

**Kūkōhu: Ka Nānaina Kaiaola o nā Kaiaa‘o ‘Ōlelo Hawai‘i
(A Study on the Cultural Ecology of Hawaiian-Medium
and Hawaiian Immersion Learning Environments)**

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Abstract

There is growing evidence that schools that incorporate Hawaiian language, culture, and culture-based approaches create powerful and responsive learning environments for Native Hawaiian children. These culturally relevant settings yield promising results that ho‘oulu kanaka, cultivate enlightenment for the Native child by increasing cultural identity and competency, socio-cultural maturity, Hawaiian language vitality, and positive academic outcomes. This research study, *Kūkohu*, was designed to increase understanding of the characteristics found in such Hawaiian culture-based learning environments across the continuum of “school for Hawaiians” to “Hawaiian schooling” models. For the purposes of this study, a Hawaiian culture-based inventory tool was developed to describe four key identity dimensions—cultural, linguistic, curricular, and relationship—found in the landscape and soundscape of public school environments where Native Hawaiian children are enrolled. Supported by a macro- and micro-review of the literature, a mixed-methods approach that included Indigenous heuristics, community participatory process, and focus groups was employed to capture the voices of experienced Hawaiian educators and experts. Three Hawaiian medium/immersion schools participated in the focus groups and piloted the *Kūkohu* inventory. The focus group process revealed the following four insightful and enduring themes that can serve as a catalyst for assisting schools in developing dynamic Native schooling environments: ‘o ka ‘ōlelo Hawai‘i, he ola, he nohona a he lawelawe ‘oihana—Hawaiian language is a construct for life, living, and professional service; ko‘iko‘i ka pilina, ka nu‘ukia, a me ka lōkahi ma ka ho‘oulu ‘ana i ka papahana ho‘ona‘auao

Hawai‘i—attention to relationships, adherence to vision, and unified action are essential in cultivating resilient culturally grounded models; he ao hi‘ialo, he ao hi‘ikua ke kuana‘ike maui ola—being culturally secure in one’s own worldview is foundational for successful navigation of life; and he ‘imi loa ke kuleana ho‘ona‘auao —educational improvement is an on-going civic responsibility. This dissertation revealed that Hawaiian culture-based learning environments employ various models across the conventional to Native empowerment schooling continuum all of which strive to strengthen responsive and responsible holistic settings for all students enrolled. This dissertation’s findings indicate that the Kūkōhu inventory can assist Hawaiian culture-based schools in facilitating their overall school improvement plan.

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<p><i>‘Ekolu mea nui ma ka honua ‘O ka mana ‘o ‘i ‘o, ka mana ‘olana a me ke aloha, ke aloha kai ‘oi a ‘e, Pōmaika ‘i nā mea a pau, Pōmaika ‘i nā mea a pau.</i></p>	<p>Three great things in the world, Faith, hope, and love, the greatest is love and everything is blessed, and everything is blessed. Nāwāhine, 1925</p>
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These three most powerful words, *ka mana ‘o ‘i ‘o, ka mana ‘olana, a me ke aloha* (faith, hope, and love), have sustained me throughout the arduous task of the doctoral process. The journey is an experience that no one should travel alone and those fortunate to have a support system are indeed *pōmaika ‘i* (blessed). I sincerely appreciate all the many individuals, families, and groups who inspired and supported me along the way and, most importantly, helped me to stretch my roots to greater depths and my limbs in new directions. *Mahalo a nui me ke aloha palena ‘ole*. I acknowledge and thank you all—*pōmaika ‘i nā mea a pau*.

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Dedication

To the three women in my life who ground me to my past, present, and future—my grandmother, Harriet Kulamanu, and my daughters, Kananinohea and Kulamanu. And to my mother Laureen Tsuruko, whose greatest wish I honor.

Lapa ke ahi i ka hua kukui.

The flame burns from the kernel it produces.

Table of Contents

List of Tables	xi
List of Figures	xii
Hawaiian Glossary	xiii
English Glossary	xvii
Chapter 1: He Wehena Aloha – An Opening Welcome	1
Naming of the Dissertation	2
Historic Background of the Problem	5
Statement of the Problem	9
Purpose and Premise of the Research Study and Research Question	18
Significance of the Problem and Research Objective	19
Overview of Methodology	21
Delimitations	22
Organization of the Study	22
Summary	23
Chapter 2: Literature Review	25
An Indigenous Perspective on Education	29
Issues Regarding the Education of Indigenous Children	36
A Well-being and Culture-Based Education Framework	40
Fostering Culturally Relevant Native Hawaiian Learning Environments	76
Identity Characteristics Found in the Native Hawaiian Learning Environments ..	83
Summary	105

Chapter 3: Methodology	111
Research Design and Mixed Method Approach	113
Research Process – Phase 1-3	117
Phase One – Envisioning the Big Picture in Designing the Kūkohu Inventory Tool	118
Phase Two – Gathering Perspectives From Within: Focus Groups.....	129
Phase Three – Triangulation and Data Analysis Qualitative and Quantitative ..	133
Assumptions.....	135
Summary	136
Chapter 4: Findings.....	137
Research Question	139
Focus Group Data	139
Summary	151
Chapter 5: Summary and Discussion.....	152
Summarizing the Journey	153
Kūkohu – Data Shows	155
Kūkohu – Hawaiian Culture-based Inventory Tool.....	156
Enduring Themes	162
Limitations	170
He Panina Aloha – The Closing Salute for Next Steps	170
References.....	173
Appendix A: Focus Group Guide & Protocol Texts.....	213
Appendix B: School Invitation	218

Appendix C: Participant Invitation	220
Appendix D: Kūkohu Study Information Sheet.....	221
Appendix E: School Registration Form.....	224
Appendix F: Individual Registration Form.....	226
Appendix G: School Permission Sheet.....	227
Appendix H: Participant Permission Sheet.....	228
Appendix I: Focus Group Probes.....	229
Appendix J: Kūkohu Hawaiian Culture-based Inventory	230

List of Tables

Table	pg.
1. Kūkōhu Hawaiian culture-based inventory framework.....	124
2. Focus group discussion chart.....	150

List of Figures

Figure	pg.
1. Triangulation of research methodology	117
2. Kumu Honua Mauli Ola Philosophy.....	121
3. Participation by school.....	140
4. Gender of participants.....	140
5. Age of participants.....	141
6. Participant's first language	141
7. Native Hawaiian population	142
8. School reported Hawaiian language fluency	143
9. Hawaiian language use during instructional and non-instructional time.....	144
10. Hawaiian Language fluency (self-rating)	145
11. Curricular identity summary.....	146
12. School curriculum, strategies, and practices employed.....	146
13. Comparison between school models.....	147
14. School identity: Present and future	148

Hawaiian Glossary¹

ahonui: Tolerance, patience.

ahupua‘a: Land division, from mountain to sea.

ala ‘ike: Cultural pathways.

aloha: Love, compassion, tolerance, kindness, affection, mercy, sympathy, grace, salutation.

‘āina: The land or earth.

haumāna: A student, pupil, apprentice, recruit, disciple.

hō‘ike: Show, display, exhibit; traditional form of performance assessment through demonstration of one’s knowing.

ho‘okipa: Hospitable, to entertain graciously.

ho‘okuleana: To be responsible, to take on a responsibility.

honua: Earth, ground, realm, environment, world, a contained place.

honua ao holo‘oko‘a: The global or universal world.

honua kīpuka: A garden-like area where a lava flow has left a patch of uncovered forest; representing the world centered around the family and community environment.

ho‘oponopono: To make right; traditional Hawaiian process of reconciliation, family problem-solving process.

honua ‘iewe: The environment of the child while in the womb.

hula: Hawaiian cultural expression through dance.

¹ Terms retrieved from: wehewehe.org; Kawai‘ae‘a, K., et al. (2002). Nā honua maui ola: Hawai‘i guidelines for culturally healthy and responsive learning environments.

‘iewe: Placenta, afterbirth; relative of a common ancestry.

‘ike: To know, see, feel, greet, recognize, sense, perceive, experience, be aware of, understand.

‘ike ku‘una: Traditional knowledge.

keiki: Child, offspring, descendant (also used to refer to the plural children (nā keiki) within the English context).

kaiaa‘o: Learning environment.

kama‘āina: A Native-born person; also, a long-time resident who is highly familiar and knowledgeable about a place.

kaiulu: Community.

kōkua kaiulu: Community giveback.

kuana‘ike: Perspective.

kuleana: Responsibility, area of responsibility, privilege.

kapu: Taboo, prohibition, sacredness; special privilege or exemption from ordinary taboo.

kumu: A teacher; literally, the foundation or source.

lawena: Behavior, actions.

loina: Rule, custom, protocol.

māla: Garden.

mālama: To take care of, tend, attend, care for, preserve, protect, beware, save, maintain.

mālama ‘āina: To care for the land, land stewardship.

mana: Spiritual, supernatural or divine power, authority.

mauli: The essence of spirit, life, the seat of life, life spirit.

mele: A song, anthem, or chant of any kind; also a poem, poetry. To sing and chant.

mo‘oki‘ina: A way of delivering instruction that applies traditional Hawaiian thinking in the learning approach.

mo‘okū‘auhau: Genealogy.

mo‘olelo: A story, tale, myth, history, tradition, or legend.

na‘au: The gut or instinct; also, the affections of the heart or mind, as in a mood, temper, or feelings.

na‘auao: Learned, enlightened, intelligent, wise, knowledge, wisdom; educated, education.

ola: Life, health, wellbeing, living, livelihood, means of support, salvation.

ola kino: Health.

oli: A protocol chant, often part of a ceremony or special occasion.

‘ohana: Family, close group, traditionally relatives or kin.

‘ōlelo: Language, speech, words, statements; to speak or say.

‘ōlelo Hawai‘i: Hawaiian language.

‘ōlelo no‘eau: Proverb, wise saying, traditional saying.

piko: The connecting point, navel, umbilical cord; found at the top of the head, the belly button, and at the genitals; fig. blood relative, genitals. A designated place considered as the umbilicus or gathering center within a given location where members gather for protocol.

piko ‘ā: Creative and inventive connection found below the navel at the genitals.

piko ‘Ī: Spiritual connection found at the crown of the head.

piko ‘ō: Inherited connection found at the navel.

piko‘u: Identity.

pili ‘uhane: Spiritual.

pilina: An association, relationship, union, meeting; joining, adhering.

pilina kaiaulu: Community affiliation, relationship, or connection.

pilina ‘ohana: Family affiliation, relationship or connection.

pilina: A way of closing the day; event or activity.

pono: Goodness, uprightness, morality, correct procedure.

puka kula: Graduation.

wahi pana: A legendary or sacred place.

wehena: A way of opening the day; event or activity.

English Glossary²

acculturate: Learning aspects of a culture other than one’s own—particularly those aspects that enable the individual to survive in that culture.

Adequate Yearly Progress (AYP): This is the minimum standard for improvement that all schools must achieve as stipulated by the federal No Child Left Behind accountability requirements. To meet AYP in Hawai‘i, public schools all students including student subgroups (i.e., Special Education, Economically Disadvantaged, and five ethnic groups including Native Hawaiians) must achieve a certain level of participation and proficiency on the State reading and mathematics tests. In addition, schools must meet either an on-time graduation rate for high schools or must not exceed a specified retention rate for elementary and middle/intermediate schools. When a school meets the minimum standard for 37 indicators, the school has “Met” AYP. If a school fails to meet one (or more) of the 37 indicators, it has “Not Met” AYP.

autochthonous language: Indigenous or Native language of a particular place.

charter schools: Charter schools are independent public schools designed and operated by educators, parents, community leaders, educational entrepreneurs, and others. They were established by State legislation and are directly responsible to the Hawai‘i Board of Education, which monitors their quality and effectiveness, but allows them to operate outside of the traditional system of public schools.

collaboration: To work together in a unified effort towards a common goal.

culture: A system of beliefs and actions that characterize a particular group. The shared ideas, customs, traditions, and values that determine how a group of people will behave.

culturally appropriate: A cultural standard of conduct based on the actions, beliefs, and values of a people.

cultural knowledge: The knowledge, skill, and teachings that relate to Hawaiian traditional values.

² Terms retrieved from: ‘Aha Pūnana Leo. (2003). Kukui ‘Ā Mau; Hawai‘i Department of Education. (2010). School Year 2009-2010. *Superintendent’s Annual Report on Hawai‘i Public Education*; Reference Answers. (2012). Retrieved from Answers.com website: <http://www.answers.com>; W. H. Wilson, personal communication for linguistic definitions, January 12, 2011.

complex: This smaller division within a Complex Area consisting of a comprehensive high school, middle/intermediate school, and elementary schools within its attendance boundary.

Complex Areas: These are administrative units made up of two or more complexes.

culture: The totality of beliefs, social forms, and material traits of a group.

culture-based education (CBE): The grounding of instruction and student learning in the values, norms, knowledge, beliefs, practices, experiences, and language that are the foundation of culture. Culturally based education can be considered as a broad-based school-wide approach that seeks linguistic and social-cultural congruence of the Native student population in all aspects of the school program but particularly in classroom instruction.

cultural proficiency: The policies and practices of an organization or the values and behaviors of an individual that enable that agency or person to interact effectively in a culturally diverse environment.

economically disadvantaged: These are students whose families meet the income qualifications for the federal free/reduced-cost lunch program. Note that this is an indicator of school-community poverty.

enculturate: Learning one's own culture, a process that is influenced strongly by home and family.

English medium education: A means of teaching academic content through English and its heritage to first/primary speakers of English within an environment where English is the language of operations, administration, and evaluation of academic and professional outcomes with one of those academic outcomes being secondary language level proficiency in one or more languages such as Hawaiian (or Japanese or French). Children who enter an English medium education school speaking another language at home are expected to assimilate to the larger group for whom English is the first/primary language.

Hawaiian-Focused Charter Schools: Are initiated, supported, and controlled by a Hawaiian community; offer Hawaiian-based curriculum, instruction, and assessment; are committed to perpetuating Hawaiian culture, language, values, and traditions; and

actively contribute to the growth of Hawaiian-focused education through participation in ongoing research and dissemination of best practices.

Hawaiian immersion education: A means of teaching Hawaiian as a second/secondary language to first/primary speakers of English but with the maintenance of English as the language of operations, administration, and evaluation of academic and professional outcomes. Hawaiian language (minority/non-dominant language) is the classroom language within an English (majority/dominant language) medium educational system. Hawaiian immersion is a form of English medium education where the second language, Hawaiian, is used to teach content within the classroom. Students who speak Hawaiian (or Japanese or French) at home who enroll can be expected to assimilate to the larger group where English is the first/primary language.

Hawaiian language and culture-based schools (HLCB): A broad term used to describe Hawaiian culture-based schools, including Hawaiian language immersion, Hawaiian-medium, and Hawaiian-focused schools.

Hawaiian medium education: A means of teaching academic content through Hawaiian and its heritage to first/primary speakers of Hawaiian within an environment where Hawaiian is the language of operations, administration, and evaluation of academic and professional outcomes with one of those academic outcomes being a secondary language level of proficiency in one or more languages such as English (or Japanese or French). Students who speak English (or Japanese or French) at home who enroll can be expected to assimilate to the larger group where Hawaiian is the first/primary language.

heritage: The status or tradition inherited by a person through birth.

holistic Learning: A process of learning that places importance on the complete experience and ways in which the separate parts of the learning experience are interrelated.

Indigenous: Belonging naturally to a place; not introduced; Native, endemic, aboriginal.

Indigenous education: Refers to the inclusion of Indigenous knowledge, models, methods, content, Indigenous ways of knowing, learning, instructing, teaching, and training within formal and non-formal education systems. The use of Indigenous education can enable Indigenous communities to “reclaim and revalue their languages and cultures as a proactive response to the loss of Indigenous knowledge and language through the processes of colonialism. It has been viewed as important for ensuring that

students and teachers (Indigenous or non-Indigenous) are able to benefit from education in a culturally sensitive manner that draws upon, utilizes, promotes, and enhances awareness of Indigenous traditions, perspectives, language, and culture. These methods often enhance educational effectiveness, success, and learning outcomes of Indigenous students by providing education that adheres and develops their own inherent perspectives, experiences, and worldview. For non-Indigenous students and teachers, it promotes greater respect for and appreciation of the cultural realities of these communities and peoples.

language immersion education: Is a method of teaching a second language in which the target language (L2) is used as the means of instruction. Unlike more traditional language courses, where the target language is simply the subject material, language immersion uses the target language (minority/non-dominant language) as a teaching tool, surrounding or "immersing" students in the second language. In-class activities, such as math, science, social studies, and history, are conducted in the target language.

majority/dominant language: The politically powerful language used in the larger society.

minority/non-dominant language: Any language that is not the politically powerful language used in the larger society. It may be a foreign language, a language of an immigrant community, or a language of an Indigenous group.

multicultural education: An idea, an approach to school reform, and a movement for equity, social justice, and democracy. The major goal of multicultural education is to restructure schools so that all students acquire the knowledge, attitudes, and skills needed to function in an ethnically and racially diverse nation and world. Multicultural education seeks to ensure educational equity for members of diverse racial, ethnic, cultural, and socioeconomic groups, and to facilitate their participation as critical and reflective citizens in an inclusive national civic culture.

Native Hawaiian: Refers to the Indigenous Polynesian people of the Hawaiian Islands or their descendants.

No Child Left Behind (NCLB): This law, enacted in 2001, is a reauthorization of the Elementary and Secondary Education Act, and consists of many Title programs (e.g., Title I, etc.), each with its own funding and reporting requirements. The Act specifies school and state accountability mandates and reporting requirements for Title I funds and requires that all schools in a state must be subject to the same accountability system.

official minority medium education: Use of a minority language that is official in its home area as the medium of education with the teaching of the majority/dominant language as an academic subject.

place-based: Promotes learning that is rooted in what is local—the unique history, environment, culture, ecology, economy, literature, and art of a particular place. Sometimes called pedagogy of place, place-based learning, experiential education, community-based education, education for sustainability, environmental education, or more rarely, includes service learning is an educational philosophy. Place-based education uses the students' local community as one of the primary resources for learning by studying community issues and solving community problems.

revernacularization: To reestablished an endangered or extinct language of a country, location, or people as the dominant, daily language of normal intergenerational life within that country, location, or amongst a people, or within a well-defined multigenerational community within that country, location, or amongst a people.

stewardship: A symbiotic relationship with a culture or land, wherein one feels a deep responsibility and connection to care for, maintain, or uphold a state of wellbeing or righteousness. Inspired purely by one's own will and carried out with great reverence and humility.

total Immersion: All curriculum is taught through the medium of the second language in the initial school years, including reading and language arts.

tradition: Custom, opinion, or belief handed down from generation to generation, usually by non-written and, in particular, oral means.

traditional knowledge: The way of thinking, feeling, speaking, seeing, listening, learning, and doing, based on what is known or perceived from the body of tradition.

two-way Immersion (dual immersion): A program that serves both language minority and language majority students, in the same classrooms as an English-medium school. These models aim for bilingualism and biculturalism for both groups of students. While maintaining English as their dominant language for the English speakers and access to assimilation to English as their dominant language for minority language speakers.

Chapter 1

He Wehena Aloha³ – An Opening Welcome

Ulu kukui o Liliko‘i.

Kukui grove of Liliko‘i.⁴

—Pukui

An ‘ōlelo no‘eau, or Hawaiian proverb, is a cultural wisdom that conveys its message through imagery and nuances of language using cultural symbols and common lived experiences of the culture. Liliko‘i⁵ was said to be a favorite place in Makawao, Maui where Hawaiian chiefs once frequented. There at Liliko‘i stood a well-known ulu kukui, a candlenut grove, that produced the most fragrant ‘inamona, a nut relish made from roasting its sweet nuts. The oil from inside the roasted fleshy part of the nut also provided lighting in traditional times. Hence, the kukui is often used as a metaphor for enlightenment and a symbol for education and learning—the academic discipline of this dissertation. Likened to the tasty, fragrant relish made from the kukui nuts, the opening wisdom offers an invitation to the reader to sit for a while under the canopy of

³ For the purposes of this paper, the Hawaiian language will be treated equal to English. Both English and Hawaiian words will be italicized only to stress emphasis and not to denote a “foreign language.” Translation or interpretation of the Hawaiian language will be provided in parenthesis following the Hawaiian language only if the meaning is not provided within the context of the sentence. In addition, all essential terms in both Hawaiian and English are provided in a glossary at the front of the document. If further clarification is required, an on-line electronic Hawaiian dictionary is available at <http://wehewehe.org/>.

⁴ Traditional Hawaiian wisdom, # 2869, p. 314. Pukui, M. K. (1993). *‘Ōlelo No‘eau: Hawaiian proverbs & poetical sayings*. Honolulu, HI: Bishop Museum Press.

⁵ The passion fruit was first grown at Liliko‘i; hence, the term liliko‘i in Hawaiian for passion fruit.

enlightenment and partake in the sweet kukui relish of the dissertation topic as an opportunity to grow in the light of new knowledge on Hawaiian culture-based learning environments.

Naming of the Dissertation

In Hawaiian thinking, the process of naming is a serious task. Names recognize and acknowledge the being, spirit, and relevance of the person, place, or inanimate object being named to the world. All things have mana, a spiritual power, force, or quality that resides within and is both tangible and intangible. This is especially true of personal items—like a boat, a house, or, in this case, a dissertation paper. In general, Polynesians view mana as something that can be received, given, and taken away. Words are used in naming as symbols and metaphors to describe thoughts, dreams, remembrance, purpose, and aspirations to be fulfilled through the proper giving of a name. Synthesizing the intention of the paper to its basic core purpose and then deciding on just the right words to express and bring about pono (proper balance to the) actions of the dissertation study, along with pule (prayer) to request blessings on the outcome, were all part of the cultural considerations given through the process of naming this dissertation paper.

As this dissertation depicts a Hawaiian research study, the title given to the paper is appropriately Hawaiian, which is then followed by an English version of the title:

Kūkohu: Ka Nānaina Kaiaola o nā Kaiaa ‘o ‘Ōlelo Hawai‘i - A Study on the Cultural Ecology of Hawaiian-Medium and Hawaiian Immersion Learning Environments. The English is not a direct translation, and I have taken certain liberties using the Hawaiian language to name the dissertation title. The word Kūkohu was the name given to the

Hawaiian culture-based inventory matrix developed as the model for the research study. The inventory matrix is a tool that assists in describing the various characteristics found in the learning environments where Native Hawaiian⁶ students are schooled. The educational perspectives described by the inventory matrix range across models falling within a “school for Hawaiians” to a “Hawaiian schooling” continuum—more simply, from conventional to Native empowerment schooling models. Nā kaiaa‘o means learning environments and ‘ōlelo Hawai‘i, Hawaiian language. These four words nā kaiaa‘o ‘ōlelo Hawai‘i, identify the kinds of learning environments that were surveyed in the research study using the Kūkohu: namely, Hawaiian-medium and Hawaiian immersion learning environments (hereinafter Hawaiian-medium/immersion).

The broad concept of the research study followed an approach similar to that of a biologist when going into the forest to study the ecology of that environment. The biologist first prepares to enter the environment by gathering knowledge already known about the particular environment to be studied. The biologist then surveys and identifies the various species of plants, animals, insects, and birds found in the ecology of that environment. The process is followed by detailed descriptions about the whole ecology to better understand the environment, issues, and meaning. Upon conclusion, the biologist provides an overview of the findings to make informed recommendations. Ka nānaina kaiaola refers to the cultural ecology in the various Native Hawaiian learning environments across the Hawai‘i public and charter school spectrum.

⁶ The term Hawaiian and Native Hawaiian are used here interchangeably and is defined as any individual who can trace his or her genealogy to the original inhabitants (or their descendants) of the Hawaiian Islands, regardless of blood quantum or racial/ethnic identity (Kana‘iaupuni, S. M., Malone, N., and Ishibashi, K., 2005, p. 20).

Building upon over thirty years of experience and knowledge in Hawaiian language and culture education and supported by new learning acquired from the literature review, I created a framework based upon the Kumu Honua Maui Ola, a Hawaiian educational philosophy, that encompassed six models: three well-being and three culture-based education models. I first began with the development of the Kūkohu Inventory Matrix utilizing a community participatory process to elicit the expertise of Hawaiian education experts actively engaged in or with Hawaiian culture-based settings from across the Hawaiian culture-based spectrum. I then went to three kula kaiapuni, Hawaiian-medium/immersion schools, to survey the identity characteristics of each of the schools' ecology. To accomplish this, I piloted the Kūkohu Inventory Matrix at each of the sites and implemented a focus group process that involved asking participants' critical questions meant to elicit the participants' thoughts about their experiences within their school settings. Analysis based on the data collected by the Kūkohu matrix and feedback from the focus group questions that described the characteristics found in each of the particular learning settings followed and was used to inform the findings and summary discussion.

Four enduring themes resulted from the research and provide profound insights on how strongly culture-based schools experience their role and responsibility to ho'oulu kanaka, cultivate enlightenment of the Native child through culturally centered practices that include: 'o ka 'ōlelo Hawai'i, he ola, he nohona a he lawelawe 'oihana—Hawaiian language is a construct for life, living, and professional service; ko'iko'i ka pilina, ka nu'ukia, a me ka lōkahi ma ka ho'oulu 'ana i ka papahana ho'ona'auao Hawai'i—attention to relationships, adherence to vision, and unified action are essential in

cultivating resilient culturally grounded models; he ao hi'ialo, he ao hi'ikua ke kuana'ike maui ola—being culturally secure in one's own worldview is foundational for successful navigation of life; and he 'imi loa ke kuleana ho'ona'auao—educational improvement is an on-going civic responsibility.

Hence, the title *Kūkohu: Ka Nānaina Kaiaola o nā Kaiaa 'o 'Ōlelo Hawai'i - A Study on the Cultural Ecology of Hawaiian-Medium and Hawaiian Immersion Learning Environments* reflects the Hawaiian culture-based inventory matrix developed through a four-step process that included Indigenous heuristics, the literature review, community participatory and focus groups, and the triangulation of all the data to describe the cultural ecology of a small sampling group. The research is an empirical study that provides new knowledge based on the experiences and practices of Hawaiian educators in Hawaiian culture-based settings across the educational continuum.

Historic Background of the Problem

Public education in Hawai'i is encompassed within a single statewide system serving over 181,000 students in conventional and public charter schools. Within this student population, Native Hawaiians make up the largest ethnic group at about 28% of the total student enrollment in mainstream schools and an additional 84% in public charter schools (Native Hawaiian Education Council, 2011). Hsu and Nielson (2010) estimate a 20.5% increase in Native Hawaiian population in the last 20 years and project that in the next 50 years the Hawaiian population will double. Data show that over half of the Hawaiian students in public education are economically disadvantaged and most are likely to attend low-quality schools that are in No Child Left Behind (NCLB)

restructuring status, have low family involvement, less experienced teachers, and higher teacher turn over (Kamehameha Schools, 2001).

Over 50 years of negative educational experiences set within a deficit model has resulted in the largest educational disparities occurring among Native Hawaiians in terms of academic achievement, school engagement, school retention, and graduation (Kamehameha Schools, 2011). Hawaiian language and culture-based schools (HLCB) have higher percentages of Native Hawaiian enrollment than mainstream schools and serve an even higher number of “at-risk” children—children who are socio-economically and educationally disadvantaged—with 46-70% of the school enrollment eligible for free and reduced lunch compared to the State average of 44% (Native Hawaiian Education Council, 2011). Kana‘iaupuni, Ledward, and Jensen (2010) report that culturally relevant education indicates promising results in terms of the educational gains of Indigenous students, with test results in reading, math, as well as measurements of attitude towards school showing positive student gains.

The education system in Hawai‘i has a unique history that is closely tied to cultural loss and language demise among its Indigenous people. Revisiting that history provides a strong context for understanding the relevance of educational issues for Native Hawaiians. Hawaiian language was once the main language spoken amongst the different ethnic groups in all aspects of Hawaiian life; even the western-based court system and parliamentary politics were conducted in Hawaiian. In 1841, King Kamehameha III (also known as Kamehameha III) established a compulsory Hawaiian-medium public education school system. Hawaiian was the medium of instruction and all subjects were taught through the Hawaiian language. Hawaiians were estimated to be

among the world's most literate people, with an estimated 91% literacy rate amongst Native Hawaiians and a 75% literacy rate in Hawaiian and English amongst the total population (Hawai'i General Superintendent of the Census, 1897; Silva, Ka'awa, Kawai'ae'a, & Housman, 2006, p. 38).

In 1893, the U.S. government illegally overthrew the Hawaiian monarchy. Then, in 1896, following the assimilation policies of the U. S., Hawaiian was outlawed and all schools became "English-only" schools. Legal policies designed to dismember the Hawaiian nation and, hence, assimilate Native Hawaiians into Eurocentric culture created a domino effect of dislocation within its Indigenous population through loss of land and language shift, which in turn had negative consequences in terms of cultural competency, identity, and self-worth. A once thriving nation of self-sufficient citizens engaged in politics, business, and education, Hawaiians became alienated in their own homeland. By 1919, the Native Hawaiian population, estimated to be between 800,000 to 1,000,000 people in 1778, had declined to 39,000 Hawaiians and Part-Hawaiians. In less than six generations depopulation of Hawaiians had reached almost 95% (Dye, 1994; Osorio, 2002).

The English-only campaign after the overthrow of the Hawaiian monarchy "accelerated the extermination of the Hawaiian language. Advocates targeted the field of education, where the next generation of Native speakers would receive their instruction" (Lucas, 2000). There were many newspaper articles written in Hawaiian about the concern over loss of language and the cultural competency of Hawaiian children. Articles like the following frequented the Hawaiian newspapers and expressed strong

public concern over the deterioration of Hawaiian knowledge and how this would affect Hawaiian children:

Ina he makemake na Hawaii e lilo keia hana i mea kokua nui i na hanauna hou e oili mai nei, a e mau aku ai hoi ko lakou malamaia ana, oiai ka lahui Hawaii ke emi mau aku nei a ke aneane aku nei e nalowale ka olelo Hawaii kumu, no ka mea o ka olelo Enelani ka olelo e a'o nui ia nei ma na kula i keia mau la, a ua hoohemahema loa ia ka huli ikaika ana i ka olelo Hawaii kumu, o keia mau olelo naauao a na Hawaii e nele loa ana ke kamaioia e na hanauna hou. (Nūpepa Kū'oko'a, August 21, 1924)

(If the Hawaiians prefer this practice to become a great assistance to the new generations that will come, and as they continue to care for the authentic Hawaiian language, while the population of Hawaiians is decreasing and the Hawaiian language is in peril of extinction, and because the English language is strongly being implemented in school these days, and the scholarship quality of the authentic Hawaiian language has become severely problematic, these intelligent utterances of the Hawaiians will severely disappear as a spoken language among the new generations. (trans. by K. Kawai'ae'a))

Over the course of the next 50 years, the disenfranchisement of the Hawaiian people in their own land and their loss of sovereignty, language, culture, and identity continues, until, in the late 1970s, it is met with strong public and statewide concern. In 1978, the Hawai'i State Constitution added three Articles meant to stave off the damaging effects of the last 100 years of colonization: Article X section 4 reaffirms and protects Native Hawaiian traditional and customary rights, Article XII section 7 gives

equal status to the Hawaiian language with English, and Article XV provides Hawaiian education through provisions that incorporate Hawaiian culture, history, and language into public education, respectively (State of Hawai'i, 1978). This period of time, often called the Hawaiian renaissance, brought forth a resurgence of interest in Hawaiian knowledge, language, sovereignty, and identity along with a determination to overcome a legacy of disenfranchisement through colonization of the Hawaiian nation.

Statement of the Problem

Today, Native Hawaiians continue to be disproportionately represented in many negative educational, social, and physical statistics, but some promising progress has been made through culture-based education. Education is a vehicle that can positively mitigate the negative statistics and contribute to greater educational success and well-being of Hawaiian children. There is growing evidence that culture, language, and culturally relevant learning environments contribute to improved identity, self-esteem, language and cultural competence, and promote academic success in Native Hawaiian students.

This research study on Native Hawaiian learning environments may further assist schools in identifying their strengths in terms of being culturally sound and supportive in the promotion of successful outcomes for students. The development of an inventory matrix focusing on a “school for Hawaiians” to a Hawaiian schooling” continuum works as an invitation to identify a school’s landscape and soundscape as a pathway for strengthening culturally congruent learning environments that contribute to building healthy relationships, responsive and rigorous learning, and responsible outcomes for all.

A “School for Hawaiians” to a “Hawaiian Schooling” Continuum. There is no “one-size fits all” schooling model that is suitable for all learners. Families have different ideas about education and which kinds of schools will provide the best fit for their children. The Hawai‘i Department of Education is unique in that it is a single State-run system with many subsystems contained within its structure and connected to the structure.

Schools-Within-a-School created a way for Hawaiian immersion schools to expand through the sharing of facilities within a regular conventional school setting. In these school facilities, services and budget are all shared and administrated by the same principal. Depending on the availability of schools that can accommodate a new immersion site, however, schools are not always in the preferred communities, which other challenges for families and the school community (McCarty, 2003).

Public charter schools differ significantly from this model. They lead the way with divergent innovations for school reform outside of the standard institutional infrastructure of conventional schooling. Public charters have autonomy that includes fiscal, staff, and facility responsibility. They are still accountable in terms of meeting the same requirements as conventional schools but have autonomy to decide how they will address those requirements.

Current education models serve Native Hawaiian students’ needs through a variety of options that span an educational continuum from conventional models that attempt to insert Hawaiian culture into education—“a school for Hawaiians”— to models that interweave academics into culture—“a Hawaiian school” model. In Hawaiian schooling models, Hawaiian language, traditions, mores, and practices are infused into

the school curriculum in different ways, for different purposes, and have different outcomes. Schools that teach about language and culture as a course or subject area do so in very different ways than schools that teach across the curriculum through the medium of Hawaiian language and culture.

The educational continuum for Native Hawaiians spans across three kinds of schooling options: (a) an institutional/mainstream model that, for the purposes of this dissertation, will be called conventional schooling; (b) a community congruent model found in smaller schools and rural communities; and (c) a Native empowerment model through which HLCB schools are building momentum. The catch phrase “school for Hawaiians to a Hawaiian school” simply describes the continuum for viewing the various kinds of learning environments Native Hawaiian students experience.

As a single statewide public school system, conventional schools enroll the largest numbers of Hawaiian students in the state—thus, these schools would fall into the category of *a school for Hawaiians* (Hawai‘i Department of Education 2010c). These schools commonly utilize a Western educational lens for schooling that is comparable with the way schools are generally conducted in America. Teachers sensitive to the local and Hawaiian culture, as well as the cultural and community needs of students, may use culturally responsive types of curriculum, teaching approaches, and resources to address learning. Other supplemental programs, such as afterschool, summer, enrichment, gifted and talented, special education, early literacy, at-risk, substance abuse, health, voyaging, and environmental science, provide programs and services that may also integrate culturally relevant strategies to foster ethnic pride and address academic preparation. Hawaiian values are often woven into these programs through a significant focus on

hands-on application so as to build on learning through doing, ma ka hana ka 'ike (Kawakami, 1999, 2004).

Straddling the middle of the educational continuum and often found in rural areas, neighbor islands,⁷ and in high Native Hawaiian community settings, are community congruent schools. Often smaller in size, these schools are where strong community identity overarches the curriculum and school culture. Mainstream “western” curriculum is often central in these schools; however, the schools reflect a distinct community flavor that is reflective of the local Native Hawaiian lifestyle and culture. Schools are family-based with high percentage of local community staff and faculty, which works to maintain the community culture within the educational setting. However, teacher staffing is sometimes problematic because of high teacher turnover, and this can result in a flux of instability in the school setting. Further complicating the situation is that many of the teachers who do work in (and too often leave) these schools, do not come from these communities, which can create additional barriers to implementing community values (Kahumoku et.al, 2008; Kamehameha Schools, 2006).

Native empowerment schools are social justice models aimed at reforming education built upon a Hawaiian foundation of philosophy, epistemology, and pedagogy—a *Hawaiian school*. Hawaiian-medium/immersion and Hawaiian-focused charter schools are examples of Native empowerment schools. These school models have made huge strides in shifting the way schools operate from a western to Indigenous paradigm by asserting the right to create Hawaiian educational systems as a culturally

⁷ Meaning one of the inhabited islands outside of Honolulu (where the state capitol is located on the island of O‘ahu)—Hawai‘i, Maui, Moloka‘i, Lāna‘i, Kaula‘i or Ni‘ihau Island.

viable choice for families to educate their children. These models are Hawaiian culture-based empowerment models that create new learning communities and extended families. In HLCB schools, parents and educators alike take a more proactive, community stance on school reform as an opportunity to get back to Hawaiian basics—language and cultural vitality, values, and tradition from which to build academic excellence and student success through Hawaiian ways of knowing and doing.

The Hawaiian language revitalization movement has made its largest strides through education in raising the number of Hawaiian language speakers under the age of 18 from below 50 children in the early 1980s to nearly 2,500 children in 2011 (Kawai‘ae‘a, Alencastre, & Housman, 2007; Vuta, 2011a, 2011b). Recognizing the near demise of the Hawaiian language in 1983, the ‘Aha Pūnana Leo formed a grassroots organization dedicated to the revitalization of the Hawaiian language. In 1984, it launched what has been popularly called the Hawaiian language revitalization movement with the opening of its first Pūnana Leo preschool. These schools quickly expanded throughout the state. In 1987, the Hawai‘i Department of Education agreed to open two kindergarten/first grade classes in Waiiau on O‘ahu and Keaukaha on Hawai‘i Island. The statewide Hawaiian language immersion program, called the Papahana Kaiapuni Hawai‘i, and the individual schools, kula kaiapuni, continued to expand across the state and to include high school grades. Ānuenuē in Pālolo, O‘ahu and Nāwahīokalani‘ōpu‘u in Kea‘au, Hawai‘i, K-12 Hawaiian-medium/immersion schools celebrated their first graduating classes in 1999. Then, in 2001, three Hawaiian-medium /immersion education schools were approved as public charter schools, creating fully-realized options

for Hawaiian language education from preschool through grade 12 (Kawai‘ae‘a, Alencastre, & Housman, 2007).

The term kaia‘ōlelo Hawai‘i specifically refers to Hawaiian-medium/immersion schools where Hawaiian is fully operationalized as the language of the school and the language of the home. Hawaiian immersion is a general term for kula kaiapuni schools. In such schools, Hawaiian is not usually nor necessarily the language of the home. Nonetheless, Hawaiian-medium/immersion schools, or kula kaiapuni, have developed schooling models founded upon family-based, Hawaiian cultural, and linguistic principals. Kula kaiapuni families in general are vigilant about language perpetuation as the key to recovery of Hawaiian language vitality and foster Native identity that is maui Hawai‘i-centric and the Hawaiian life-force of their children. Families have been known to drive their children long distances to enroll them in a kula kaiapuni Hawai‘i schools and have a long history of commitment and participation in the development and operation of these schools.

The charter school movement in 2000 made way for HLCB schooling through Hawaiian-focused and kaiapuni Hawai‘i immersion schools for K-12. These schools may be either start-up charter schools or conversion schools from the Hawai‘i Department of Education (HDOE) structure. Charter schools provide more autonomy for schools and communities to take charge over the educational model and agenda so as to determine different routes of accountability to the core/state standards and Adequate Yearly Progress (AYP) measures. Currently, 17 of the 31 charter schools are within a HLCB setting. Hawaiian-focused schools enroll approximately 3,100 students with Native Hawaiians making up 78% of the student population; another 2,374 students attend

immersion schools, which have a 95% Native Hawaiian population (Hawaii Charter School Administrative Office, 2011a, 2011b; Hawai'i Department of Education, 2010b, 2010d, 2011d; Native Hawaiian Education Council, 2011; Vuta 2011a, 2011b).

Hawaiian-focused and kula kaiapuni schools differ in a several respects with the most distinctive differentiation being Hawaiian language use within the school setting. Kula kaiapuni schools utilize Hawaiian language to deliver curricular instruction. Hawaiian language is taught as the dominant language of the school with multilingualism as a long-term objective of immersion education. Hawaiian-focused charter schools use English as the dominant language of the school and instruction, and infuse the Hawaiian language into the curriculum when and where possible. In a few Hawaiian-focused schools, bilingualism is a long-range goal, but with the English language as the dominant language of the school, attaining this goal has presented a challenge.

Hawaiian-focused charter schools build upon local community and environmental issues as the springboard for curriculum development and learning application. State standards are aligned with community goals through place-based and project-driven curriculum. Community identity and Hawaiian identity are interwoven into the fabric of the curriculum. Community expertise is highly valued, and community goals help to provide direction of the curriculum.

Hawaiian-focused schools like the kula kaiapuni have strong Hawaiian culture- and community-centric characteristics. Having said this, it is also important to mention that kula kaiapuni and Hawaiian-focused schools may share and even overlap in their general dimensions. However, each school has their own unique model that has been

shaped by their history, community, politics, language use, culture, and resource variables.

Nā Lau Lama and Hawaiian Cultural Influences in Education Study. There have been two substantial contributions that have directed my interest and shaped the context for further study in Native Hawaiian schooling environments. The first was Nā Lau Lama, a statewide collaboration and initiative launched in January 2006. It brought together the various stakeholders in public and private education and included educators, administrators, researchers, families, community members, professional service providers, and key support from the Office of Hawaiian Affairs, the Hawai‘i Department of Education, and Kamehameha Schools. The goal of Nā Lau Lama was to create a stronger presence of Hawaiian knowledge systems in public classrooms and better outcomes amongst Native Hawaiian learners.

The call to action was based on the premise that Hawaiian students perform better if cultural ways of teaching, learning, and doing are part of the standard curriculum and schooling model. Five working groups were tasked with producing reports to recommend best practices for implementation through professional development, culture-based education, family and community strengthening, Indigenous assessment, and advocacy. The momentum and communication between the workgroup and the general public was maintained through general meetings and presentations at three conferences—Ku‘i Ka Lono for the Hawaiian charter schools in November 2006, the Native Hawaiian Education Association (NHEA) Convention in March 2007, and the National Indian Education Association (NIEA) in October 2007 (Kamehameha Schools, 2008).

In 2008, the Nā Lau Lama Community Report, *Teaching and Learning with Aloha*, was published and distributed to organizations, policy makers, schools, and teacher education programs. The report identified several critical issues and recommendations that were followed-up on in multiple ways by the various stakeholders and support organizations (Kamehameha Schools, 2008).

In 2006, Kamehameha Schools began the *Hawaiian Cultural Influences in Education Study (HCIE)*. The first step was the development of the *Hawaiian Indigenous Education Rubric (HIER)* in April of that year, which was followed by the first large scale empirical study in a collaborative effort between the Hawai‘i Department of Education, Nā Lei Na‘auao Hawaiian Charter School Alliance and the kula kaiapuni schools. The study included 600 teachers, 2,969 students, and 2,264 parents at 62 schools in regular public and charter schools serving high numbers of Native Hawaiian students (Kana‘iaupuni & Kawai‘ae‘a, 2008; Kana‘iaupuni, Ledwarn & Jensen 2010).

Native Hawaiian children constitute the largest ethnic population, nearing one-third of the public school enrollment, and, thus their success has a significant impact on the overall success of public education in the state. Nā Lau Lama and the HCIE research study has brought Hawaiian education to the forefront in highlighting Hawaiian culture-based education and its best practices as a strengths-based solution for shifting the educational paradigms that have been steeped in deficit model strategies for generations. Nā Lau Lama and the HCIE study are the predecessors that sparked my interest in the Kūkohu Hawaiian culture-based inventory and ultimately lead to the research study described in this dissertation.

Purpose and Premise of the Research Study and Research Question

The Hawaiian language and culture is central to a distinct identity and history of Hawai‘i. It is within that center that the local island culture has its roots and has evolved, historically embracing all other cultures in Hawai‘i. Hawaiian knowledge is an irreplaceable cultural treasure passed down as a legacy to the present generation, and, therefore, a kuleana, or responsibility, exists to mālama, care for, protect, and perpetuate, the Hawaiian language and culture so as to pass it forward for future generations.

Education is a venue through which increased cultural identity and competency, socio-cultural maturity, Hawaiian language vitality, and positive academic outcomes can be established as a foundation necessary for building cultural capital and preparation of the next generation. It is in the best interest of the whole society to create culturally healthy and responsive learning environments that benefit all learners through the schooling process. Bruner (1996a) provides a frame for understanding the broad implications of culturally based education:

A system of education must help those growing up in a culture find an identity within that culture. Without it, they stumble in their effort after meaning. It is only in the narrative mode that one can construct an identity and find a place in one’s culture. Schools must cultivate it, nurture it, and cease taking it for granted.
(p. 42)

The purpose of this research study is to develop a greater understanding of the dimensions found in Hawaiian culture-based learning environments through the perspectives, goals, visions, practices, and experiences of knowledgeable educators in kula kaiapuni schools and experts engaged in Hawaiian education. The premise guiding

this body of work is that education is a cultural process and, therefore, schools that incorporate Hawaiian language, culture, and culture-based approaches within the *kaiaa‘o*, or learning environment, create optimally responsive settings that support positive student outcomes and healthy well-being. The long-term goal is to assist schools in *improving the cultural quality of the learning environment so that it builds relationships, academic relevance and rigor, and socio-cultural maturity based on culturally sound practices that support healthy, responsive, and responsible learning environments*. The research study is intended to move the agenda one step forward in realizing this long-term goal.

Research Question

What are the cultural identity features found within Native Hawaiian learning environments, and in what ways do they support or thwart successful outcomes?

Significance of the Problem and Research Objective

HLCB schools claim high success among their students and graduates in comparison to their Native Hawaiian counterparts in conventional school settings (Ledward & Takayama, 2009b; Takayama, 2008). Data show 79% of the conventional schools with high Native Hawaiian populations are in corrective action (Kekahio, 2007). Takayama (2008) suggests that HLCB schools show a propitious advantage for “raising student achievement for both Hawaiian and non-Hawaiian students.” Moreover, HLCB schools serve higher numbers of special education and economically disadvantaged students. Although initial test scores may be low, students in these schools demonstrate that “positive achievement growth is consistent over time” (Takayama, 2008, p. 275).

HLCB schools purport high academic success, socio-cultural maturity, identity and language revitalization to be the broad goals of Hawaiian culture-based education schools and assert that incorporating these elements work to yield promising results in terms of addressing the academic and cultural needs of Native Hawaiian students.

In the literature review, the disciplines of the social sciences including language, culture, and education are interwoven. It provided a wealth of information that supports Indigenous and culturally responsive education as an argument for using a strengths-based approach as a healthy alternative for a deficit model of education (Kana'iaupuni, 2004). Historical perspectives and socio-cultural issues supporting the validity for culture-based education (CBE) lays a foundation for the research study and creation of a framework for describing the identity characteristics found within conventional to Native empowerment schooling models for Native Hawaiians.

Participating from both within and outside of Nā Lau Lama and the HIER/HCIE initiatives, and taking into account my contributions in the development of a Maui Ola Hawaiian Education P-20 system, kula kaiapuni schools and Indigenous Teacher Education gave way to the idea of an inventory matrix tool that can ultimately assist schools, programs, and teachers to more successfully align their school visions. Moreover, such a tool can facilitate stakeholder's ability to capitalize on their best practices for improving the schooling process and achieving positive student outcomes. Results of the study may also contribute towards improving the cultural compatibility and synchronization of the cultural learning environment for Native Hawaiians and Hawaiian culture-based programs. Although Native Hawaiian children are at the center of the research as well as the impetus for the research, I believe this research may also serve

non-Hawaiian children in HLCCB schools and regular public schools that have large populations of Hawaiian students as well.

Overview of Methodology

The methodology is an exploratory design utilizing Indigenous heuristic techniques for problem solving, learning, and discovery. The research study employs a mixed methods approach in the collection of quantitative and qualitative data. Combined, the qualitative data—collected through the stories, thoughts, and ideas presented by participants—and quantitative data—collected through the piloting of the Kūkoku inventory— yielded a richness and depth of information that addresses the research question.

The study, *Kūkoku: Hawaiian Culture-based Inventory*, is an interdisciplinary research study that examines the multiplicity of interchange between the four characteristics—cultural, linguistic, curricular, and relationship identity—within the schooling environments of three different Hawaiian-medium/immersion schools. The study addresses an issue of social relevance that aims as its long-range goal to effectuate positive educational outcomes and healthy well-being for Native Hawaiian children.

The development of the Kūkoku inventory matrix was based on a triangulation of personal knowledge and over thirty years of experience in a CBE setting, the literature review, and a community participatory process utilizing an advisory committee for feedback to the matrix. Focus group meetings were held to gather quantitative and qualitative data to verify the accuracy of the inventory matrix as a balanced picture of

the HLCB learning environments. The outcomes of the research study will provide a foundation for future research in broader educational contexts as post-doctoral work.

Delimitations

The following delimitations are noted:

- The study was not designed to measure Hawaiian language or cultural competency.
- The study was not designed to measure the educational outcomes of the students.
- The study was not designed to measure the performance of schools.
- The study was not designed to measure the performance of the administrator(s), teachers, or staff.

Organization of the Study

Chapter 1 shapes the context for the research study and provides important background information informing the study. The research hypothesis and question as well as an overview of the study and methodology are also included.

Chapter 2 is the literature review. A wide net was cast over local, national, and international shores so as to gather perspectives from the current theories in multicultural and Indigenous education and linguistics on culture-based education for Indigenous children. Many themes emerged from the review of literature that are integral to the research study. A synthesis of the literature that crisscrosses and bridges Western and Indigenous perspectives support the design of a framework from which the Kūkohu inventory matrix was developed. Included in the literature review is a synthesis of

knowledge relative to Indigenous worldview, epistemology, and pedagogy that provides this study with a solid foundation for the research question.

Chapter 3 presents the methodology used in the Kūkohu study. It includes a description of the *mixed methods* methodology, including the research design, process, and procedures as well as the Kūkohu inventory matrix, data analysis plan, assumptions, and limitations of the study.

Chapter 4 provides the findings of the study and the data collected. Findings presented include the data from the focus group meetings and the matrix.

Chapter 5 is the final chapter and is where discussion and summary of the research study is presented. A discussion on the critical themes that emerged as a result of the study and culminating conclusions and recommendations are provided.

Summary

Education offers the opportunity to heal and empower individuals, families, and communities with outcomes that are life sustaining and enduring into the future. The education process supplies us with the academic tools and social contexts to critically analyze, problem-solve, and make pono decisions going forward. Good learning helps us to be good thinkers and to think and act more consciously and compassionately towards others. Schooling, family, and community provide us with the socio-cultural foundation through which we relate to the world and prepare to make contributions as citizens of the future.

Education serves children best when it works with the family, community, and others in shared partnerships and collaboration. Through culturally relevant strengths-

based approaches, the educational environment can better cultivate and nurture students' cultural identity and place within society. The closing statement for this chapter is taken from The Alaska Native Knowledge Network (1998) and articulates standards for culturally-responsive schools:

A firm grounding in the heritage language and culture Indigenous to a particular place is a fundamental prerequisite for the development of culturally-healthy students and communities associated with that place, and thus is an essential ingredient for identifying the appropriate qualities and practices associated with culturally-responsive educators, curriculum, and schools. (p. 2)

This dissertation study developed and piloted a Hawaiian culture-based inventory tool called Kūkohu. As a part of the research process, it gathered insights from educators from within the Hawaiian-medium/immersion schools and from experts activity engaged in Hawaiian education across the conventional to Native empowerment schooling models. This dissertation's findings indicate that the Kūkohu inventory can assist Hawaiian culture-based schools in facilitating their overall school improvement plan.

Chapter 2

Literature Review

*He kumu kukui i he 'e ka pīlali.*⁸

A kukui tree oozing with gum.

—Pukui

Using the symbolic imagery of the kumu kukui, the pīlali, a gum like substance from the inner bark of the kukui tree, is likened to knowledge that exudes from the source itself. As a metaphor for the literature review process, the kumu kukui is not a singular tree, but a grove of wisdom and an opportunity through which to become more informed about what is already known in the field pertinent to the research topic. The pīlali in this context represents the glue that binds all of the interrelated pieces of knowledge from across the field to form a solid comprehensive base that informs the research study. *He kumu kukui i he 'e ka pīlali* describes the prosperity of new knowledge gained through the literature review process.

The literature review is an 'imi loa, a deep search for knowledge that contributes depth and an enriched perspective of the research question. Indigenous education is a relatively progressive field within the mainstream of Western education and a movement of self-determination for Indigenous peoples internationally to reinvigorate an

⁸ Traditional Hawaiian wisdom, # 711, p. 79. Pukui, M. K. (1993). *'Ōlelo No'eau: Hawaiian proverbs & poetical sayings*. Honolulu, HI: Bishop Museum Press.

educational process that better serves the well-being of the Native child. Indigenous education offers a solution for improving the schooling experiences of the Native child beyond the Western paradigms of theory and research and the instruction of content and skills.

This literature review provides a body of knowledge on Indigenous education settings as strength-based holistic environments for cultivating well-being in culturally responsible and healthy ways. The review presents a broad cross-section of perspectives through the scholarship of Indigenous and non-Indigenous authors who are recognized as leading authorities in their fields and who maintain an intimate pulse on the heartbeat of the work in Native language and culture education. The outcome of the literature review is an extensive collection and synthesis of the body of knowledge that provides an interdisciplinary look at the multiple and complex issues implicit in the research question.

Culture-based education (CBE) is used as the frame for discussing the complexity of issues, perspectives, and “best practices” culled from a growing body of literature on multicultural education, Indigenous education, and culturally responsive education for improving student outcomes and well-being. Issues of culture, language, and worldview shape the underlining context for creating responsive Native learning environments across the educational continuum.

There are five themes central to the research question that have emerged as a result of the literature review. These key themes set the foundation for the research study in terms of Native schooling, culture-based education, and Native learning environments.

They include:

- An Indigenous perspective on education.
- Issues regarding the education of Indigenous children.
- Culture-based education (CBE) and well-being.
- Fostering culturally relevant Native learning environments.
- Characteristics of the Native identity-based learning environment.

Building upon this foundation, both theoretical and empirical renowned experts from within the field provide further insight and perspectives on the issues that, in turn, create the framework for this research study.

Indigenous education is grounded in its own distinct philosophies, epistemologies, and pedagogies that are central to place, language, culture, spirituality, mores, values, and beliefs. The first theme that we will examine frames a perspective for Indigenous education and takes a closer look at the interplay between language, culture, intention, and knowledge. Shaping an Indigenous view of education provides a broad framework to view Native learning environments through local, national, and international perspectives.

The second theme investigates the complex issues involved in the education of Indigenous children. A significant body of the literature examined focuses on studies and experiences in Canada, U.S., New Zealand, and Australia where substantial headway has been made in investigating this issue. This section works to build a greater understanding of the inequities marginalized cultures have experienced through the acculturation process in colonized settings.

The third theme describes Indigenous well-being and taking CBE models from theory to practice. The term CBE is broadly used to identify approaches that build linguistic and socio-cultural congruence between the home and school and, for Indigenous purposes, reclaims schools as cultural spaces for the holistic preparation of its youth. CBE provides the perspectives, contexts, and practices for fostering well-being through Indigenous paradigms. The discussion on well-being also opens the initial pathway for understanding CBE as a holistic Indigenous education framework for creating optimal learning environments based on strength-based attributes that cultivate promising student outcomes. Three models of well-being and CBE set a theoretical foundation for the Kūkōhu Hawaiian culture-based inventory as a critical argument for effective Indigenous learning environments and sets the stage for the methodology in Chapter Three.

Theme four probes the literature on culturally relevant Native learning environments across the public schooling continuum. By moving through the literature through a macro- to micro-examination, the topic will focus on the literature that has emerged for improving Native schooling and aligns the literature with Native Hawaiian data. The review contributes to a deeper understanding of the most immediate considerations relevant to Native Hawaiian learning and the schooling environments across the educational continuum.

CBE is incorporated across the educational spectrum in conventional, community, and charter schools in Hawai‘i. The literature for the final topic reveals four identity characteristics—cultural, curricular, relationship, and linguistic—which will be discussed in more detail in the section that explains the Kūkōhu research study inventory matrix. A

closer, more in depth look at the four characteristics as they are discussed in the literature provides a “local” perspective for Hawaiian language and culture-based schools (HLCB) within the context of the national and international literature.

Joseph Nāwahīokalani‘ōpu‘u, one of Hawai‘i’s most accomplished Native Hawaiians of the nineteenth century, had a famous saying for his students about learning: “*Mai nā kulu wai me nā hune one li ‘ili ‘i, loa ‘a ka moana kai hohonu a me ka ‘āina kilohana.*”⁹ (From the drops of water and the grains of sand, we have the deep oceans and the magnificent land). It simply sums up the literature review process and learning experience. By drawing from the broad pool of knowledge across the growing bodies of literature on Indigenous education, one gains a richer and more complex sense of the landscape and soundscape in which Native Hawaiians are educated.

An Indigenous Perspective on Education

Indigenous thinking embraces a holistic view of being in the world. Within the traditional Native perspective, the world is an integrated tapestry of finely woven connected metaphors. Relationship to each other and place, the world above and below, things seen and unseen, as well as the past, present, and future exist simultaneously within the traditional Indigenous worldview. Demmert and Towner (2002) explain:

Traditional systems of Native American education used to transfer skills and knowledge from one generation to the next developed over thousands of years. In

⁹ Famous saying of Joseph Kaho‘oluhi Nāwahīokalani‘ōpu‘u who said this to his student at the Hilo Boarding School in Waiānuenuē, Hilo, Hawai‘i. Sheldon, J. G. M. (1996). *Ka puke mo ‘olelo o Hon. Iosepa K. Nāwahī*. Hilo, HI: Hale Kuamo‘o (p. 11).

these systems, students were not allowed to fail. The family, clan, tribe,^[10] and responsible mentors worked with the youth until the information or task was clearly learned. The lessons were an integrated part of daily life and ceremonies, not a separate or isolated activity. (p. 1)

Cornelius (1999) published a framework for Indigenous culture-based curriculum in which she examines the Native American Indian educational experience and provides a good definition for understanding Indigenous culture that sets the foundation for education in the Indigenous context:

Culture has been defined as those Indigenous people who have their own cosmology, worldview, language, ceremonies, government, economic system, land base, health systems, and traditions that are rooted in antiquity. Indigenous peoples have a culturally specific way in which they perceive reality, that is, how they make meaning of this world, and that reality is based in ancient beliefs about how this world originated and how human beings should live on this earth. (p. xii)

Native Hawaiians resonate the same general frame in terms of how cultural understanding is embedded in the traditional practices used in the education of their children. Knowledge transfer occurred inter-generationally—such practices built a legacy of stewardship and sustainability for its people and environment. Charlot (2005) adds,

¹⁰ Hawaiians do not have clan or tribal affiliations, as do the Native American Indians or the Alaskan Natives. Traditionally education was delivered through social, gender, class, or vocation related contexts (Meyer, 2003).

Learning is therefore at the center of the ‘Hawaiians’ way of thinking and living. Education transmits the accumulated knowledge of past generations, and response and creativity add to the store. Life is ka ‘imi loa ‘the great search’ that involves all aspects of “sensitivity, perception, intelligence and action. (p. 2)

Ideally, schools should equip all students with the necessary tools to “succeed” through academic preparedness, critical thinking, social-cultural maturity, and wellbeing. For Native American communities (including American Indians, Alaska Natives, and Native Hawaiians) the education system has restricted Native children to the outer margins of the American educational experience. Demmert (Tlingit/Sioux), who was appointed the first Deputy Commissioner of Indian Education under the U.S. Office of Education, has done extensive research on academic success of Native American students. He states,

The greatest educational challenge for many is to build learning environments that allow each of their young children to obtain an education that creates good people that are knowledgeable and wise ... in a language and cultural context that supports their many histories and traditions. (Demmert & Towner, 2003, pp. 9, 48)

Indigenous education has gained much momentum as an international movement of self-determination through an on-going struggle for equitable education that is relevant, rigorous, and grounded in Indigenous values, philosophies, epistemologies, and pedagogy. May and Aikman (2003) summarize the importance of the Indigenous education movement for Native education:

In short Indigenous educators, faced for several generations with inequitable and racialised education policies, have developed innovative approaches to combating social and economic marginalisation, and reinforcing Indigenous identity and values in contexts of rapid social change—approaches that are crucially important in themselves but may well also have much wider currency. (p. 139)

In 1990, U.S. Secretary of Education Lauro Cavazos chartered the Indian Nations at Risk Task Force. The task force formulated its recommendations based on research, public testimonies, and at the National Indian Education Association (NIEA) Convention.¹¹ In addition, twenty-one papers were commissioned from Native American Indian and Alaskan Native education experts on critical issues impacting the failure of Native education in America. The result was a report entitled, “Indian Nations at Risk: An Educational Strategy for Action” (p. ix). The “Indian Student Bill of Rights” best illustrates the beliefs that American Natives hold in terms of basic rights for every Native student:

- A safe and psychologically comfortable environment in school.
- A linguistic and cultural environment in school that offers students opportunities to maintain and develop a firm knowledge base.
- An intellectually challenging program in school that meets community as well as individual academic needs.
- A stimulating early childhood educational environment that is linguistically, culturally, and developmentally appropriate.

¹¹ Native Hawaiians were added to the NIEA membership under the amended constitution of 2000 (NIEA, 2000).

- Equity in school programs, facilities, and finances across Native communities, and in schools run by the federal government and public schools in general. (Indian Nations At Risk Task Force, 1991)

The Interplay Between Language, Culture, Intention, and Knowledge. In its most reductive form, Culture simply refers to the “shared ways of being, knowing, and doing” (Educational Research Service, 2003; Kana‘iaupuni, 2007). Edwards, Ellis, Ko, Saifer, and Stuczynski (2004) provide a fuller definition of Culture and how it contributes to student achievement:

Culture can be defined as a way of life, especially as it relates to the socially transmitted habits, customs, traditions, and beliefs that characterize a particular group of people at a particular time. It includes the behaviors, actions, practices, attitudes, norms and values, communication styles, language, etiquette, spirituality, concepts of health and healing, beliefs, and institutions of racial, ethnic, religious, or social group. Culture is the lens through which we look at the world. It is the context within which we operate and make sense of the world.

Culture influences how we process learning, solve problems, and teach. (p. 9)

Providing another perspective, Meyer (2006) defines culture as, “actions, beliefs and values that a group of people agree are ‘best practices.’ It is specific to place, climate, and time” (p. 32). Knowledge is shaped by history, intention, and functions over space and time, and is open to historical influences that add to the dynamics of cultural change. As part of her research on Native epistemology, Meyer (2003) views intention as an expression of culture that motivates us to action and negotiation of meaning through doing (p. 55). Intention deepens the quality of education as we utilize schools as, “places

for practice, moral development, and cultural extension” (Meyer, 2006, p. 33). For Native Hawaiians, Meyer reiterates the importance of intention in regards to purpose, meaning, and function in education:

The belief that meaning was tied to learning was not something hidden or subtle for Hawaiians. It is the core of why we do things—it must have function for information to become knowledge and knowledge to become understanding... Knowledge that holds function at its center moves our students into action and a better understanding of the roles of history and intention ... [learning] makes sense when there is a purpose, meaning, and function to the knowledge that is gained. (p. 33)

Cultural knowledge is described as “those learned behaviors, beliefs, and ways of relating to people and the environment that members of a cultural group acquire through normal processes of enculturation (Hollins, King & Hayman, 1993, p. 2). Language and culture play an essential role in the learning process of one’s early life experiences and serve as the foundation from which one perceives and interacts with the world around him/her. Current research suggests, “culture strongly influences students’ learning patterns, communication styles, perceptions, and behavior” (Educational Research Service (ERS), 2003, p. 4).

Culture has a profound effect on the way we perceive and interact with the world. Everyone has a culture and every learning context is culturally influenced by geographical locations, language, histories, beliefs, practices, and experiences. Education has historically been a place for assimilation and acculturation of the Native child into the Western culture. Demmert and Grissmer (2004) offer an explanation on the cultural

development of the Native child and offer suggestions on how schools can mitigate the negative experiences many Native children encounter in schools:

If culture influences an individual's view of the world; if cultural experiences determine how one approaches a problem and attempts to solve it; if cultural environment influences the way a person thinks and approaches life; and if early experiences and our environments significantly influence what each of us become as individuals, issues of culture, language, cognition, community, and socialization are central to learning. If all of this is true, then each of these factors must be adjusted for in the context of learning, in our social development, in our theories of education, and in our assessment and research. (Demmert, 2003, p. 3)

Vygotsky's theories on language, culture, and learning affirm the development of cognition through social interaction within the context of activities. Learning is informed by the constant presence of culture and the interaction between home and school. The most effective schooling occurs when the learning of the home and school intersect (Vygotsky, 1994, 1986). Deyhle and Swisher (1997) suggests that the learning styles acculturated within the home are often different than what is expected in school, and Jordan (1985) furthers the argument by stating that such differences can ultimately affect learning: "The idea that continuities or discontinuities between children's natal cultures and the culture of the school can affect the quality of learning that takes place in school is not a new one" (p. 109).

Issues Regarding the Education of Indigenous Children

While homes and communities provide an on-going context for enculturation of the child through the language, culture, values, practices, and beliefs of the home and community, schools are still the primary vehicle for acculturation of the child into the mainstream dominant culture of the society. In the U.S., that mainstream norm is a Western worldview. It is pervasively invasive throughout the educational systems and institutions of America, and sets the tone that guides political decision-making and funding for national policies, academic standards, curriculum, teacher preparation, as well as school and student success.

Beginning in the 1870s and for over a century following, the U.S. Federal Education Policy focused on assimilation of its Indigenous populations to Euro-American standards through such acts as the Indian boarding schools for American Indians (AI) and Alaska Natives (AN). Indigenous Americans were placed in schools distanced from their homes and communities to discourage family influence and were forbidden to use their Native language and culture (Lipka, 2002; La Belle, Cheryl, & Kanaqlak, 2005; Meriam, 1928). Lipka (2002) states, “In these cases, the very act of learning required a student to deny his or her personal, cultural, and linguistic heritage.”

Demmert and Towner (2002) explain the impact of colonization on Native Americans: “many of these traditional systems for educating the youth of a tribe are no longer practiced. Dramatic changes in education systems occurred because of a mix of cultural, social, and political interventions that have taken place among all Native peoples” (p. 1). Stairs (1994) describes the experience for the Indigenous learner as a constant “cultural negotiation [and] neither power relations nor learning styles nor

language or spiritual renewal alone is likely to drive effective negotiation of an Indigenous schooling situation” (p. 168).

In an attempt to reduce the achievement gap and better understand the inequities that marginalized cultures have historically experienced, researchers have long pondered over the role that language and culture play in the school setting (Deyhle & Swisher, 1997; Ogbu, 2003; Osborne, 1996). The issue encompasses a multi-layered and multi-faceted set of concerns that are cultural, linguistic, historical, genealogical, identity-bound, and place-centered (Kana‘iaupuni, 2004, 2006; Meyer, 2003a, 2003b, 2008), that is further complicated by the simple fact that “Many of the instructional procedures used by schools stem from a set of cultural values, orientations, and perceptions that differ radically from those of many of our students” (Educational Research Service, 2003, p. 10). The Native child enters the formal learning environment with a wealth of knowledge, life experiences, and personal styles of learning that are often mismatched with the culture of the school (Deyhle, 1997; Kawakami, 1999). Ogbu (1982) suggests that cultural discontinuity is the explanation for minority school failure and thus a justification for “cultural compatibility” in program development.

Education serves Native cultures best when it is holistically delivered and intentionally purposeful and useful (Meyer, 2003a, 2008). In that way, the Indigenous child is able to build an image of the surrounding world and a relationship within the world connected to place, genealogy, and history (Kanahele, 2005; Lindsey, 2006; Pere, 1982; Pukui, 1972). Developing outcomes for educational excellence should include holistic considerations that are grounded in nurturing cultural coherence within the content, processes, procedure, and experiences of the formal education setting. Fostering

experiences that are culturally congruent and reflect the experiences of the student within his/her family and community provides a footing from which he/she can build and scaffold new knowledge (Demmert, Grissmer, & Towner, 2006; Gay, 2000; Huber & Parscal, 1991; Mohatt, 1994; Stoicovy, 2002; Tharp & Hilberg, 2002; Tharp, 2006).

Effective critical change in education for Native children is not a simple task when understood within the context of all the multitude of variables teachers and schools must negotiate in order to produce “successful student outcomes.” The challenge is a complex balancing act that schools are better equipped to deal with when working with the families and communities as educational partners. Demmert & Towner (2003) explain,

From a tribal and Native American professional perspective, the creation of lifelong learning environments and meaningful educational experiences for both the youth and adults of a tribal community requires a language and cultural context that supports the traditions, knowledge, and language(s) of the community as the starting place for learning new ideas and knowledge ... this cultural context is absolutely essential if one is to succeed academically and to build a meaningful life as adults. (p. 1)

According to The Indian Nations At Risk Task Force (1991), the mission of Native education is “to develop the self-sufficiency essential to healthy economies and to their social and cultural well-being” (p. 20). The Task Force further articulated the implications of such an approach to education in their report:

The Task Force believes that a well-educated American Indian and Alaska Native citizenry and a renewal of the language and cultural base of the American Native

community will strengthen self-determination and economic well-being and will allow the Native community to contribute to building a stronger nation—an American that can compete with other nations and contribute to the world's economics and cultures. (Indian Nations At Risk Task Force, 1991, p. iv)

The report identified five important principles that have redirected initiatives serving Native populations at the Native, local, state, and national governmental levels:

- The U.S. has responsibility to help Native governments and communities preserve and protect the Native cultures, which are found in no other part of the world.
- The educational strategies and reforms that will be needed to achieve Native educational goals must guide improvement in all schools that serve American Indian and Alaska Native students.
- Schools must provide enriching curricula and assistance that encourage students' best in academic, physical, social, cultural, psychological, and spiritual development.
- Parents, Elders, and community leaders must become involved in their children's education, in partnership with school officials and educators. They must participate in setting high expectations for students, influencing the curriculum, monitoring student progress, and evaluating programs. (Indian Nations At Risk Task Force, 1991, p. xiv)

These principles indicate that a genuine commitment to real change will be required not only on the part of school systems, but also by federal, state, local, and

Native governments as well as from Native corporations, educational organizations, business, labor, and community organizations.

A Well-being and Culture-Based Education Framework

Culture-based education (CBE) promotes Native heritage as part of a healthy picture for individual and community well-being. The recognition of CBE for Native Americans stems as far back as 1929, when Lewis Meriam released his report of survey findings to the Secretary of the Interior, the Honorable Hubert Work. Meriam's report called for a complete overhaul of the Bureau of Indian Affairs and of national policy. His report recognized education as a means for academic success and meaningful citizenry through school reform for Native American students. Chapter IX on education states:

The most fundamental need in Indian education is a change in point of view. Whatever may have been the official governmental attitude, education for the Indian in the past has proceeded largely on the theory that it is necessary to remove the Indian child as far as possible from his home environment; whereas the modern point of view in education and social work lays stress on upbringing in the natural setting of home and family life....The methods of the average public school in the United States cannot safely be taken over bodily and applied to Indian education. Indian tribes and individual Indians within the tribes vary so much that a standard content and method of education, no matter how carefully they might be prepared, would be worse than futile. (Meriam, p. 346)

Native peoples have endured many hardships through colonization and perhaps one of the most devastating examples has taken place through the assimilation processes of Western education. This acculturation of Indigenous youth occurs when they are removed from their home environments, culture, and language as a process to strip away Native identity and well-being. The effects of which are well documented through many stories of Native peoples. In contrast, Indigenous education places a high value on well-being as a fundamental outcome of the educational process. Culturally sound schooling models for the Indigenous student resonate holistic and comprehensive application of both Indigenous and contemporary approaches that are reflective of and responsive to the culture, language, and community. A review of three well-being and culture-based models shapes the context for the Kūkohu framework, a Hawaiian culture-based inventory matrix that was developed for this research study and is more fully described in Chapter 3. For our purposes here, the Kūkohu framework is a strengths-based approach for addressing responsible schooling environments for Native Hawaiian children.

The first Kūkohu model was published in *Ka Huaka 'i*, the Native Hawaiian Educational Assessment (Kana'iaupuni et al., 2005; Kamehameha Schools, 2009). It utilizes a conceptual model of well-being as a framework for presenting Native Hawaiian data, innovations, and implications. The model employs a flower metaphor with five petals to represent five categories of well-being that have been articulated in theories and research on well-being. These dimensions recognize the strengths and challenges of Native Hawaiians in attaining an improved quality of life, wellness, and an overall

stability in culturally centered ways. Beginning with a macro view of well-being provides the essential elements for accountability of a Hawaiian CBE continuum:

- ***Social and cultural well-being***: Functioning of individuals, family and others in relationship to society. Includes family composition and interaction, social networks and support, community dynamics, and social behavior. Cultural practices, language, and traditions are the contextual underpinnings.
- ***Physical well-being***: Life expectancy, wellness, nutrition, disease incidence, health risk factors, maternal and child health, and access to health care. Physical and spiritual well-being are inextricably related and tied to the natural environment.
- ***Cognitive well-being***: School readiness, instructional quality, achievement test scores, special education rates, attendance, high school completion, and educational attainment as outcomes. Intellectual function, knowledge (both Western and Hawaiian 'ike), and human capital.
- ***Material and economic well-being***: Monetary and material resources such as housing, land (resource and ancestral foundation), employment, occupation, income, and other dimensions of socioeconomic status.

- ***Emotional well-being***: Feelings, perceptions, attitudes, intimacy, mental health, self-esteem, cultural identity, belonging, sense of place, ties to the land, spirituality and those connections to ancestors and others. (Kana‘iaupuni et al., 2005, p. 18)

The second model was developed in collaboration on an international Indigenous scale and influenced by the original work of Crabbe (2003) as is represented in his Hawaiian Ethno-cultural Inventory (HEI). Demmert (2008) also developed an Indigenous well-being rubric that describes the dimensions and exemplars found in Indigenous communities. The matrix identifies five dimensions at four levels of proficiency that reflect the “distinctive contemporary as well as traditional linguistic, cultural, and social mores of the community” (p. 1). The rubric recognizes the specific beliefs, practices, behaviors, attitudes, and knowledge pools that lead to social, cultural, psychological, and physical well-being of Indigenous individuals and communities:

- ***Knowledge and participation in the traditions of the cultural community***: A strong positive Indigenous identity and active involvement in the cultural community.
- ***Traditional spiritual beliefs, practices, and philosophies***: Active and practical traditional spirituality.
- ***Respect for self and contribution through roles and responsibility to family, community, and tribal affairs***: Understands and demonstrates responsibility to family, community, and broader society.
- ***Indigenous knowledge and application and Native language fluency***.

- *Shows development and progress of cognitive and intellectual skills.*
- *Health and wellness:* Knows, understands, respects, and applies kinesthetic activity for physical development. (Demmert, 2008, pp. 1-5)

The last well-being model is called the Circle of Courage created by Brendtro, Brokenleg, and Bockern (2002) and is based on the First Nations philosophical concept of the medicine wheel. Native American philosophies and their cultural systems of education naturally cultivate the well-being of children through holistic Indigenous values, beliefs, and practices central to their way of being in the world. The whole rearing concept for children is designed on a foundation of the child as a sacred being. As a result, approaches to education nurtured caring, respectful, independent, and courageous children. This well-being model was developed through extensive work with at-risk youth as a strengths-based prevention model and contributed to the broader understanding of strengths-based/culture-based Native education. They found that Native youth that possessed the four attributes explained below lead healthy lives as active contributing citizens of the Native community. These four principles in the Circle of Courage provide guidance for reclaiming Native environments and can be applied to Hawaiian learning environments:

- *Spirit of Belonging:* Understanding that who one is, where one comes from, and one's relationship to the surrounding world is cultivated by trust through processes that foster a sense of belonging, self, and cultural identity.
- *Spirit of Mastery:* Inquiry for learning and mastery of concepts, content, and skills to develop cognitive, physical, social, and spiritual competence.

- ***Spirit of Independence***: Developed thinking processes and responsibility for good decision-making and communication through an empowered sense of self and internal discipline.
- ***Spirit of Generosity***: Centered in the generosity of heart, spirit, and concern for others through active family and community participation in service to others. (Brendtro, Brokenleg, & Bockern, 2002, pp. 43-59)

Collectively, these three models provide a local, national, and international example of the essential principals that impact well-being from an Indigenous perspective and contribute to the holistic character of CBE settings. Although the purpose for developing these models may have differed, they share some important dimensions in terms of well-being that are worth thinking about when working toward enhancing the richness of what students can experience in these types of school settings. Some of these shared elements include grounding cultural identity and belonging in practices, traditions, and language of the distinct culture; socio-cultural, intellectual, physical, and spiritual competence; and service to family, community, and Native affairs as a responsible member of the broader society.

The literature on culture-based education reveals three critical models that have emerged from the research on Native education. The first CBE model developed by Demmert, Grissmer, and Towner (2006) reviewed and analyzed the available research on Native students in the U.S. (p. 8). This material was incorporated with information from 109 studies that focused primarily on Native American achievement as documented in the Early Childhood Longitudinal Study of Progress (ECLS-K), the National Assessment of Educational Progress (NAEP), and addition information from the Northwest Regional

Educational Laboratory (NWRL) national study on Native language and CBE programs. Two major foci emerged from the review: a) the preservation and revitalization of Native languages and cultures and the methods in which they are being incorporated into the education process; and b) the successful preparation and educational attainment of Native Americans for the labor market (p. 7).

In addition, drawing from Demmert's (2008, pp. 9-10) work, I cross-aligned the elements found in the national study with the Indigenous CBE rubric developed by Demmert et al. (2008). Five critical elements for Native CBE programs were identified as a result of the review and analysis:

- **Language:** Recognition and use of Native American (American Indian, Alaska Native, Native Hawaiian) languages as the language of instruction, as a bilingual approach to learning or as a first or second language.
- **Pedagogy:** (a) Practices that stress traditional cultural characteristics and adult-child interactions as the starting place for one's education (mores that are currently practiced in the community, and which may differ community to community); and, (b) Pedagogy in which teaching strategies are congruent with the traditional culture as well as contemporary ways of knowing and learning (opportunities to observe, opportunities to practice, and opportunities to demonstrate skills).

- ***Curriculum:*** Based on traditional culture that recognizes the importance of Native spirituality, and places the education of young children in a contemporary context (e.g. use and understanding of the visual arts, legends, oral histories, and fundamental beliefs of the community).
- ***Leadership:*** Strong Native community participation (including partnering with parents, elders, and other community resources) in educating children as is evidenced in the curriculum, planning, and operation of school/community activities.
- ***Assessment:*** Knowledge and the use of the social and political mores of the community.

In 2006, the Kamehameha Schools Research and Evaluation Division developed the second CBE model used in the framework of the Kūkōhu inventory. The Hawaiian Cultural Influences in Education (HCIE) study was the first large-scale empirical CBE research study of its kind. The research study was a collaborative effort between Kamehameha Schools, the Hawai‘i Department of Education, and the Hawaiian immersion/focused public charter schools. The results included data from 600 teachers, 2,969 students, and 2,264 parents at 62 schools across the Native Hawaiian education continuum. The initial phase of the study created a Hawaiian Indigenous Education Rubric (HIER) through a community participatory process of which I was actively involved. HIER identified five basic elements found in Hawaiian culture-based education that were later used to inform the development of the surveys used in the study:

- ***Language:*** Acknowledging and using Native or heritage language.

- ***Family and Community***: Involving and integrating the family and community in the development of curricula, learning, and leadership (i.e. school model development, events, enrichment, learning projects).
- ***Context***: Structuring of the learning environment and interactions in culturally relevant and healthy ways (i.e. haku, observation).
- ***Content***: Integrating culturally grounded content, skills, and assessment in authentic ways that make learning meaningful and connected to the learner and learning community, i.e., mālama ‘āina (land stewardship), kōkua kaiaulu (community responsibility), ola pono (values & life skills preparation, oral histories).
- ***Assessment and Accountability***: Using a variety of methods to gather and maintain data that ensures student progress in culturally responsible ways (i.e., hō‘ike). (Kana‘iaupuni, 2007; Kana‘iaupuni & Kawai‘ae‘a, 2008; Kana‘iaupuni, Ledward, & Jensen, 2010)

The last CBE model that informed the Kūkōhu framework was selected from the research of McCarthy (2009a, 2009b) on the promising practices for strong CBE Native language and culture schooling. The recommendations are a response to the high-stake tests and limited quantitative data available on the role and impact of Native languages and cultures on Native American student achievement. The research acknowledges the empirical evidence on the innovations being demonstrated by Indigenous language program models focusing on high Native language fluency and rigorous levels of academic achievement. McCarty identifies four characteristics that lead to strong CBE Native language and culture schooling:

- ***Self-efficacy as social change agents***: Facilitates learners' self-efficacy, critical capacities, and intrinsic motivation as thinkers, readers, writers, and ethical social agents.
- ***Educational parity of Western and Indigenous education***: Enables students to achieve full educational parity with their White mainstream peers, with the long-term goal of preparing Indigenous students for full participation in their home communities and as citizens of the world.
- ***Well-being, academic and ethnic identities***: Contributes substantively and positively to learners' personal well being and the development of their academic and ethnic identities.
- ***Promotes trusting relationships between home and school***: Promotes positive, trusting relationships between the school and the community, helping to complete the circle of ...“the whole child, the whole curriculum, and the whole community.” (McCarty, 2009a, p. 22; McCarty, 2009b, pp. 12-13)

The Indian Education Association (2011), the largest and oldest association representing the education interests of American Indians, Alaska Natives, and Native Hawaiians suggests that CBE in combination with high academic expectations, learning standards, and the Native language is most likely to improve and yield academic achievement of Native children. CBE bilingual and immersion programs maintaining a strong commitment to the use of the Native language and culture in combination with local knowledge as an integral part of the curriculum are the most successful programs (Demmert & Towner, 2003; Tharp, 1982).

Framing Culture-based Education (CBE) in Theory and Practice. Mohatt, Trimble, and Dickson (2006) explain that CBE grew out of the guiding assumption “that a discontinuity between home and school environments serves to confuse and alienate Indigenous children, fostering a sense of inadequacy and lack of self-efficacy” (p. 39).

McAlpine, Eriks-Brophy and Crago (1995) similarly argue that the conflict between classroom and home cultures create an assimilation crisis where students feel compelled to choose between their own culture and language or being able to succeed academically and socially by acculturation into the school culture. Although genetics is a factor in our development, the cultural mores and attitudes experienced and our physical, socio-cultural, emotional, spiritual, and intellectual surroundings play a critical role in what and who we become (Afifi & Bergman, 2002; Begley, 1996; Bowman, Donovan, & Burns, 2001; Bruner, 1996a, 1996b, 2006a, 2006b; Demmert & Grissmer, 2005; Gardner 1983, 1995; Ogbu, 2003; Van der Veer 1994; Vygotsky 1994; Yap et al, 2005).

Education is a process of cultural negotiation that “moves from meaning to meaning-making, and ultimately to culture making” (Stairs, 1994, p. 165). Research shows that Native children connect, learn and retain better when meaning is made through relevant experiences tied directly to their lives. Therefore, culture is related to the development of the mind. Bruner (1996a) explains,

Culture shapes mind, that is it provides us with the tool kit by which we construct not only our worlds but our very conceptions of our selves and our powers.... For you cannot understand mental activity unless you take into account the cultural setting and its resources, the very things that give mind its shape and scope.

Learning, remembering, talking, imaging; all of them are made possible by participating in a culture. (pp. x-xi; also in Demmert & Towner, 2003, p. 5)

Bruner (1996a) goes on to explain that culture and learning are interdependent and inextricable from one another: “On this view, learning and thinking are always situated in a cultural setting and always dependent upon the utilization of cultural resources” (p. 4).

The Northwest Regional Education Laboratory (NWREL) provides a good operating definition for culture-based education (also referred to as culturally based education):

Culturally based education can be considered as a broad-based school-wide approach that seeks linguistic and social-cultural congruence of the Native student population in all aspects of the school program but particularly in classroom instruction. Such approaches are more feasible and more likely to occur in school settings where the Native student population is in the majority. (NWREL, 2004, p. 2)

CBE is thus a framework for Native education that is grounded in a strengths-based approach for learning. Through CBE, educational practices, pedagogy, and curriculum are aligned with the language, culture, and experiences of the student.

Kana‘iaupuni (2007) further explains:

Perhaps most simply put, culture refers to shared ways of being, knowing, and doing. Culture-based education is the grounding of instruction and student learning in these ways, including the values, norms, knowledge, beliefs, practices, experiences, and language that are the foundation of a (Indigenous) culture.

Because U.S. society typically views schools through a Western lens—where

Western culture is the norm, what many do not recognize is that all educational systems and institutions are culture-based. Hence, the term is conventionally used to refer to “other” cultures, and in this case Indigenous cultures. (p. 1)

Yap et al. (2004) best describes the findings found in the literature review on the value and benefits of CBE:

Culturally based education, by expressing the values of the tribe and the community, ensures greater endorsement, involvement, and support by parents and community resources. This in turn strengthens potential associations between student experience and the academic curriculum. Thus, a CBE intervention that is congruent with community goals is maximally efficacious for student academic achievement. (p. 2)

The data on Native American students consistently documents a list of negative educational outcomes illustrating failure in schools—lower achievement, attendance, graduation rates, higher disciplinary intervention, special needs, etc. The cultural deficit theory has been used for many years to explain the shortcomings of Native Americans and assign blame to minorities’ home setting and culture. From an acculturation perspective, it provides rationale for further assimilation of students into the broader mainstream culture. Although there is limited quantifiable research available on CBE, empirical research clearly shows “a direct relationship between culturally based education and improved academic performance among Native students” (Demmert & Towner, 2005, pp. 5-6).

Three established educational theories describe the contexts of culture-based education for Native peoples. According to Demmert, Grissmer, and Towner (2006, pp. 9-10), the three theories provide a frame for better understanding the proposition of CBE:

- ***Cultural Compatibility Theory***:- *Matching levels of congruency in context and content where the human interactions in the school and classroom are compatible with those of the home and community.* One simple example is the application of the concept of hānai (feeding). Eating is an important affair to Hawaiians and the practices of hānai are demonstrated in the home and then extend to the school and community. It is common to hear the call, “mai e ‘ai.” (come and eat) to family, friends, or visitors in a Hawaiian home. Feeding is usually a part of the Hawaiian social context. It is also a common practice to take food to eat and share with others at community activities. In Hawaiian CBE schools, it is similarly not uncommon to see the teachers and students sharing their lunch with one another as an expression of pilina, relationship, and mālama, caring. (see also Ceppi, 2000; Glassco, 2005; Kawakami & Pai, 2005; Ladson-Billings, 1995, 2006)
- ***Cognitive Theory***: *Building new knowledge by making connections to prior knowledge that has meaning, personal and social relevance, or a relationship to prior knowledge or experience.* An example of cognitive theory might be teaching about the lifecycle of the salmon by relating it to the lifecycle of the ‘o‘opu or goby fish found in the

local streams. In this context, the use that vendor textbooks explain using abstract concepts outside of the “local” experience contributes to added confusion to learning. (see also Sorensen, Tomas, Monroe, & Walker, 2002)

- ***Cultural-Historical-Activity Theory (CHAT)***: *New knowledge is gained by synchronizing the culture, language, and cognitive processes through socio-cultural means to build understanding as a whole connected piece.* In CHAT, teaching about and through the culture using cultural knowledge, history, traditions, language, mores, and practices is done simultaneously through congruent cultural learning processes like ha‘i mo‘olelo and hula (traditional Hawaiian storytelling and dance) as vehicles for building new knowledge. (see also Ah Ho, 1994; Kaiwi, 2006)

Educational quality can be achieved by articulating culturally healthy and responsive learning environments as a base from which one develops and fulfills personal aspirations and grows to serve the family, community, and others (Kawai‘ae‘a et al., 2002). Culture-based education (CBE) under the auspices of culturally responsive or culturally based schooling is used to describe a “holistic and comprehensive application of culturally relevant education” (Kana‘iaupuni, Ledward, & Jensen, 2010, p. 2) that is grounded in the worldview, epistemology, and pedagogy of a particular culture “from whose lens are taught the skills, knowledge, content, and values that students need in our modern, global society” (Kana‘iaupuni & Kawai‘ae‘a, 2008, p. 71). Castagno and

Brayboy (2008) propose the term culturally responsive schooling (CRS) to describe the Indigenous model for culture-based education, differentiating schooling from education to focus on the processes and places where students are educated. CRS like CBE promotes Native identity (including language, culture, and worldview) as the piko, the quintessence for developing an optimal healthy learning environment that addresses individual and community well-being, and provides the context for Native American educational reform from the broad continuum of assimilationist to self-determination models (Castagno & Brayboy, 2008; Trujillo, Viri, Figueira, & Manuelito, 2005; Demmert & Towner, 2003, 2005; Swisher & Tippeconnic, 1999).

CBE Learning Contexts Across the Schooling Continuum. There are five different kinds of learning contexts that best describe the application of CBE in practice. These descriptions may vary in actual implementation due to differences in school vision and goals, geographic and instructional settings, and the availability of human and financial resources. For example, some Hawaiian immersion sites share English medium facilities while others are chartered or stand alone facilities. Although the goal of language revitalization is shared amongst the schools, they have unique characteristics that reflect a distinct relationship and history with the community:

- ***Culturally Based Instruction (CBI)***: The CHAT theory is strongly applied within the type of instructional model where Native pedagogy, Native ways of knowing and doing, language, culture, and values are embedded in a variety of ways. The curriculum applies language and/or culture intensive approaches. Native spirituality is an essential part of the holistic make-up of the learning environment and is maintained through cultural practices. These

programs have high Native attendance and are Native empowerment models that utilize the language, culture, traditional wisdoms, and cultural identity as the underpinnings for academic achievement. These “Native schools” have high expectations for student achievement, production, attitudes, and behavior. Although the choices may vary in implementation, the programs are basically one of two types:

1. Language-based programs using the Native language as the medium of instruction to either create or build competency of the language among second language learners or with fluent speakers to teach academic subjects through the Native language while increasing competency of the language. The Native language is used as the medium of instruction and social interaction in fully implemented or partially implemented programs. Examples include minority official languages, immersion education, and bilingual and two-way immersion programs. (Wilson & Kamanā, 2001a, 2001b, 2011a, 2011b; Wilson, Kamāna, & Rawlins 2006)
2. Native-focused programs are intended to be strong culture-base programs that are taught through the medium of English and infuse the Native language into the curriculum. Native empowerment, being environmentally savvy, and having a strong cultural identity are some of the goals of these programs. An example is Hawaiian-focused charter schools and Native community-based conservation projects. (Kahakalau, 2003, 2005a, 2005b, 2006)

- ***Native Language Instruction (NLI)***: Native language is the subject of instruction and coursework. NLI is usually taught as a regular course, like a high school language course. In most cases, NLI is taught as a “foreign language” and can be taught through the Native language through methods like TPR. Cognitive theory is commonly applied to NLI. (Hinton, 2001b; Mamchur, 1996; Sims, 2001)
- ***Native Studies Programs (NS)***: These courses can be required or elective courses in the school curriculum and include courses such as Native history, entho-science, culture, social studies, arts, and ethnic studies courses. (Cajete, 1999; Maryboy, Begay, Hawkind, & Cline, 2005)
- ***Native Cultural Enrichment (NCE)***: These are additive activities, events, classes, workshops, and programs that aim to enhance the Native curriculum. This would include after school programs, single day events such as May/Lei Day, cultural summer programs, art workshops, cultural camps, or field trips. The goal of NCE programs is to provide a connection to the language and culture in small manageable chunks that motivate and build the cultural identity and knowledge of the student. (Kawakami, 2004; Nā Pua No‘eau, 2007)
- ***Culturally Relevant Materials (CRM)***: Materials are presented through the Native language or English. These materials have been infused, integrated, or embedded with Native culture, language, values, and practices conducive to Native learning styles to deliver the content of the curriculum. These include

curriculum, resource, and supplementary materials aimed at teaching the content and skills; supporting a Native worldview; as well as building a healthy identity, attitudes, and behavior. Such materials include storybooks for reading, environmental science materials, and health and social studies curriculum that are culturally compatible with the Native culture. (Kanahele-Frias, 2003; Kawakami, 2004; Nelson, Cajune, Hiratsuka et al., 2002)

There are a wide range of cultural applications to make learning meaningful for the Native student. Programs range from utilizing the language and culture as the foundation from which all learning is connected to programs that use the language and culture as a vehicle for transitioning and acculturating students into the “mainstream” culture. Whether a Native program is designed on a deficit model strategy, a strengths-based model strategy, or somewhere in between, the word “culturally” is often used to describe the pool of strategies that are appropriate, centered, compatible, congruent, contextualized, effective, matching, mediated, reflective, relevant, responsible, responsive, and sensitive for making learning connections with Native students using their home and community language, culture, and practices. The words learning, teaching, pedagogy, instruction, schooling, and education are also often used interchangeably to describe the context of application (i.e. culturally relevant instruction/pedagogy/education). However, it is evident that culture is the central ingredient present within the social and academic interplay of the learning experience (Agbo, 2001; Au & Jordan, 1981; Au & Kawakami, 1994; Au & Matson, 1983; Cazden & Leggett, 1981; Gay, 2000; Irvine, 2003, 1990; Kana'iaupuni, 2004; Kaomea, 2000; Ladson-Billings, 1995, 1994, 1992; Lambe, 2003; Mohatt, 1994; Mohatt & Erickson,

1981; Monroe, & Obidah, 2004; Ojbu, 2003; Reyhner, Gilbert, & Lockard, 2011; Roux, 2001; Stairs, 1994; Stoicovy, 2002; Tharp, 1997; Vogt, Jordan & Tharp, 1987 ; The Education Alliance, 2006; Wilson & Kamanā, 2001a, 2001b, 2006, 2011a, 2011b).

Culture-based education (CBE) is a broad term that includes the use of culture, language, and place in the curriculum and learning strategies that foster identity as well as connect to the child's prior knowledge and experiences in constructing new knowledge. Types of CBE strategies also include place-based, community-based, ethno-based, and Native/Indigenous-based education. These strategies differ depending on the context for learning exploration. For example, place-based and community-based education use the geographic environment familiar to the child to build new learning.

Culture-based education is an emerging field that aligns with many of the theoretical contributions of constructivism as well as multicultural and intercultural education and acknowledges the distinctive features found in Indigenous epistemologies and pedagogy. Castagno and Brayboy (2008) remind us that "Indigenous students come to school with different learning styles and cultural practices that result in incongruity between teaching and learning. When teaching methods are adapted to be more congruent with students' cultural norms, academic achievement generally improves" (p. 953).

Recognizing, respecting, and being responsive to both the diverse and distinct cultural identity and language needs of students in creating optimal learning environments is clear. Considerations relating to the learners prior experiences, home language, and culture mixed with micro- through macro-levels of societal and environmental differences play into the specifics of how culture is incorporated into the

learning environment (Bruner, 1996a; Demmert, 2010, 2005; Demmert & Towner, 2003; McCarty, 2009a; 2009b). Gay (2000) points out that even, “standards of goodness in teaching and learning are culturally determined and are not the same for all groups” (p. 22).

The term “cultural synchronization” is an idea that recognizes all the multi-layers that exist in the blending of internal and external, micro- and macro- dynamics between school, home, and community that are present in the classroom and orchestrated by the teacher. It requires the teacher to negotiate between the students’ background and the teachers’ own identity, experiences, and attitudes that are all pieces of the cultural puzzle. Issues of place, history, and genealogy are at the nucleus of the teachers’ ability to make learning work and make sense (Durie, 2003; Irvine, 1990; Kawagley & Barnhart, 2003; Mataire, Matsuoka & Morelli 2005; Meyer, 2003a; Osborne, 1996). Osborne (1996) calls these phenomenon socio-historical-political realities and reminds us that teachers can come from different ethnic groups. The challenge is in the ability of the teacher to, “foster their natal cultural identity, [because] that empowers them with knowledge and practices to operate successfully in mainstream society” (p. 292).

Effective Pedagogic Approaches for Indigenous Learners. One of the crucial components to school success is instructional quality. A substantial number of studies have shown that, “when local knowledge plays a dominant role in instruction (usually in combination with use of the Native language), improvements are seen in various performance and attainment measures” (Demmert & Towner, 2002, p. 9). Therefore, utilizing Native pedagogy is a vehicle for attaining cultural and academic standards of success.

A culturally sensitive and knowledgeable teacher is able to match the instructional approaches with appropriate processes and practices that meet the holistic needs of the Native student. Considerations of language, culture, family, community, and student needs are key and must be integrated into the curriculum, classroom, and school environment through a variety of ways pertinent to the content, skills, and expected behaviors. Teachers who are able to synchronize the academic and cultural objectives in authentic contexts so as to process and practice new learning help students make meaningful personal connections. Such activities that incorporate well-rounded culturally responsible processes, such as observation, first hand experience, use of community/elder resources, hands-on practice, exploration, and performance, provide learning suitable for all Native Hawaiian learner types (Charlot, 2005; Kawai‘ae‘a & Figueira, 2004; Kawai‘ae‘a, Hale, Nāho‘opi‘i, & Kana‘iaupuni, 2005; Meyer, 2003a; Pukui, 1972).

Learning must also be natural and foster Native ways of being. Incorporating cultural practices in language rich contexts such as protocol, ceremonies, storytelling, and traditional practices enhance the students’ ability to participate in a world that shapes function in purposeful, meaningful, and relevant ways. Incorporating cultural wisdoms, traditions, and values into the curriculum content enhances the lens through which students make sense and order of the world (Barnhardt, 2007, 2005; Hall, 2004; Kahakalau, 2005c; Kawakami, 2004; Pere, 1982). An example would be the making of a crab net and connecting this to mathematical concepts of area, perimeter, algorithms, and biological and environmental science. Lipka and Mohatt, (1998) comment, “The

challenge is to adapt local culture and knowledge to Western schooling without trivializing and stereotyping.”

Based on the literature, recommendations can be made on effective pedagogy for Native and CBE learning environments. Providing a support system that builds relationships, relevance, rigor, and responsibility based upon and congruent with Indigenous ways of knowing, culture, language, values, and spirituality are fundamental for Native learning situations. Ladson-Billings (1995) also contributes to the discussion by defining a trilogy of pedagogy and the purpose of culturally relevant pedagogy as addressing academic success, cultural competence, and critical consciousness.

There are multiple perspectives that drive culturally relevant approaches for the educational setting. Multicultural education promotes democracy, diversity, and citizenship by challenging the inequalities in the system as a social justice action for oppressed groups. Multicultural education provides an equalizing opportunity for culturally diverse students within the dominant culture (Banks 2006; Gibson, 1984). Multicultural strategies teach students to value, appreciate, and respect the right to be different in terms of racial, ethnic, cultural, socio-economic, and/or gender identities.

Indigenous education also has a social justice agenda that asserts an Indigenous presence within the formula of educational reform so as to ensure equity. Indigenous education promotes the grounding of Indigenous knowledge—its language, culture, practices, and worldview—as the framework from which culturally cohesive pedagogical approaches are relevant and responsive in the educational setting for Indigenous learners. Moreover, Indigenous education addresses the inequities colonized groups have

experienced within institutionalized education and asserts the inclusion of Indigenous knowledge within formal and non-formal education systems.

It is important to note that there are fundamental differences in the underpinnings that drive the way multicultural education (grounded in Western pedagogy) and Indigenous pedagogy are viewed and articulated through praxis. Indigenous pedagogy takes the stance that “ancient is modern,” meaning that pedagogy is grounded in the traditional beliefs, values, and practices of the ancestors and employs this perspective as the theoretical foundation. This approach employs a holistic lens for Indigenous praxis aimed at fostering the well-being of the whole child as an integral part of the whole community. Western pedagogy utilizes a Eurocentric lens to view the child in terms of his/her individual aptitude, interests, and needs. Individual educational theorists provide the scientific and philosophical wisdoms that have formed and inform the foundation of Western education. However, both Multicultural and Indigenous educational approaches employ strategies applicable for educating the Native child.

Juxtaposing the tensions between the two philosophical frameworks and the wealth of approaches and strategies they offer is a critical exercise for CBE schools as they determine the appropriate fit that aligns with their own school philosophies and practices. There are many themes common in both Western and Indigenous pedagogy that provide a bridge for “good pedagogical practices” and can further equip teachers and schools with useful tools to inform and guide practices in the learning setting.

Kana‘iaupuni (2007) and Demmert et al. (2008) have identified the critical dimensions found in CBE models relevant for Indigenous and Native Hawaiian learning environments. They highlight key considerations that should be accounted for in order to

foster rich and culturally meaningful learning environments. They also articulate several essential approaches for addressing academic success that reflect the distinctive spiritual, cultural, and social mores applicable for Native Hawaiian communities. Utilizing those dimensions as a broad framework for developing Native Hawaiian environments, this next section draws upon that work and provides an additional synthesis and alignment of the critical literature in terms of multicultural, Indigenous, and Native Hawaiian ways of knowing to bring further depth and detail to the understanding of the dynamics of CBE learning environments.

Five instrumental resources rooted in multicultural and Indigenous education were used to analyze and synthesize appropriate pedagogy for CBE environments:

1. The seven CREDE principles for teaching Native American students developed by Demmert (2005) and The Center for Research on Education, Diversity and Excellence (CREDE).
2. The culturally responsive practices advocated by Klump and McNeir (2005, pp. 8-11).
3. The principles for culturally responsive teaching as articulated by the Education Alliance at Brown University.
4. The critical elements for Hawaiian learning developed by Kawakami and Aton (2001).
5. 5) Native Hawaiian proverbs collected, interpreted, and translated by Pukui (1983).

Collectively, these sources provide a cultural framing from within the language, practices, and beliefs of the culture. Additional literature from other CBE and Indigenous

education experts has been included in the synthesis as a check and balance of the common threads found in culturally responsive practices across the literature.

Leadership. Shared Collaboration of Decision-Making With Family and Community:

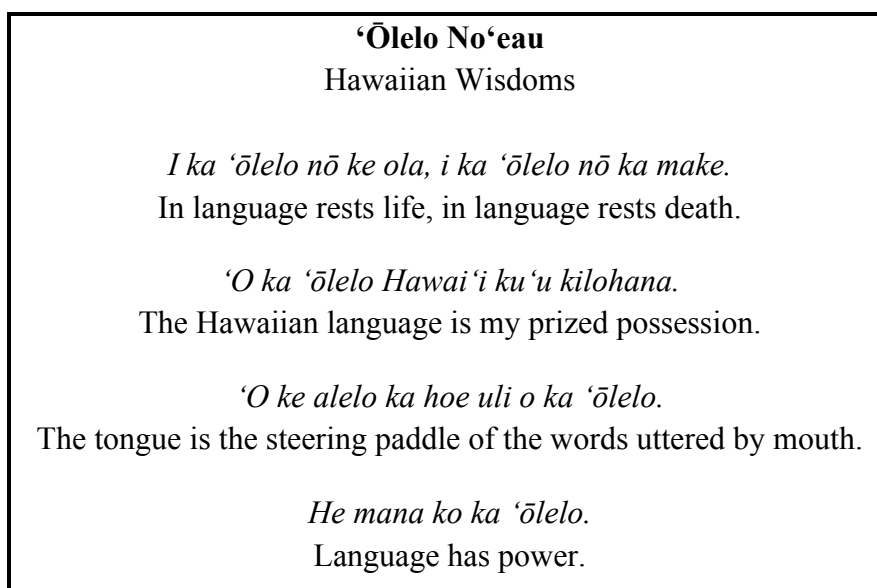
<p>‘Ōlelo No‘eau Hawaiian Wisdoms</p> <p><i>‘Ike aku, ‘ike mai, kōkua aku, kōkua mai; pēlā ihola ka nohona ‘ohana.</i> Family life requires an exchange of mutual help and recognition.</p> <p><i>Nāna i waele mua i kea la, ma hope aku mākou nā pōki ‘i.</i> He [or she] first cleared the path, and then we younger ones followed.</p> <p><i>I maika ‘i ke kalo i ka ‘ohā.</i> The goodness of the taro is judged by the young plant it produces.</p> <p><i>‘O ka makua ke ko ‘o o ka hale e pa ‘a ai.</i> The parent is the support that holds the household together.</p> <p><i>Kū i ka māna ‘ai.</i> Like the one from whom he [she] received what he [she] learned.</p>

As is reflected in these ‘Ōlelo No‘eau, education is a family, community, and school concern. School reflects the learner’s community, physical environment, and cultural practices. Students are the most successful when home and school work together for the well-being of the whole child. The literature provides a clear perspective on the role of the school, family, and community in shared leadership of the school:

- Value, respect, build trust, and actively involve the family and community as leadership partners—parents, family, elders and other community resources.

- Use an inclusive process of collaboration in the decision-making regarding the school design and program development—vision, mission, goals, curriculum, instruction, and assessment/evaluation.
- School staff should have knowledge and use the social and political mores of the community to enhance the school dynamics as a community-based and culturally based site.

Language. Perpetuate the Native or Heritage Language:



Language is the heartbeat of a people for it provides the codes of expression, communication, and conduct of a people. The essence of the culture, perspective, and ways of knowing are maintained and perpetuated through language. It is difficult to fully grasp or understanding another culture via translation of their language. The language journey begins by using the Native language in authentic contexts, purposes, and functions from simple words to more complex and advanced articulation. Recognize and use the Native or heritage language in all settings and in ways possible to perpetuate the

Indigenous language of the community and align with the school philosophy and goals.

The literature provides some simple suggestions for implementation:

- Support a language rich environment that includes nonverbal communication, providing multiple opportunities to use language and new vocabulary in the first and second language. For language immersion settings, focus is on both the target and other languages.
- Include multilingual approaches to learning and develop language and literacy skills across the curriculum.
- Build connections between the student's prior knowledge and the academic learning—language, values, skills, and experiences.
- Engage in student talk and talk story; model and elicit thinking in the Native/heritage language through purposeful and respectful conversation, reading, and writing.
- Make available materials and plan activities/events conducted in the language.

Pedagogy. Employ Culture and School Learning Through Culturally Relevant Practices, Processes, Contexts and Settings:

<p style="text-align: center;">‘Ōlelo No‘eau Hawaiian Wisdoms</p> <p style="text-align: center;"><i>Aloha kekahi i kekahi.</i> Love one Another.</p> <p style="text-align: center;"><i>A‘o aku, a‘o mai.</i> In teaching there is learning.</p> <p style="text-align: center;"><i>Nānā ka maka, ho‘olohe ka pepeiao, pa‘a ka waha, hana ka lima.</i> Observe with the eyes, listen with the ears, don’t talk; work with the hands.</p> <p style="text-align: center;"><i>‘A‘ohe hana nui ke alu ‘ia.</i> No task is too great when done together.</p> <p style="text-align: center;"><i>Ma ka hana ka ‘ike.</i> In work one learns.</p> <p style="text-align: center;"><i>Hili hewa ka mana‘o ke ‘ole ke kūkākūka.</i> Discussion brings ideas together into a plan.</p> <p style="text-align: center;"><i>E ho‘ohuli i ka lima i lalo.</i> When the palm of the hands face down they are occupied and productive.</p> <p style="text-align: center;"><i>Kūlia i ka nu‘u.</i> Strive for the summit.</p>

Learning is a natural human predisposition. Smith (1998) says, “Culture and ethnicity have a strong impact on shaping learning styles.” Kahakalau (2003) adds, “The thought is that culturally responsible pedagogy recognizes culture as the most powerful

variable that influences teaching and learning process.” Therefore, culture shapes the learning experience and provides a context for making learning relevant.

Learning is a community endeavor and should utilize strength-based approaches that honor cultural characteristics as well as adult-child and intergenerational interactions. New learning is constructed upon what students bring into the classroom from prior experiences that reflect the language, culture, values, behaviors, and attitudes of the home/community—the child’s first learning setting. Evidence from 30 years of studies demonstrate that strong Native language and culture programs are associated with improved academic performance, decreased dropout rates, improved school attendance rates, decreased clinical symptoms, and improved personal behavior. Other CBE approaches and strategies include:

- Provide a safe, caring, and respectful place that values people and fosters students’ culture as a foundation to develop student confidence, competence, and independence.
- Structure the physical environment, deliver instructional and classroom management strategies, and teach activities in culturally grounded and congruent ways that also reflect the community setting and conventions.

Native cultures vary in philosophies, child rearing practices, and character development. Common elements found across the literature include the use of humor, using language couched in community terms and expressions, and sensitivity to culturally acceptable behaviors. Respecting a child’s mana (spiritual power), mauli (life-force), and supporting self-reliance are optimal

for cultivating positive relationships and responsible behaviors of the Indigenous child.

- Incorporate the cultural values and affirm Indigenous language as a natural part of the school environment. Cultural beliefs and behaviors are demonstrated through protocols, processes, and practices that define, regulate and guide the cultivation of healthy relationships. Some of things to consider are daily routines as ritual for the whole school and classroom setting, such as school protocols for the opening and closing of the school day and meal time, annual and special celebrations, parent and community events, graduation, receiving visitors, and school orientations.
- Maintain a culture and language rich authentic learning environment that models the beliefs and values of the school. Operationalize those as practices that organize and regulate the ethos of the school culture. Design meaningful activities and varied ways for learning in multiple settings — include community experts/knowledge through experience-based, place-based, project-based, and community-based learning and venues for sharing in the community. For HLCB environments consider incorporating deep cultural values, such as mana (spiritual power), maui (life-force), pono (uprightness), ‘ohana (family), aloha (compassion, kindness), ahonui (patience, persistence), ho‘omanawanui (endurance, tolerance), and kapu (taboo, prohibited) into the classroom and school operations for the benefit of the entire school community.

- Connect lessons to students' lives by scaffolding learning—using strategies like storytelling/retelling, now/then, compare/contrast, and analogy. Use multimodality approaches to address learning styles and ways of thinking.
- Work together in joint productivity and collaboration. CREDE describes this as “creating a common experience,” in other words, a common context to develop common systems of understanding for the benefit of the whole. Have students teach one another and build upon their talents. Include peer learning, maa to muli training (older sibling to the younger sibling), mentoring, apprenticeships, internships, intergenerational family, and community workgroups.
- Engage students with challenging lessons that teach complex thinking (CREDE). Facilitate “talk story” conversation and discussion exchange in ways that get students to think. Develop thinking to help formulate well thought out questions and student decision-making skills. Problem solve through facilitation and production of projects that demonstrate learning and understanding. Assure meaningful engagement in learning. Make useful and relevant connections and have purposeful outcomes. Design tasks of varying degrees of difficulty and complexity; include clear feedback and response to progress. Problem-solving, project-based, and place-based learning can cultivate social, cognitive, emotional, and spiritual development.
- Incorporate goal-directed, interdisciplinary, small group conversations that foster language development; reading comprehension and cognitively complex tasks yield better learning results.

- Arrange classroom organization conducive for group-centered (student-centered) instruction of varying sizes with attention to special needs. Organize and monitor a plan that facilitates student responsibility, accountability, and outcomes for work, behavior, and attitude. Articulate clear goals, instructions, and listen well. Emphasize dialog over lectures.
- Facilitate using “teaching strategies that are congruent with the culture and contemporary ways of knowing and learning” (Kana‘iaupuni & Kawai‘ae‘a, 2008). Focus on effective classroom practices that are challenging, support cooperative interaction, and incorporate a lot of hands-on practice, tinkering, performance, and demonstration. Promote learning through intensive listening and observation, modeling, questions, restating, practice and exploration, and visual arts, incorporating as many senses in the process as possible. Pewewardy’s (2002) findings on American Indian/Alaska Native students suggest that using visual and tactile strategies are culturally congruent strategies. When these students can see and touch the materials, experience what they are expected to master, and then reflect on the experience, they are able to think more critically and establish more relevant and rigorous connections to what was learned. Memorization and lecture formats do not equate to learning. Rote teaching has its time and place.
- Demonstrate learning through production, demonstration, display, and reflection. Engage students in the process of evaluating their learning and products. Foster self-evaluation and self-discipline in a variety of ways.

- Model expectations, new vocabulary, and other kinds of learning students should grasp, including cultural subtleties and behavior. Evidence shows that students meet expectations—high or low—that are made of them. Have high expectations for students by holding them to a standard of excellence. Know the student, show belief in their potential, and understand their strengths and challenges to frame the heights of expectations students can reach so as to make learning more meaningful and relevant to their lives.

Curriculum. Academic/Cultural Content, Skills, Assessment and Accountability:

<p>‘Ōlelo No‘eau Hawaiian Wisdoms</p> <p><i>‘O ke kahua ma mua, ma hope ke kūkulu.</i> Learn all you can, then practice.</p> <p><i>‘U‘uku ka hana, ‘u‘uku ka loa‘a.</i> Little work, little gain.</p> <p><i>‘A‘ohe ‘ulu e loa‘a i ka pōkole o ka lou.</i> There is no success without preparation.</p> <p><i>‘A‘ohe pau ka ‘ike i ka hālau ho‘okahi.</i> All knowledge is not taught in the same school.</p> <p><i>E kuhikuhi pono i nā au iki a me nā au nui o ka ‘ike.</i> Instruct well in the little and large currents of knowledge.</p> <p><i>He luelue ka ‘upena e ku‘u ai.</i> The fine-meshed net misses nothing, big or small.</p>

Reshape the curriculum by integrating academic content, skills, and assessment with traditional and local knowledge and practices that are meaningful, relevant, and age

appropriate. Curriculum should embrace the distinct knowledge of the Indigenous group, their ways of knowing and being, and recognize the Native spirituality and environment as key elements to understanding their place in the larger Indigenous and global world. Gather and maintain data using a variety of methods to ensure student progress in culturally responsible ways—which may require adjustment in pedagogy and curricular approaches for individual students and classroom practices. Knowledge is empowering when it is internalized and has meaning.

- Conduct language, history, culture, and other elective courses through the Indigenous language and/or to teach about it. Embed cultural concepts into the curriculum (i.e. stewardship).
- Employ and fully incorporate traditional/local knowledge, language, and culture in authentic situations throughout the curriculum. Learn through and about the language and culture as a part of the whole curriculum, not as a separate additional part to the conventional curriculum.
- Culturally mediate instruction by utilizing the wealth of knowledge from the child's home/community, local knowledge, language, and culture, and integrate it as part of the conventional curriculum,.
- Utilize “real-life purpose, context, and function” (Kawakami & Aton, 2001) to cultivate cultural identity through coherent application and integration of the curriculum concepts. Create activities that foster reciprocal relationships and applied concrete learning: i.e., gardening to feed the school, restoring a treasured cultural resource.

- Utilize culturally based materials including the natural environment, community, books, family/community, and technology to help students to make sense of what they are learning.
- Include traditional/cultural forms of assessment through the formative and summative process. Use a variety of assessment strategies and tools like hō'ike (performance, show, exhibit) and portfolios.
- Have students be accountable for their learning process through self-evaluation and participation in the assessment process by using assessment tools (i.e. checklists, rubrics).
- Partner with other schools, organizations, and participate in professional development activities to produce culturally responsible curriculum reflective of the community, language, culture, and values it serves.

Professional development. Preparation of teachers and on-going professional training in areas such as Indigenous pedagogy, language, and culture (if previous training was in Western paradigms):

‘Ōlelo No‘eau

Hawaiian Wisdoms

He lāla au no ku ‘u kumu.

I am a branch sprouting from the tree that is my teacher, my source, my foundation.

Hāwāwā ka he ‘e nalu haki ka papa

An unskilled worker bungles instead of being a help.

I ka nānā nō a ‘ike

By observing one learns.

A Teacher has multiple roles and responsibilities—facilitator, instructor, coach and mentor.

On-going professional development opportunities should be available for teachers and school staff to increase the comfort zone and competency in teaching the curriculum through the language, culture, and Native ways of knowing (Barnhardt & Kawagley, 2005; Bishop & Berryman, 2006; Charlot, 2005; Educational Research Service, 2003; Gay, 2000; Genesee, Cloud & Hamayan, 2000; Hemara, 2000; Hurtado & Costantino, 2006; Irvine, 2009; Irvine & Armento, 2001; Kawai‘ae‘a, Hale, Nāho‘opi‘i, & Kana‘iaupuni, 2005; Kawakami 1999; Ladson-Billings, 1995; Meyer, 2003a, 2003b; Pease-Prety on Top, 2003; Pere, 1982; Pewewardy 2002; Pihama, Smith, Taki, & Lee, 2004; Pukui, 1993; Tharp, 1997, 2006; Tharp et al., 2007).

Fostering Culturally Relevant Native Hawaiian Learning Environments

Malin and Maidment (2003) believe the key to Indigenous survival is found in maintaining dual aspirations for revitalizing Indigenous knowledge and acquiring Western knowledge as cultural capital. Demmert, Towner, and Grissmer (2006) add that predictors for student success should include components that build cognitive skills as well as cultural and social maturity. In 2003, Demmert published the most extensive research on Native American education, comparing 193 studies and over 10,000 documents that provided evidence on the issues and strategies for improving learning and academic success of Native Americans. It should be noted that the discussion that

follows acknowledges the importance of culturally synchronizing family, community, and school goals for education.

Demmert (2004) best summarizes the findings: “the message is very clear—if parents and educators have an interest in promoting the development of smart, healthy, well-adjusted children, we must provide a safe, challenging, and enriched environment early in the life of a child” (p. 42). One of the ways to do this is through the incorporation of Native language and culture. Evidence in culture-based education research shows that the child’s Native language and culture is a vital contributing factor to student motivation, sense of identity and self, positive school attitudes, and improved academic performance and leads to reduction of a number of undesirable factors such as poor attendance and graduation rates. The literature in Indigenous education and on Native Hawaiian data (Kana‘iaupuni et al., 2005; Kana‘iaupuni & Pahi‘o, 2006; McCarty, 2006), support eight factors to consider when creating coherent Native learning environments:

- ***Early childhood environment and experiences:*** Culture plays an important role among Native Hawaiian families. 51.1% of Native Hawaiians report strong ties to community with 70.5% engaged in leadership roles (Kana‘iaupuni et al., 2005, p. 4). The majority of Native Hawaiian parents engage in stimulating activities with their children, including such activities as reading, storytelling, and singing (p. 12). Demmert’s analysis confirms the importance of providing stimulating environments that foster language development and other basic skills and attitudes toward learning. Young children who receive linguistically, culturally, socially, and kinesthetically

stimulating environments develop their natural talents and “intelligences,” which influence the academic success that students’ experience in later years (Demmert & Towner, 2002, p. 4).

- ***Native language and cultural programs in schools:*** Hawaiian medium/immersion and Hawaiian-focused charter schools show great promise in the improvement of academic success. Current statistics show 4.1% absenteeism as compared to 17.3% of state rates (Kana‘iaupuni et al., 2005, p. 12). Developing positive, healthy attitudes and experiences about language and culture are important for Native children. Research shows it significantly influences student motivation, sense of identity and self, positive attitudes, and improved academic performance.
- ***Teachers, instruction, curriculum, and assessment:*** Competent teachers that know their content and are able to plan and deliver instruction and curriculum through approaches that are meaningful, engaging, and culturally challenging to students can motivate students to do well in school. Although CBE Native schools are making a positive impact on academic and cultural success, Native Hawaiian schools typically employ less experienced teachers that are less likely to be fully licensed. A significantly high number of schools serving Native Hawaiians are in the process of “corrective action,” with 38.6% of public schools that have a Native Hawaiian student population of 50% or more being in corrective action (Kana‘iaupuni et al., 2005, p. 358). Teacher education programs that help new teachers understand the importance of cultural factors and equip them with the skill set to deliver culturally rigorous

and rich pedagogy that make connections to students and their communities will contribute greatly to further success of Native Hawaiian students.

Assessment is important in assuring rigor and relevancy of the curriculum and progress of the student. Assessment tools should “monitor the progress of the student, teacher, and institution[, be] linguistically and culturally fair, and include components that strengthen academic performance [as well as] cultural and social maturity” (Demmert, 2005).

- ***Community and parental influences on academic performance:*** Families and communities matter and have influence on the academic performance of their students. Native Hawaiian community efforts to revitalize the language and culture in schools have contributed to the increased academic and cultural success of Native children. Recent information shows 85.8% of students attending Hawaiian-focused and Hawaiian immersion charter schools are Native Hawaiian (Kana‘iaupuni & Pahi‘o, 2006, p. 19). These schools serve highly disadvantaged populations as measured by school subsidies and services. The results show that “half of the lowest achievers moved from ‘well below academic proficiency’ in grade 8 into a higher category by grade 10,” from 55.4 to 69.9% (Kana‘iaupuni & Pahi‘o, 2006, p. 22). Hawaiian-focused and Hawaiian immersion charter schools represent “a potentially dramatic return on investment to raise academic achievement,” and support positive attitudes about schools as evidenced in the low 1.9 absentee rate as compared to the 8.6 state statistics (Kana‘iaupuni & Pahi‘o, 2006, p. 27). The classroom is a natural place for local attitudes and the use of traditional

knowledge and language to be extended. Use the classroom as a healthy extension of the home by incorporating parents, family, and the community into the classroom. Research shows that family and community participation do have positive influences on a young student's academic performance.

- ***Student characteristics:*** Students bring into the classroom their personal life experiences and history that are reflected in their attitudes and behavior and contribute to a student's ability to succeed in school. Native Hawaiian families are struggling to keep up with the cost of living in Hawai'i and are "twice as likely to live in poverty as is the average family" (Kana'iaupuni, et al., 2005, p. 344). Build upon their language, natural talents, culture, knowledge, and basic skills to foster motivation, early goal setting, and enable them to balance conflicts between home, community, and school.
- ***Factors leading to success in college:*** Although Native Hawaiians are underrepresented in college, Hawaiian families have high educational ambitions for their children to continue on to college (86.4%) (Kana'iaupuni et al., 2005, p. 116). Among family-centered cultural groups, values, beliefs, and encouragement are key factors that influence educational decisions of students. Students equipped with the necessary academic skills, social and cultural maturity, and have support from the community, family, and other mentors can succeed in college. Demmert (2005) suggests that by following other successful models, such as the Pūnana Leo model, we can "Create newly extended families that operate in ways much like traditional Native families where the family worked together to insure success for all its children."

- ***Native American students leaving high school before graduation:*** National research shows that there are many reasons why Native students leave high school, including cost of living, absenteeism, pregnancy, grade point averages, poor quality of teacher-students relationships, lack of parental participation and support, levels of academic skills (including level of English skills), acculturation, boredom with school life and curriculum, irrelevance of school curriculum, knowing what they wanted to do in life, moving from one school to another, transportation difficulties, and substance abuse. Native Hawaiians have the lowest timely graduation rates among all major ethnic groups in Hawai‘i, with approximately 70% graduating in four years as compared to the 78% statewide (Kamehameha Schools, 2009). Demmert’s (2003) extensive review of the research on improving academic performance among Native American students shows that there is an increase in graduation rates amongst students in culturally based programs (Demmert, 2003). Wilson and Kamanā (2011b) report 100% graduation rates and 80% college continuation rate for students attending Nāwahīokalani‘ōpu‘u Hawaiian-medium school.
- ***International comparisons:*** The literature on culture-based education at the international level, specifically research focused on place-based, community-based, and culture-based education, supports the findings that Indigenous education is beneficial for Native Hawaiians. An review of international Indigenous materials from Māori, Canadian, and Australian Aboriginals aligns with the research advocating Native education in the U.S. Battiste (2002) says that educational renewal for Aboriginal Canadians is built on a belief that

“knowledge teaches people how to be responsible for their own lives, develops their sense of relationships to others, and helps them model competent and respectful behavior. Traditions, ceremonies, and daily observations are all integral parts of the learning process” (p. 14) The Te Wharaunga o te Waka Initiative (Hall, 2004), an Indigenous Māori initiative for at-risk students asserts, “whakapapa (genealogy) is central to all things. Traditional curricula were closely related to spiritual, intellectual, social, and physical well-being and development of the individual *hapū* [sub-tribe] & *iwi* [tribe]” (p. 4). Australian Aboriginals and Torres Strait Islanders share similar Indigenous issues for which a recent strategic plan has been developed for 2005-2008 (Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) taskforce on Indigenous education, 2006). The report states, “gains in educational outcomes achieved by Indigenous students over recent decades are largely attributed to Indigenous specific intervention programs (including strategies, pilot projects, and trials) that supplement mainstream efforts to meet the specific learning needs of students” (p. 13). The following variables affecting school success were apparent throughout the international sources discussed in the literature review:

- Language is the most significant factor in the survival of Indigenous knowledge.
- The curriculum program should be value imbued, culturally responsive and inclusive, holistic, use an integrated and interdependent approach, build on the strengths and interests, be contextualized and experiential,

student-centered and activity based, incorporate cooperative, problem-based learning, and observation with doing and authentic experiences.

- Success is built on demands for high standards of excellence both academically and culturally.
- Include family, tribal, and community participation within the school environment and decision-making processes.
- Indigenous pedagogy and other “cross-cultural” methods work to bridge the gap in learning.
- Literacy, numeracy, retention, early childhood, school and community partnerships, school leadership, teacher quality and career pathways are issues of concern. (Battiste, 2002; Hall, 2004; MCEETYA Taskforce on Indigenous Education, 2000; Pihama, Smith, Taki, & Lee, 2004)

Identity Characteristics Found in the Native Hawaiian Learning Environments

Culture-based schools have been an important initiative for counterbalancing the effects of colonialism. Hermes (2005) states, “historically, the United States government sought to control Indigenous people through schools under a policy of coercive assimilation. In many ways the culture-based movement in Native American education is a direct response to these policies of cultural genocide” (p. 43). Tippeconnic (2000) adds, “there has been a lot of interest and talk about how important Indian Education is, especially today, but in reality it has received little attention at all levels—including local, state, national, and even tribal levels” (p. 8). The challenge is to create and sustain

through a strong presence— demonstrating success in schools through use of language, culture, and more involvement as well as control of education.

The shift back to grounding education in a holistic worldview of community that fosters culturally healthy students is, “an essential ingredient for identifying the appropriate qualities and practices associated with culturally responsive educators, curriculum and schools” (Alaskan Native Knowledge Network, 1998, p. 2). This is important since “the way we typically ‘do school’ is culturally responsive instruction for mainstream student—but not others” (Au, 2007, p. 7).

The Kaupapa Māori initiative in Aotearoa, New Zealand provides a strong Indigenous educational model for culturally grounded CBE landscapes. Their movement began as a resurgence to regain Māori control of education through Māori principles and values in all aspects and at all levels. Keegan (1996) states that under the Education Act of 1989, the New Zealand Ministry provides funding for three levels of program implementation from total immersion to Māori bilingual units in mainstream schools. Reaffirming Māori identity, language, culture, and tribal knowledge through the Kura Kaupapa and Wharekura Māori language immersion public schools has been inspiring to other Indigenous colonized cultures.

Bishop (2003) talks about the use of culturally responsive instruction for attaining high levels of academic achievement without sacrificing the cultural and language integrity or violating cultural values of the home and community. Harrison and Papa (2005) describe the transformation and success of Rākaumanga, a Wharekura in Waikato-Tainui, as an example of Indigenous school reform to a fully functioning Tainui learning setting. The transformation of the Māori identity school was a collective community

initiative whose aim was a better quality education that used their tribal epistemology, worldview, and language as the foundation for school and curricular development.

Interesting to note that although the school is in a low socioeconomic community, the dropout rate is “very low” and students have, “excelled on national exams, with results comparable to schools in the wealthiest communities” (Harrison & Papa, p. 70).

With longstanding failure of Native Hawaiians in public education, the issue of Hawaiian education and integration of Hawaiian language and culture-based education (HLCB) as a proactive solution has recently been at the forefront of Native research. Thomas (2009) speaks on the disparity between culture and the school learning environment for Native Hawaiian children:

Education is presumed to be the vehicle through which we transmit culture— cultural values and norms and practices. And when you have educational institutions that are at some fundamental way at odds with the cultural norms, values, and practices of the community, it creates a very difficult learning environment. It creates an environment that is not very inviting for a lot of students. (Kalili, 2009)¹²

In 2005, the Kamehameha Schools launched its first large scale empirical study with quantitative data collected from 62 participating high schools, 600 teachers, 2,969 students and 2,264 parents called, the Hawai‘i Cultural Influences in Education (HCIE). The study explored the kinds of CBE teaching strategies being used by teachers in Hawai‘i’s classrooms across the educational continuum from the conventional to

¹² Interview comment from the film on Hawaiian CBE called, *Education: Culture Matters*. Scott Thomas was one of the researchers that performed the statistical analysis on the data from the Kamehameha Schools study, Hawaiian Cultural Influences in Education (HCIE).

Hawaiian-medium/immersion and Hawaiian-focused charter school settings. The study focused on the impact those strategies had on student socio-emotional development and educational outcomes. Kana'iaupuni, Ledward, and Jensen (2010, 2011) articulate the results so as to clarify much of the confusion around CBE and confirmed that,

- CBE strategies are integrated through Native language, culture, and ways of knowing. 73% of the teachers in Hawaiian-medium charter schools use a high number of CBE strategies. However, none of the Western-focused charter school teachers scored high on use of CBE strategies.
- CBE is used by Indigenous and non-Indigenous teachers alike, and is not unique to only “Indigenous” schools. The research shows that approximately one-third of the non-Hawaiian teachers in the study use CBE strategies at a moderate to high level.
- The data clearly show that CBE has a positive socio-emotional impact on student well-being, including identity, self-efficacy, social relationships, and enhanced student attitudes about school. 88.9% of students in CBE schools commented they expected to graduate from college in comparison to 73.5% of those students whose teachers do not use CBE strategies. In addition, there was a 10% increase in graduation rates of students in CBE schools.
- Cultural approaches strongly enhance relevance, relationship, and rigor within the learning environment and result in positive academic outcomes. In particular, math and reading scores exceeded expectations in academic student gains.

- CBE integrates family involvement and economic sustainability of the community. Increased family participation impacts sense of belonging, student's civic responsibility, and stewardship of community through rigorous place-based and project-based strategies.

The data demonstrate that HLCB schools make a difference in Hawai'i's public school educational landscape for students and teachers. As an example, the Native Hawaiian Education Council (2011) reported in their 2011 Needs Assessment Report to the U.S. DOE that:

Hawaiian-focused charter schools provide a high-impact opportunity to improve the educational well-being of Native Hawaiian children: they increase student engagement with school, promote environmental stewardship and civic responsibility, involve parents and communities, and lead to solid improvements in academic achievement. (p. 51)

HLCB practices are implemented throughout the educational continuum in school settings, both public and private.

Kawakami (2004) highlights the characteristics central to the inclusion of Hawaiian language and culture within the landscape of the educational continuum in Hawai'i school settings. Her descriptions echo what is known about the effective use of HLCB practices in other places in Hawai'i and around the world. Foremost, "Hawaiian education is clearly connected to the learning environment... Learning is viewed as holistic and embedded within a social and cultural context" (p. 26).

Mounting evidence supports CBE as an alternative for building academic success amongst Native learners. Demmert & Towner (2003) point out that empirical evidence

demonstrates that “high achievement in academics and motivation depends upon the spiritual well-being of the Native student’s early attention to cognitive development, sense of identity, and social/cultural maturity” (p. 4).

There is a growing body of scholarship about what CBE learning environments looks like and how they are implemented in schools serving Native children. Four characteristics or “identity features” of the Native Hawaiian learning environments appear to be prevalent in the literature and will be used to further inform the development of a CBE Native Hawaiian matrix that describes the learning environments—across the continuum of school for Hawaiians to Hawaiian school.

Cultural Identity. There is much discussion throughout the literature on the importance of culture and its influence on the learning environment. Demmert (2004) reminds us that “culture shapes how we observe the world and is closely combined with our experiences” (p. 3). Culture also evolves as changes occur in our social structures and natural events. The Hawaiian culture is influenced by an island landscape and way of knowing that has developed from a unique history, oral traditions, language, and mores. In addition to Native Hawaiian ethnic ancestry, the literature on Native Hawaiian identity illustrates the importance of cultural practices and beliefs as an identifier of “Hawaiianess.”

Data from the Kamehameha Schools (2009) Native Hawaiian educational assessment update reported 85% of Native Hawaiians feel a sense of Hawaiian identity and actively participate in Hawaiian activities as a perpetuation of Hawaiian ethnic affiliation. 74.1% claimed to understand the meaning of being Hawaiian. Crabbe (2002)

identified twenty-seven Hawaiian cultural practices of Native Hawaiians, including chant, surfing, Hawaiian language, and genealogy preservation.

We internalize culture through our lived social experiences throughout our lives. Gay (2000) frames the issue of how teachers use and apply their cultural knowledge in the learning setting:

Teachers' ideological stance and their understanding of culture frame how they view curriculum, learning, pedagogy, and the social context for learning in school. In sum, their understanding of culture influences the extent to which teachers provide meaningful and productive learning experiences for their students (p. 135).

Sense of place is another cultural identifier as expressed through love for and connection to 'āina (land), place, and community. 80% of Native Hawaiians agree that 'āina is a living, sacred being that is part of what defines their identity as Native Hawaiians. Ledward, Takayama, and Kahumoku (2008) point out that pilina kaiaulu (community affiliation/connection), kōkua kaiaulu (community giveback), and mālama 'āina (land stewardship) are three of the seven best practices identified in HLCB. They are “productive streams” that can be used in schools to reinforce meaningful interconnections and culturally relevant experiences between students, family, and community.

Genealogy is another important culture identifier. Indigenous people use genealogy as a tool for articulating the cultural connection between themselves and the universe—as an interconnected whole. Kame'eleihiwa (1992) reminds us that “genealogies are the Hawaiian concept of time, and they order the space around us.

Hawaiian genealogies are the histories of our people” (p. 19). Through genealogies the stories are maintained about our past, identity, and models for behavior. As the only Indigenous people of Hawai‘i, Native Hawaiians have a genealogical tie to place and perpetuate the stories of origin and migration through many Hawaiian practices like hula and ocean voyaging. Genealogy is key but not limited to Hawaiian identity. The HCIE study reported that 83% of the Native Hawaiian students desired to know the genealogy of both parents. Genealogy can be integrated as a concept, content, and skill across the subject areas and used as a best practice to link school, home, and community.

The term ‘ohana, or family, is another strong identifier that binds the Hawaiian family through genealogy, place, and practices. Kana‘iaupuni, Malone, and Ishibashi (2005) define the ‘ohana as the foundation of Native Hawaiian social well-being and stress the importance of family integration practices in the school where parents/family are seen and respected as the child’s first teacher. Many traditional Hawaiian practices are still maintained and passed on today through pilina ‘ohana (family affiliation) practices. Name giving, food gathering and preparation, family values, spirituality, ho‘oponopono (process of reconciliation and forgiveness), family knowledge, and rearing practices are some of the ways in which Hawaiian families perpetuate a Hawaiian cultural identity. Pilina ‘ohana can be applied to the larger context of the school community as a large extended family. Kanu o ka ‘Āina (2009) calls it an “intergenerational family of learners.” Family-based or family-oriented education is incorporated in many HLCB programs. The Native Hawaiian Education Council (2011) recognizes the impact ‘ohana involvement has on the general educational and literacy

outcomes of students and recommends maximizing family strengths in meeting student's educational needs.

Curricular Identity. Culturally responsive teaching, effective curriculum, and appropriate assessment are essential building blocks for creating a strong curricular identity. Providing purposeful curriculum and engaging learning experiences in authentic environments is frequently a function of the teacher's competency, comfort zone, and belief system about teaching. Roux (2001) explains that culturally responsive teaching is addressed in the classroom as an "active process of thinking, a state of mind, a way of seeing and learning that is shaped and influenced by the beliefs about the value of cultural relationships and cultural competency" (p. 48). Kawakami, Aton, Glendon, and Stewart (1999) point out the importance of place to curricular identity and of incorporating cultural elements "so that the student can feel a sense of identity emerge from their own cultural upbringing" (p. 22).

In their accreditation study, Kanu o ka 'Āina (2009) a Hawaiian-focused charter school on Hawai'i island, share an example of culturally responsive schooling:

Indigenous model of education, KANU, is inherently culturally-driven and place- and values based ... we believe that a relevant curriculum, addressing real world issues is absolutely essential for students to make personal connections to the subjects being studied. Real, authentic, hands-on learning has always been the Hawaiian way, as validated in countless proverbs.... All projects, as well as many daily activities involve some aspect of the Hawaiian culture and allow the students to actively practice Hawaiian ways. One culturally rooted project involves the Makali'i, a double hulled voyaging canoe. Students' project-based

approach to the study of the Makali‘i incorporates vital cultural aspects from genealogy to astronomy and navigation.... Performance-based assessment, called “hō‘ike” in Hawaiian, is both an ancient and modern method of evaluation that allows students to share significant aspects of their learning with authentic audiences. (pp. 12-13)

The Alaskan Native Knowledge Network (1998) provides leadership for reinvigorating culture in the schools as a foundation to strengthen student learning and confidence. They have published a set of culturally responsive curriculum standards and strategies for incorporating culturally responsive curriculum in schools. These standards are different than state standards in that they do not determine what all students should know and be able to do. Instead, culturally responsive standards “are oriented more toward providing guidance on how to get them there in such a way that they become responsible, capable, and whole human beings in the process” (p. 3). The Alaskan Native Knowledge Network (ANKN), suggest the following five culturally responsive curriculum standards:

- A culturally responsive curriculum reinforces the integrity of the cultural knowledge that students bring with them.
- A culturally responsive curriculum recognizes cultural knowledge as part of a living and constantly adapting system that is grounded in the past but continues to grow through the present and into the future.
- A culturally responsive curriculum uses the local language and cultural knowledge as a foundation for the rest of the curriculum.

- A culturally responsive curriculum fosters a complementary relationship across knowledge derived from diverse knowledge systems.
- A culturally responsive curriculum situates local knowledge and actions in a global context. (pp. 13-16)

Kawakami and Dudoit (2000) enrich the intention of the guidelines by reminding us that “effective learning requires authentic social as well as physical environments and experience-based learning activities” (p. 386).

Effective curriculum that reflects a culturally accurate, sensitive, and rigorous perspective for instruction across the subject areas has been a huge issue for schools. As mandated by state law, all students in public schools receive instruction in Hawaiian history, studies, and language. Although this is state mandate, there is no consistent quality implementation at the elementary levels and at the high school level it is limited to a few required courses. Kaomea (2000) describes the dilemma of finding culturally responsive curriculum materials for teaching ‘ike Hawai‘i, Hawaiian knowledge:

After centuries of distortion and degradation of the Hawaiian culture, the colonialist economic and psycho-dynamics that have existed and continue to exist in our schools and the larger society make it difficult for Hawaiian texts to be conceived and received in truly progressive ways. Thus, until the colonial dynamics of (post) colonial Hawai‘i are really overthrown, the teaching of Hawaiian studies in our schools will continue to be problematic. (p. 341)

The Native Hawaiian Education Act (NHEA) provides federal funding for the improvement of Native Hawaiians in the areas of beginning reading and literacy, at-risk youth, fields in underemployed disciplines, and Hawaiian language instruction. Through

support from the NHEA, multiple culturally responsive curricula have been developed in the areas of history, literacy, Hawaiian language, health and wellness, and natural and physical sciences. Many of the new materials and other state and community programs have incorporated the Hawaiian cultural guidelines called, “Nā Honua Mauli Ola Hawai‘i (NHMO) Guidelines for Culturally Healthy and Responsive Learning Environments” created in 2002 (Native Hawaiian Education Council, & Ka Haka ‘Ula O Ke‘elikōlani, 2002). Like the Alaskan Native Knowledge Network (ANKN) guidelines, the Nā Honua Mauli Ola (NHMO) cultural guidelines provide an Indigenous lens for fostering culturally responsive schooling.

Laddison-Billings (1995) describes the processes needed for assessment of culturally relevant pedagogy as “multifaceted, incorporating multiple forms of excellence” (p. 469). Kana‘iaupuni, Ledward, and Jensen (2010) add that culturally relevant assessment include haku, “original compositions imbued with a person’s experience and spirit,” and hō‘ike, “performances requiring multilevel demonstration of knowledge and/or skills” (p. 10). These traditional Hawaiian forms of production and assessment are linked to cultural, content, skill, and behavioral/attitude scales of competency and excellence.

There is much room for research on culturally responsive education. Data that have been collected from within a cultural frame has challenged mainstream conventions about assessment and evaluation of Indigenous students as well as schools/programs. Kamehameha Schools (2002) addresses the importance of maintaining “routine documentation and assessment, which includes identifying and communicating strengths

and weaknesses to adjust our strategies accordingly and move our programs forward” (p. 5).

Relationship Identity.

You can have the best design, the best scope, and the best conceptual framework of an education. You can have the best ideas. But, if you don't have the “pilina” the relational part, its not going to exist. (Kalili, 2009)¹³

Relationship identity is an essential cultural dimension for the Indigenous student, family, and community. Many Indigenous educators would argue that relationship comes first before building relevance and rigor in schools. Bishop and Berryman (2006) use the “relationship of respect” as the strategy for maintaining good relationships with Māori students. Students identified relationships as the most critical reason for their ability to achieve in the classroom. Teachers who developed positive relationships of respect with students experienced increased student engagement and improved academic achievement. Parents also acknowledged an increase in self-concept and self-efficacy in their children (Bishop & Berryman, 2006; Kalili, 2009).

For the Indigenous person, the world is a tapestry of interconnected relationships that coexist simultaneously across time and space and “among the natural and human realms” of the Indigenous consciousness (Barnhardt, & Kawagley, 2005; Meyer, 2003a). Spirituality is understood as part of the interrelated whole between people and place, seen and unseen. It is also intimately tied to the development of knowledge, learning, and wisdom. Relationships then are deeply important and personal as evidenced in the

¹³ Interview comment from Lehua Veincent on the film, *Education: Culture Matters*. Mr. Veincent is a principal at Keaukaha elementary school located on the Hawaiian homestead in Hilo, Hawai'i.

expressions of language, preservation of genealogy, transmitting of family knowledge, and in the stewardship practices of the environment. Knowing where one comes from, who the ancestors are, family history and stories are contemporary practices of maintaining traditional relationship connections (Alaska Native Knowledge Network, 1998; Kawakami, Aton, Glendon, & Stewart, 1999; Kawai‘ae‘a et al., 2002).

Research also shows that teachers do incorporate relationship-building strategies into the curriculum and the ethos of the learning environment in many ways.

Relationship identity in the school setting is associated with caring, high expectations, knowing how to manage classrooms, knowing how to facilitate students’ learning, and understanding what is needed for the particular dynamics of the student group to learn.

To know and be able to respond to these dynamics well one must create a caring relationship of aloha and respect within the environment. In a HLCB environment, relationship is the first key to building relevance, rigor, and responsibility among students. Strategies for learning include engaging students in active and authentic learning experiences as a bridge for them to make real connections between the abstract concepts in learning, the academic content to be learned, and the relevance to their lives (Bishop & Berryman, 2006; McCarthy & McCarthy, 2006).

Pilina ‘ohana and pilina kaiaulu (family and community involvement) are two strength-based approaches for demonstrating the interconnectedness between the home, school, and community. The HCIE study found 70% of the Native Hawaiian students feel a familial connection with those in the school community as compared to 51.5% of non-Hawaiian students. Incorporating relationship building into the curriculum and schooling environment affirms the importance of the whole child in the process of

learning and fosters well-being in a positive learning environment where students can thrive and develop individual capabilities from within the strength of whole learning community (Gay, 2000; Ledward, Takayama, & Kahumoku, 2008; Ledward & Takayama, 2009a, 2009b).

Linguistic Identity. Language conveys the presence of a people's identity. Through language, the inner code of a culture—the thoughts, emotions and feeling, philosophies, and worldview—are preserved and perpetuated. For the Polynesian people, the word life-force is often associate with the description of language value and vitality: ‘O ka ‘ōlelo ke ka‘ā o ka maui (Hawaiian),¹⁴ Language is the fiber that binds us to our cultural identity; Te reo mauri ora¹⁵ (Māori), Language a vibrant life-force. Language through this understanding is viewed as a life-force, the living spirit and breadth of a people.

UNESCO (2003) estimates there are between 6,000-7,000 languages still spoken in the world today with about 97% of those languages spoken by about 4% of the world's people, primarily Indigenous peoples. Many languages are in danger of extinction with only members of the elderly generation or the preceding generation being Native speakers. About every fourteen days another language becomes extinct. UNESCO further estimates that in our century, about 90% of the world's languages will be replaced by one of the world's dominant languages. The vitality of Native languages and Native

¹⁴ The vision statement for Ka Haka ‘Ula O Ke‘elikōlani College of Hawaiian Language at the University of Hawai‘i at Hilo.

¹⁵ In April 2011 the Ministry of Māori Affairs released a report prepared by an independant panel on the review of the Māori Language and Māori language strategies. The title of the paper summarizes the importance of Māori language revitalization effortts.

language survival rests in the transmission of the language to the children and their use intergenerationally.

Healthy vital languages have speakers in all generations actively engaged in the articulation and use of its language. UNESCO (United Nations Educational, Scientific and Cultural Organization) has developed nine factors for assessing language vitality and estimates that only 18 of the world's Indigenous languages are healthy vital languages with speakers at all generations. UNESCO ranks the Hawaiian language as critically endangered with less than 1% of its statewide population being speakers of Hawaiian.

Tied to UNESCO is the overarching international governmental work at the United Nations level relevant to language, culture, and sovereignty. In December 2010, the U.S. became the last country to endorse the United Nations Declaration on the Rights of Indigenous peoples. Articles 13 and 14 affirm the rights of Indigenous peoples by ensuring their right to take "effective measures" to secure access to and protection of education in their own culture and language (United Nations Permanent Forum on Indigenous Issues, 2008; United States of America, 2010a, 2010b). Article 13 states,

Indigenous peoples have the right to revitalize, use, develop, and transmit to future generations their histories, languages, oral traditions, philosophies, writing systems and literatures, and to designate and retain their own names for communities, places and persons.

And Article 14 states,

Indigenous peoples have the right to establish and control their educational systems and institutions providing education in their own languages, in a manner appropriate to their cultural methods of teaching and learning.

The U.S. Administration for Native Americans (2012) data cite that more than 300 Native languages were once spoken in the U.S. and only 175 languages remain. Pease-Pretty On Top (2003) identifies one-third of the Native American Indian languages as having fewer than 100 speakers and only 20 being used intergenerationally (pp. 9, 17). Romero and McCarty (2006) estimate that between the U.S. and Canada, less than 16% of all Native languages are still spoken and being acquired as a first language by children.

The Native American Languages Acts of 1990 and 1992 provide the first commitment in law by the U.S. for “assuring the survival and continuing vitality” of Native American Languages. Through the Native American Programs Act of 1974, funding is provided on an annual basis to support the survival of Native American including Native American Indian, Alaska Natives, Native Hawaiian, and Pacific Islanders, which includes the Indigenous people of American Sāmoa, Guam, and the Commonwealth of the Northern Mariana Islands. The 2010 census estimates nearly 9.8 million people in that group. An estimated 24,000 speak Hawaiian at some degree of proficiency. In 2011, less than five million dollars was released to support all the Indigenous languages of the U.S., its territories, and commonwealth nations in the Pacific. That averages at less than two dollars a person to support an irreplaceable and valuable cultural resource and human treasure.

In 1978, the Hawaiian language became the only state in the U.S. whose Indigenous language is equal by de jure with English. That same year, it was mandated that Hawaiian culture, language, and history be taught in Hawai‘i’s public schools (State of Hawai‘i, 1978). In 1980, the Department of Education established its Hawaiian Studies Program, called the Kūpuna Program, for grades K-6. The Kūpuna Program

initially was conceived as a program of Hawaiian language study utilizing kūpuna whose elderly expertise was recognized in the community and who already possessed competency in Hawaiian language and culture. The approach fostered the transmission of community and place-based knowledge to be taught as an intergenerational cultural exchange by senior-aged cultural experts of the community. Students learned basic about Hawaiian culture and Hawaiian language, such as simple greetings for different times of the day, numbers, and colors.

Hawaiian Studies is taught as an enrichment component of the curriculum and focuses on learning about Hawaiian language, values, concepts, practices, and history. The original idea worked well in the early years while there were still many kūpuna alive in the community. However, rapid dwindling numbers of Hawaiian-speaking kūpuna to under 200 (Wilson, 2006) required the program to evolve as a kūpuna/mākua elderly/parent program depending heavily on the mākua to stabilize the program. Over the years, the Hawaiian Studies Program has experienced much criticism and many challenges in its implementation. Nonetheless, it has contributed and enriched the initiative program and has had a positive effect in terms of developing awareness and appreciation for Hawaiian language and culture in all public school children (Kawakami, 2004; Wilson & Kamanā, 2006).

The quality of Hawaiian language and Hawaiian studies classroom instruction is highly inconsistent and depends on the availability of knowledgeable community experts, local made curriculum, and, most certainly, teacher competence and confidence to teach Hawaiian language. Since there is no state mechanism for selecting textbooks and teaching materials, decisions are often made by the individual teacher or school, and too

often, even having Hawaiian materials, textbooks, or supplementary resources is contingent on school funding and takes a back seat when schools are faced with budget cuts and the needs of the common core subject areas (Kaomea, 2000, 2005).

Hawaiian language is not a prerequisite for most teacher education programs in Hawai‘i or for those trained outside of Hawai‘i who teach in Hawai‘i public schools. Teachers may have had limited or no course background in Hawaiian language or culture. Wilson and Kamanā (2011a, 2011b) state that materials for teaching Indigenous languages commonly follow models for teaching a foreign language, “thus framing Indigenous languages and cultures as subordinate to the national language and culture” (p. 41). This approach is problematic and further complicated as many teachers may lack competence and confidence to teach or use Hawaiian in the classroom.

The expansion of the Hawaiian language revitalization movement began with the inclusion of the Hawaiian language medium Pūnana Leo preschools in 1983 followed by the Papahana Kaiapuni Hawai‘i schools into public education in 1987 using an immersion model. Hong (2010) defines the goal of language immersion schools as a way to “achieve second language proficiency by using the second language as the primary medium of instruction” (pg. 1). Fortune and Tedick (2008) identify Indigenous immersion as a “distinct” category of immersion education. Autochthonous language immersion programs are designed to revitalize endangered languages and cultures by enrolling large numbers of Native children with increasing numbers of “nonheritage” learners. Immersion is considered an additive program in which students achieve a minimal level of bilingualism in the target language (Hawaiian) with primary fluency in the majority official language (Wilson & Kamanā, 2011a, 2011b). In some respect,

Hawaiian language is also considered a heritage bilingual model and shares maintenance and enrichment model characteristics for language recovery with an endangered language among non-speakers of the language. Positive outcomes have been identified in terms of academic achievement, cultural identity, increased self-esteem, higher-order thinking, understanding of complex concepts, resolving behavioral problems, multilingualism, and community and language survival (Genesee 2000; Hong, 2010; Northwest Regional Educational Laboratory; 2006; Rawlins, 2011; Tedick, Fortune, & Christian, 2011; Wilson & Kamanā 2011a, 2011).

Nearing thirty years of development with a multitude of challenges, including insufficient resources and funding, facilities, curriculum, leadership/administration, policies, and teachers, has lead to the divergence of different immersion models in Hawai‘i. Many of the Hawaiian immersion schools share facilities with conventional English medium schools under the administration of one principal and school vision as a full or partial-immersion model. Others have chosen to go the charter school route to allow more autonomy for school development and operations as a Hawaiian language immersion/Hawaiian-medium site.

Hawaiian-medium education is commonly used to describe the medium or language of instruction used to teach the various school subjects, but in more recent years the term Hawaiian-medium or Kaia‘ōlelo Hawai‘i school has evolved to define a Hawaiian dominant learning setting much like that of the original Hawaiian education system where all administration and operations are conducted through Hawaiian and the typical student is viewed as a Native speaker of Hawaiian. In the same spirit a “believe,

behave, become, and belong”¹⁶ adage guides the implementation of ideology to recreate a fully functional Hawaiian education setting that cultivates a “distinctive self-reproducing community” (Wilson & Kamanā, 2011b, p. 17). With the increasing numbers of Hawaiian speaking families, the school becomes an extension of the home language where Hawaiian is the primary language used for all daily aspects of the school operation including by the principle, teachers, staff, students, and families, making Hawaiian the primary language and English and other languages the auxiliary languages (Wilson & Kamanā, 2011a, 2011b).

The goal of Hawaiian-medium education is supporting Hawaiian as the first language of the school and home. Wilson and Kamanā (2006), strong proponents of Hawaiian language revitalization efforts, articulate five benefits for Hawaiian-medium education, which include —(a) assuring personal cultural connections, (b) maintaining Hawaiian identity as a distinct people, (c) supporting academic achievement, (d) acquisition of standard English, and (e) third-language study. Strengthening academic achievement is accomplished by addressing higher levels of conceptual development and metalinguistic skills of bilingual competency. Wilson and Kamanā describe the revernacularization of Hawaiian through the Hawaiian-medium educational model:

The strong Hawaiian language medium school model of the Hawaiian monarchy was needed if Hawaiian was to survive extinction. The contemporary Hawaiian-medium model was developed by combining knowledge gained from the historical Hawaiian model with information gained from Canadian French immersion and even stronger autochthonous language medium models from New

¹⁶ Betty Jenkins, personal communication, February 17, 2012.

Zealand and elsewhere. The model calls for a standard-English language arts course beginning in Grade 5 and third and fourth languages to be taught as resources are available. (pp. 166-167)

The Hawaiian-medium/immersion education is a model for language recovery, revitalization, and language sovereignty. Proponents of Indigenous medium/immersion education assert the right of choice to speak in the Native language and to make decisions about “the content and medium of their children’s education” (Pacific Policy Research Center, 2010). Northwest Regional Educational Laboratory (2006) identifies “language as the core, and traditions as the fiber that connect everything else” (p. 5). Pease-Pretty On Top (2003) has identified five key factors that motivate Indigenous language immersion in the U.S.:

- Severe losses in Native language fluency.
- Language immersion positively impacts educational achievement.
- The greater preservation and revitalization of culture and language is connected to the greater Native community.
- Native culture and language teaching and learning positively affect tribal college student retention.
- Native leaders identify language immersion as a strategic counter to the devastating effects of American colonization of Native people. (pp. 8-9)

The Māori language movement (Aroturuki me ke Arotakenga Monitoring and Evaluation Branch Te Puni Kōkiri, 1999) is one of the most successful language resurgence efforts. It is interesting to compare Hawaiian-medium/immersion with that of Māori language in Aotearoa New Zealand where there are strong parallels and similar

history of language revitalization efforts. The 2002 New Zealand census counts over half a million Māori. One-fourth of the Māori population speaks Māori and half of the Māori speakers are under 25 years of age. The 2006 census includes 157,100 people who could speak Māori at different levels of proficiency of which 84% are of Māori descent. In 2008, the public school student count was 28,733 with a majority count of 25,726 students being of Māori heritage. Last year alone, the New Zealand government spent an estimated 600 million New Zealand dollars across all sectors of government to support Māori language (Reedy, 2011). The data show an incredible shift in terms of language revitalization, which was most certainly affected by the 700 Kohanga Reo, 44 Kura Kaupapa, and 25 Wharekura Māori immersion education initiatives and programs (Minister of Education, 2009; Statistics New Zealand, 2002).

Indigenous language identity loss and its affect on Indigenous identity is a worldwide crisis. With the loss of language comes the loss of a people's identity and a valuable, irreplaceable cultural resource that cannot be restored outside of its homeland. Kalena Silva, a Native Hawaiian¹⁷ articulates the value of language identity, "Language and culture provide physical, spiritual, and emotional sustenance, the strength of which depend on the riches of the soil where it grows. Land, lineage, language, cultures ... a bond born out of the respect, the bond links to ancestors as well as to future generations."

Summary

During the past thirty years there has been a growing emphasis on developing culturally viable and innovative alternatives that better serve the needs of Native

¹⁷ Quote from Pease-Pretty On Top, J. (2003), p. 19. Native American language immersion: Innovative Native Education for children and families.

Hawaiian children. A number of programs and instrumental initiatives have been established through grassroots and institutional attempts to improve, reform, and reclaim education. Included in this short list is the Hawai‘i Department of Education’s (HDOE) Kūpuna/Mākua Hawaiian Studies program that brings community experts into the classrooms across the state to teach the language, values, culture, and history of Hawai‘i; the Papahana Kaiapuni Hawai‘i Hawaiian-medium/immersion schools (18 HDOE and 6 public charter) at 24 sites statewide; the Pūnana Leo preschools, internationally known as Hawaiian language nest schools, at 11 sites with programs from infant-toddler through age 4; Hawaiian-focused charter schools in 11 communities across the state; Nā Pua No‘eau Center for Gifted and Talented Native Hawaiian Children with outreach centers on each island; Kamehameha Schools Public Education Support programs; and many other culture-based/community-based programs growing throughout the state. Although these CBE type programs are commonly underfunded and underresourced, they are highly valued and have produced positive outcomes, including an increase in graduation rates, college attendance and test scores in reading and math, as well as declines in absentee and drop out rates (Hawai‘i Department of Education, 2011; Hawaii Charter School Administrative Office, 2011; Jordan 1985; Kawakami, 2004; Tharp, 1982; Kahakalau, 2003; Kamehameha Schools 2011; Kana‘iaupuni 2010; Nā Pua No‘eau, 2007; ‘Aha Pūnana Leo, 2012; Tibbetts, 2005; Wilson, 2001a & 2001b; Wilson, Kamanā, & Rawlins, 2006).

According to Kana‘iaupuni and Pahi‘o (2006), the Native Hawaiian education movement is centered around rallying the strengths and talents of educators, families, and community to refocus on the “people, relationships, and children” (p. 43) to shift

educational paradigms and redirect the historic deficit model to a strengths-based approach—academically, social-culturally, emotionally, physically, and spiritually. Native Hawaiian children have historically struggled to successfully navigate through a system that is not responsive to their educational needs. Culture-based programs, including both place-based and community-based models, are examples of Native models that serve high percentages of Native Students and show great promise for raising academic achievement as well as language and cultural competency of Native students (Jordan, 1985; Kahakalau, 2003, 2004, 2005a, 2005b, 2006; Kana‘iaupuni, 2004; Kana‘iaupuni, Malone & Ishibashi, 2005; Kawai‘ae‘a et al., 2005; Kawakami, 2004; Silva et al., 2006; Hawai‘i Department of Education, 2000; Vogt, Jordan & Tharp, 1987; Wilson & Kamanā,, 2001a, 2001b, 2006; Wilson, Kamanā, & Rawlins, 2006).

Beaulieu (2006) summarizes the dream for Native Indian education and sentiments that are shared by many Alaskan Natives and Native Hawaiians working in culture-based environments:

A large part of our thinking in Indian education carries with it the belief that it is possible to transform the educational programs of schools serving Native students so that they will serve the interests of specific tribal¹⁸ communities. That interest is first defined in terms of maintaining social and cultural continuity with the past while adapting to change. (p. 53)

Education plays an important part in the history of language, culture, and identity loss (Wilson & Kamanā, 2001a, 2001b, 2006). The history books and personal family stories

¹⁸ For Native Hawaiians, the value of place, the ‘āina (land), is connected to genealogy and tradition. Although Hawaiians are not tribal in social structure, values like *mālama ‘āina* (caring for the land) and *aloha ‘āina* (love for the land) are part of cultural identity. Therefore, the concept of community as “place” is important.

tell us about the disempowerment, disengagement, and disenchantment of Native Hawaiians as they assimilated into Euro-American standards. However, embedded in Native cultures are also enduring values that have been sustained through the practices, behaviors, language, and traditions as culture evolve from one generation to another (Barnhardt & Kawagley, 2010, 2011; Native Hawaiian Educational Council & Ka Haka 'Ula O Ke'elikōlani, 2002; Alaska Native Knowledge Network, 1998).

Reconnecting culturally grounded ideas, values, and practices provide multiple possibilities for counterbalancing the negative effects of colonialism and acculturation. As an example, Maui Ola Hawai'i Education has cultivated a network of schools from pre-school thru college offering a Hawaiian educational system for learning in Honua Kaia'ōlelo, Hawaiian-medium schools. They are an example of a Hawaiian CBE model focusing on high academics and applied culture through the revitalization of the Hawaiian language.

The charter school laws have opened options for communities to creatively develop school models aligned to community needs and resources. Seventeen of the thirty-one charter schools are Hawaiian-focused or Hawaiian language/Hawaiian-medium/immersion schools. Kahakalau (2003), a leader in Hawaiian-focused charter schools, articulates, "Hawaiian ancestors understood their own learning preferences and aptitudes and shaped their education process accordingly. Culturally, responsible pedagogy recognizes culture as the most powerful variable that influences teaching and learning process."

The enrollment in these schools has grown over 500% over the past ten years (Native Hawaiian Education Council, 2011, p. 35). Data show that in 2010, Native

Hawaiian students made up approximately 78% of the student population in Hawaiian-focused charter schools and 95% in Hawaiian language/Hawaiian-medium/immersion charter schools. In 2011, Native Hawaiian enrollment in these Hawaiian-based schools increased 11.2% in comparison to the 1.2% in conventional schools. Enrollment data illustrate that families are choosing Hawaiian-based charter schools as a viable option for their children.

The Native Hawaiian Education Council (2011) needs assessment report states that these schools “provide a high-impact opportunity to improve the educational well-being of Native Hawaiian children; they increase student engagement with school, promote environmental stewardship and civic responsibility, involve parents and communities, and lend to solid improvements in academic achievement” (p. 51). In addition, these models are viewed as engaging for Hawaiian and non-Hawaiian students alike. Parents believe they “promote student safety and well-being to a much greater extent” (p. 50), and are promising as a model that actively reinvigorates high cultural identity and student achievement (Kahakalau 2005a, 2003; Kanu o ka ‘Āina, 2001, 2009; Kawai‘ae‘a, Alencastre, & Housman, 2007; Yamauchi & Luning, 2010).

Indigenous communities who have suffered from colonization and acculturation call for equitable educational choices that are culturally relevant and grounded in their own distinct philosophies, epistemologies, worldview, and pedagogies. The considerations that address the educational needs in the schooling of Native children are central to place, language, culture, spirituality, mores, values, and beliefs. Multicultural education contributes to another layer that seeks to equalize educational opportunities for

culturally different students and produce learners with the competencies necessary to be successful in both the Native and Western culture (Gibson, 1984).

Contributions from a growing body of literature along with Indigenous educational initiatives that have emerged in the last thirty years provide a strong foundation for the research study on Native Hawaiian learning environments. One lesson learned well is that education works best when institutions, families, communities, and support organizations work together. Kalili (2009), in a recent film on Hawaiian culture-based education, sums up the sentiments and aspirations of many educators working in formal and non-formal school settings to transform education and shift student outcomes through a HLCB strengths-based approach to education:

Raising bright and alert keiki (children) who are mindful of the world and people around them and who contribute to the community is fundamental to who we are. Our kūpuna instinctively knew the value of education. On-going learning rooted in our values and unique lifestyle, allow us to thrive; and the continued development and application of culture-based learning today will ensure future generations of well-educated keiki in Hawai‘i tomorrow.

Chapter 3

Methodology

*Ua lilo i ke koli kukui a maluhi.*¹⁹

Gone lamp-trimming until tired.

—Pukui

Sometimes cultural wisdoms use language to describe the action of someone in a humorous or serious way. The opening ‘ōlelo no‘eau talks about being fully engrossed and absorbed in the whittling down of the lamp’s light until fatigued. It is a way of saying that one is gone on a night spree and will be there until tiredness sets in. It could be the individual is doing something fun or seriously toilsome work. In Hawaiian thinking, the giving freely of one’s self is also considered to be an expression of aloha—a fondness for that person or thing upon whom time and energy was expended. Whether work or fun related, maluhi, tiredness in this sense, can be a good thing, remembering metaphorically that the kukui refers to the light and, in the process of being in the light, enlightenment is attained. The opening ‘ōlelo no‘eau thus sets the stage for the methodology section of the research study.

¹⁹ “Said of one who has gone on an all night spree. When the top nut on a kukui nui candle was burned out, it was knocked off and the next nut on the stick was allowed to burn.” The *koli kukui* (To trim the top of a kukui lamp) is used here as a metaphor to describe the direct labor-intensive nature of the methodology phase. Traditional Hawaiian wisdom, # 2817, p. 309. Pukui, M. K. (1993). *‘Ōlelo No ‘eau: Hawaiian proverbs & poetical sayings*. Honolulu, HI: Bishop Museum Press.

Chapter 3 presents the methodology used in the Kūkohu study, a three-phase process. The chapter includes the descriptions of the mixed methods methodology, which includes the research design, process and procedures to develop and test the Kūkohu inventory matrix, the data analysis plan, as well as the assumptions, limitations, and delimitations of the study. This research study employs an interdisciplinary approach that examines the multiplicity of interchange between four identity characteristics—cultural, linguistic, curricular, and relationship—found within the Native Hawaiian schooling environments.

The study addresses an issue of social relevance that aims as its long-range goal to effectuate positive educational outcomes and healthy well-being for Native Hawaiian children. As an Indigenous research study, the methodology was informed by both Western and Indigenous research practices and procedures. The methodology was informed by two purposes: (a) to develop a Hawaiian culture-based inventory matrix tool that can be implemented and used by schools on a larger scale as post-doctoral work; and (b) to investigate the perspectives, experiences, values, vision, goals, and practices of the schools that participated in the study so as to further inform the richness of the inventory tool.

By gathering what is known about and being practiced in culturally synchronized schools through the literature review, experts in the field, and by working with schools (and not merely studying the schools), more relevant knowledge can be attained about CBE learning environments. The broader vision can lead to more practical and effective ways to support healthy and responsive learning environments that value and build

relationships, academic relevance and rigor, and socio-cultural maturity based on culturally sound practices of the school.

Premise

The premise guiding this body of work is that education is a cultural process; therefore, schools that incorporate Hawaiian language, culture, and culture-based approaches within the kaiaa‘o, or learning environment, create optimally responsive settings to support positive student outcomes and healthy well-being.

Research Question. What are the cultural identity features found within Native Hawaiian learning environments, and in what ways do they support or thwart successful outcomes?

Research Design and Mixed Method Approach

There were many considerations taken into account when choosing the appropriate research design and approaches for the study, including (a) cultural concerns about the methods, processes, and protocols that would impact the quality and ethical issues of the study; (b) the audience the research addresses and serves and the processes for collecting their input; (c) the participants and research samples; and (d) the overall objectives and goals of the study. Under careful consideration of these issues and in consultation with my doctoral committee and others, a mixed-method approach was determined as the appropriate choice. The approach blends the type of data to be collected with a rounded collection process that effectively integrates the qualitative and quantitative methods needed to inform the inventory matrix in a balanced approach. The research study leans heavily on qualitative research methods with quantitative data to

augment and provide information-rich samples for analysis that meets both Western and Indigenous standards (Kovach, 2010; Patton, 1990).

Indigenous research experts point out the importance of balancing the technical and cultural aspects of research and refer to this balancing act as a “double door approach” to a methodology that includes relationship-binding principles, culturally appropriate research methodology, cultural and research competencies, protocols for sharing information, research assurances for reciprocity, and community partnering strategies. In short, the methodology should be designed to reflect the collective objectives of the researcher and the community the research aims to serve in ways that are thoughtful, sensitive, rigorous, and collective (Battiste, 2002, 2008; Kovach, 2010; Mataira, 2003; Mataira, Matsuoka, & Morelli, 2005; Wilson, 2008).

There is definitely a tension when working between two very different worldviews on research. Western research promotes a scientific posture that separates the researcher from the process, positing that such separation maintains the validity and reliability of the data. Indigenous research promotes relationships and connections as a crucial factor in the process of determining valid and reliable research. At the foundation of the two paradigms are fundamentally different understandings about the role, purpose, place, and function of research. As a novice researcher, this created significant internal strife for me until I could make sense of which methods I would use and how I would implement those methods in a way that reflected my own Indigenous ideals and beliefs about research and yet be accountable to the standards of rigor expected in both Indigenous and Western paradigms.

As culture is social and education is a cultural process, an exploratory design using a mixed-methods approach that employs Indigenous heuristics, a community participatory process, and focus groups provided a good fit and comprehensive process that would be acceptable for the diverse group that has a stake and interest in the outcomes of the study (Patton, 1990). These methods allow the researcher to be part of the research process in ways that are thoughtful, rigorous, collective, and accountable within both Western and Indigenous frames of research and also bring those for whom the Kūkohu Inventory Tool is being designed to assist into the fold of development of the tool. By combining all three approaches, I was able to take a more honest and deeper look at the content, context, processes, interactions, and attitudes of the participants in ways that provided me with the quantitative and qualitative data necessary to capture a richer picture of the findings. Therefore, a mixed-methods approach increased both the validity and reliability of the data in the context of addressing the intention of the research study.

Kahakalau (2003) presented parameters of Indigenous heuristics in her dissertation while a student at Union. Her work in Hawaiian education through the Kanu o ka 'Āina model frames Indigenous heuristics in a way that is complementary to the processes needed for a research study. Since this methodology may be new to the reader, I have included here the Kahakalau framework for Indigenous heuristics:

- The research question centers around an Indigenous plight and attempts to bring about positive change for an Indigenous peoples.

- The research is conducted by an Indigenous person, in an Indigenous community, for the immediate benefit of this community, and with help from this community.
- The research personally includes and affects the researcher and his/her family and community.
- The research includes a practical application of the theory via an ongoing social action project that directly benefits an Indigenous community and includes both a quantitative and a qualitative analysis of the action research; The research process utilizes Indigenous data collection methods, such as observation and participation, "talking story," "dream learning," etc.
- The research method utilizes triangulation and involves at least two distinct groups of co-researchers in data collection and analysis.
- The research process follows the six-phase phenomenological process developed by Charles Moustakas called heuristics.
- The findings of the research are presented both in a format that is understood and preferred by the Indigenous community involved, as well as a format accepted by academia. (p. 114)

Research Process – Phase 1-3

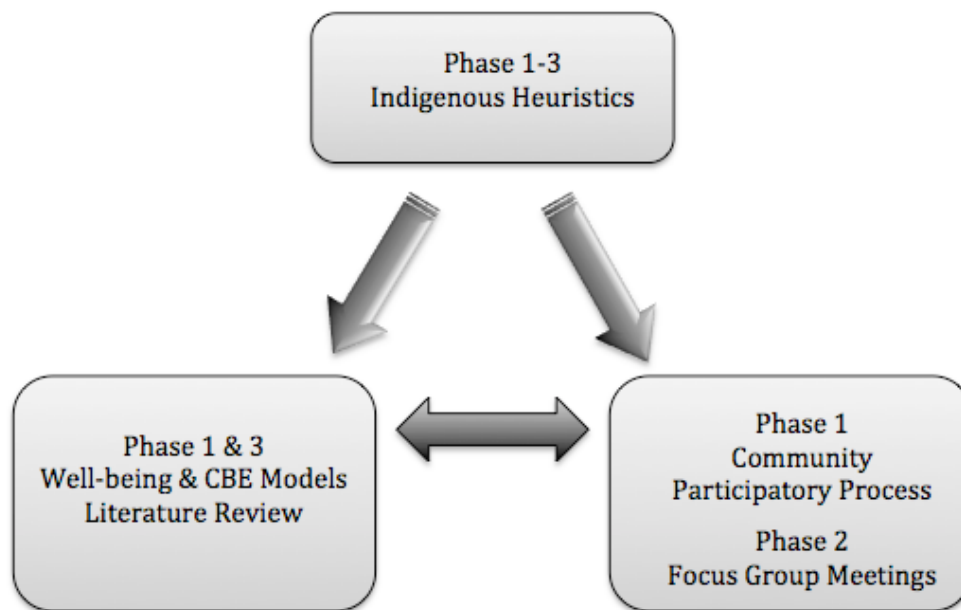


Figure 1. Triangulation of research methodology

Phase 1	Designing the Kūkōhu Hawaiian Culture-based Inventory Tool
Phase 2	Gathering Perspectives From Within
Phase 3	Triangulation on the Data & Analysis

There are three phases to the research design and four types of data were collected throughout the research process. The research process employed a three-tiered approach where triangulation of the data set at each of the phases was necessary to prepare for the next phase of the process. Ensuring congruity of the themes, trends, and significant findings along the way set the foundation for the final triangulation at phase three. The qualitative and quantitative data used for analysis were acquired from the following: (a)

Indigenous heuristics, using my knowledge and experiences gained from working for over thirty years within the CBE field; (b) CBE and well-being models and the literature review; (c) an advisory committee of CBE experts in Hawai'i; and (d) heterogeneous focus groups from three volunteer Hawaiian-medium/immersion school sites (Mathison, 1988; Meyer 2008, 2006).

Phase One—Envisioning the Big Picture in Designing the Kūkohu Inventory Tool

The initial working draft of the research inventory tool, *Kūkohu: Hawaiian Culture-based Inventory*, was developed at phase one. The research approaches employed in Phase 1 included Indigenous heuristics, the literature review, and community participatory process.

Indigenous heuristics is a process. The research process began with conceptually envisioning the tool itself, how it was to be used, whom it served, and how it would assist in addressing the research question. As a Hawaiian cultural tool for schools, the first step for Kūkohu was to conceptually center the tool in Hawaiian thinking and philosophy to ensure that at its piko (the essence of its very core), the tool would be Hawaiian. Indigenous heuristics brings into the blend of the research method any related professional, cultural, and personal life experiences, attitudes, and beliefs that contribute to the dynamics of the research study.

Thus, the research began with myself as a Hawaiian educator, speaker, and cultural practitioner. I have been intimately involved with Hawaiian education and the Hawaiian-medium/immersion education movement for nearly thirty-five years as a teacher, teacher trainer, and administrator. The revitalization of Hawaiian has been a

personal commitment and a family lifestyle choice. As one of the pioneering families in Hawaiian-medium/immersion education, our children were raised as Hawaiian speakers in the home and have been educated from the pre-school to grade twelve through Hawaiian. As a grandmother, our family now has three living generations of Hawaiian speakers.

I acknowledge the influence my grandparents have had on my life and choices that have ultimately guided me along the path to the research study topic on Hawaiian culture-based environments. I recognize that I was born at a critical cultural turning point in our family history. Outside of the Ni‘ihau community, my grandparents were part of the last generation of Native Hawaiian speakers. They were raised in strong Hawaiian environments as kua‘āina rural residents in Waialua, Moloka‘i and Makena, Maui. Then in the 1940’s my grandfather received his homestead and moved the ‘ohana to Kahakuloa, Maui where he built his home and raised pigs and cattle. My grandmother was a teacher in the village schoolhouse at Kahakuloa. They were respected kūpuna in the community and in the senior years of their lives were active social change agents on Maui who shared their Hawaiian cultural knowledge and supported many land and cultural issues in the 1960-1980’s.

As the eldest mo‘opuna (grandchild) on the Hawaiian side of my family, part of my role was to learn the family knowledge and ways. It is a kuleana, a responsibility and a privilege, and began by quietly learning alongside my kūpuna and others from that senior line of our family. Learning my role was an experience that not only connected me to my family but also gave me a solid foundation in what I know today as a Hawaiian educator.

In drafting the first run of the Kūkohu inventory, I used the Kumu Honua Maui Ola philosophy to ground the “Hawaiianness” of the inventory tool. The Kumu Honua Maui Ola is a philosophy statement written in 1998 by Hawaiian speaking educators to clarify and provide a philosophical foundation for schooling through Hawaiian. It has been used as a public document for Hawaiian-medium/immersion schooling and in Hawaiian education initiatives and activities. As one of the writing committee members of the Kumu Honua Maui Ola philosophy, that knowledge helped me to analyze the literature and put it into a context that is centered in Hawaiian thinking.

Ke Kumu Honua Maui Ola Native Hawaiian philosophy.



Figure 2. Kumu Honua Maui Ola Philosophy

The Kumu Honua Maui Ola philosophy speaks of three pillars: the piko (connections to time, spiritual/ancestral, genealogy/family, and creativity/inventiveness), the honua (environments/places), and the maui (life-force). The piko connects ones past, present, and future through spiritual, family, and creative/inventive relationships. The honua is about place, environment, and the world that surrounds one in connection to family, community, and global interaction. The maui has four aspects responsible for the development and nurturing of the quality of ones life force. The way in which one develops through these aspects, pili 'uhane (spiritual/intuitive), lawena (kinesthetic/behavioral), 'ike ku'una (traditional/inherited knowledge), and 'ōlelo

(language), shapes the nature of one's cultural base. Therefore, the maui is essential in Hawaiian thinking as the unique life force, a cultural center that distinguishes and identifies the culture of a person, in this case a Hawaiian. It is believed that by tending to the maui (very much like a flame), the life force of a person becomes strong. Therefore, one is confident in their person and identity.

Drawing from the Kumu Honua Maui Ola philosophy and the literature review, I selected the four identity characteristics for the Kūkōhu inventory matrix—cultural, curricular, relationship, and linguistic. Similarly, but at a much more advanced level, the Māori developed the Te Aho Matua philosophical statement that provides guidance in the operationalization of their Kura Kaupapa and Wharekura schools. Cultural philosophies provide guidance and philosophical support from within the tenants of the cultural beliefs and practices—an “ancient is modern” application for education (‘Aha Pūnana Leo, 2003; ‘Aha Pūnana Leo & Ka Haka ‘Ula O Ke‘elikōlani, 2009; Kimura, 2007; Mataira, 2008; Nepe 1992; New Zealand Education Review Office, 1997; Te Aho Matua Working Party, 2003; Te Rūnanga Nui o ngā Kura Kaupapa Māori o Aotearoa, 1996, 1998).

The Literature Review. The second step was to shape the context of the document through the literature review by looking at Indigenous models of well-being and CBE. The literature review also identified other themes necessary to incorporate in the matrix, specifically Indigenous education, CBE, pedagogy, and learning environments. I conducted the initial literature review systematically to capture what was said and locate any disconfirming evidence that was not consistent with my own experience to enhance the methodology and align it with the first phase of the research

process. In the final phase three of analysis, I revisited the literature review to update the research and to apply it to the final findings of the research study.

The Kūkohu Hawaiian Culture-based Inventory went through a rigorous Indigenous process of development that employed the literature review process, a community participatory process, and focus groups. Table 1 shows the framework developed through the literature review process.

Chapter 2 provides the literature review of over 260 documents in its totality. From macro- to micro-level, the research topic was investigated. Part of the critical process of development entailed alignment of the Kumu Honua Maui Ola philosophy with three Well-being and three CBE models that I selected as models for the Kūkohu Inventory Tool. The models chosen incorporate Indigenous education in the areas of language, culture, at-risk youth, education, and social science.

Table 1. *Kūkōhu Hawaiian culture-based inventory framework*

Kūkōhu	Cultural Identity	Curricular Identity	Relationship Identity	Linguistic Identity
KHMO Philosophy	‘Ike ku‘una (traditional & inherited knowledge)	Lawena (kinesthetic & behavioral)	Pili ‘Uhane (spiritual & intuitive connections)	‘Ōlelo (language)
Well-Being Model Elements	Ka Huaka‘i Conceptual Model of Well-being (Kana‘iaupuni, Malone & Ishibashi)	Social and Cultural, Emotional, Cognitive, Physical and Material and Economic Well-being		
	Indigenous Cultural Well-being (Demmert)	Indigenous Identity	Intellectual Skills Kinesthetic/Physical Development	Practical Traditional Spirituality Responsibility to Family, Community & Broader Society
	* Language crosses all 5 dimensions			
	Circle of Courage (Bendtro, Brokenleg, & Bockern)	Spirit of Belonging	Spirit of Mastery	Spirit of Independence and Generosity
CBE Model Elements	Indigenous CBE (Demmert et al.)	Culturally-based curriculum & pedagogy		Leadership & decision-making Social and political mores Indigenous language
	Hawaiian Indigenous Education Rubric (HIER) (Kana‘iaupuni et al.)	Context Culturally grounded/relevant/responsible & well-being	Content (culture/place-based & values/life-skills)	Pilina ‘ohana & Pilina Kaiāulu (family & community involvement & integration) ‘Ōlelo Hawai‘i (Hawaiian language use)
	CBE Bilingual and Immersion Models (McCarty)	Self-efficacy as social change agents Educational parity of Western and Indigenous education Well-being, academic and ethnic identities Promotes trusting relationships between home and school		

(‘Aha Pūnana Leo, & Ka Haka ‘Ula O Ke‘elikōlani, 2009; Kana‘iaupuni, Malone, & Ishibashi, 2005; Demmert, 2008; Bendtro, Brokenleg, & Bockern, 2002; Demmert, et al., 2008; Kana‘iaupuni, & Kawai‘ae‘a 2008; McCarty, 2009a, 2009b)

Well-being Model Elements.

Ka Huaka‘i Conceptual Model of Well-being. The conceptual model was developed for the 2005 Native Hawaiian Educational Assessment. It emphasizes the interconnectedness of five areas that are distinct but overlap with each other. The elements are social and cultural, physical, cognitive, material and economic, and emotional (Kana‘iaupuni, Malone, & Ishibashi, 2005).

Indigenous Cultural (Socio-Psych) Well-Being Continuum. Influenced by the original work of Crabbe (2003) on the Hawaiian Ethno-cultural Inventory (HEI), Demmert (2008) developed a rubric entitled Indigenous Cultural (Socio-Psych) Well-Being Continuum. The rubric describes five dimensions and four levels of exemplars that reflect the “distinctive contemporary as well as traditional linguistic, cultural, and social mores of a community” (p. 1)—Indigenous identity, traditional spirituality, responsibility, intellectual skills, and kinesthetic/physical development. Demmert was in the process of vetting the rubric among national and international Indigenous groups including Circumpolar Indigenous peoples at the time of his passing. I was among one of the participants assisting Demmert in vetting the document through a university course I teach called Indigenous Well-being Through Education. The course is an international course that includes Native Hawaiians, Native American Indians, Alaska Natives, First Nations students from Canada, and Māori (Demmert, 2008).

Circle of Courage. The Circle of Courage modeled after the First Nations medicine wheel describes the essential characteristics for reclaiming Native American at-risk youth. Developed by Bendtro, Brokenleg, and Bockern, it is an Indigenous well-being model that describes four characteristics of spirit much like how Hawaiians value the importance of maui, or living life force. The well-being model includes spirit of belonging, mastery, independence, and generosity. I first heard a presentation on the Circle of Courage at the National Indian Education Association Convention in 2000. It is a moving, Indigenous model built upon a strengths-based foundation that grew out of the work with at-risk youth but is applicable to any Native group (Bendtro, Brokenleg, & Bockern, 2002).

CBE Model Elements.

Indigenous Culture-Based Education (CBE). There are five characteristics with four indicator levels found in CBE environments including Indigenous language, culturally based pedagogy, culturally based curriculum, leadership and decision making, and assessment. The rubric was developed by national leaders in Indigenous education, language revitalization, and research, then vetted at the same level among CBE leaders and programs. This was one of two rubrics Demmert was working on at the time of his passing. Through a synchronous distance-learning course conducted in collaboration with other universities at a national and international level, one of the courses I teach, Indigenous Culture-based Education, was used to vet the document to other Indigenous educators. The course includes Native Hawaiians, Native American Indians, Alaska

Natives, First Nations students from Canada, and Māori educators and students (Demmert, Hilberg, Beaulieu, Rawlins, Tharp, & Yap, 2008).

The Hawaiian Indigenous Education Rubric (HIER). The HEIR was developed in collaboration in 2006 by the Kamehameha Schools Research and Evaluation Department, Nā Lei Na‘auao Charter Schools, and a research advisory committee. There are five dimensions and four indicator levels (from none to enacting). The rubric was developed then implemented as part of Kamehameha’s full-scale research study called Hawaiian Cultural Influenced in Education (HCIE). The five dimensions to the HIER rubric include the use of Hawaiian language, ‘ohana (family) and community involvement, content, context and data, and accountability. I participated in the development of the rubric as a member of the advisory committee (Kana‘iaupuni & Kawai‘ae‘a, 2008).

CBE Bilingual and Immersion Models. Since the research study was to take place in focus groups with Hawaiian-medium/immersion schools, it was important to also draw from the CBE characteristics found in the unique settings of Native language education. McCarty describes four characteristics found in these Native language settings: self-efficacy as social change agents, educational parity of Western and Indigenous education, well-being, academic and ethnic identities, and promoting trusting relationships between home and school (McCarty, 2009a, 2009b). Culture models do not often include strong elements of best practices for language revitalization and recovery. Native empowerment models used to inform the Kūkohu inventory have both strong culture and language dimensions. The focus groups in the research study are also all made up of members who work at or are in some way affiliated with Hawaiian-

medium/immersion schools. Ensuring that the critical dimensions and considerations for supporting language vitality are included within the Kūkohu framework was an essential component.

The Community Participatory Process. As part of honoring the Indigenous research protocol and acknowledging that the tool is ultimately meant for HLCB schools at a broader level, the development of the Kūkohu framework brought into the research mix an advisory committee of Hawaiian CBE experts through a community participatory process. The Kūkohu draft included the version I had prepared during the initial literature review and aligned with the Kumu Honua Mauli Ola philosophy. The language style of Kūkohu is aimed for a school-setting audience.

Step three and the final process of this phase used a community participatory approach to further shape the identity characteristics and detailed descriptions of the Kūkohu matrix that I initially drafted. Over the past 5 years, I have worked on several educational initiatives around culture-based education (CBE) projects through the Nā Lau Lama state initiative (2006-2009) and the Hawaiian Cultural Influences in Education (HCIE) Advisory Committee (2008-2010). The experiences allowed me to learn more about HLCB schools on a broader level and get to know the local experts in the field who work in a variety of educational and school contexts.

The education community in Hawaiian CBE and Immersion Education is a relatively small professional and grass roots community in comparison to the larger conventional educational settings. The expert volunteer committee that participated in the community participatory process was assembled from within those two groups. They included educational and research professionals, classroom teachers,

administrators/principals, and community and grass roots experts from the various conventional to Native empowerment school settings and were asked to provide an external screening of the tool.

In an ideal situation, the community participatory process is best conducted together. That was not fully possible with the time constraints of the research study, the volunteers' schedules, and the interest of individuals participating. I used a mixed-methods strategy to gather feedback on the initial Kūkohu matrix I prepared through small face-to-face meetings of 1-3 people as well as email and phone calls for those volunteers unable to attend the meetings. The final findings from this process were used to prepare the Kūkohu Inventory Tool that was used for the focus groups in phase two.

Phase Two – Gathering Perspectives From Within: Focus Groups

Focus groups provide another independent source of data for the research study. The Kūkohu matrix was piloted by the participant groups at three different Hawaiian-medium/ immersion schools within the “school for Hawaiians to Hawaiian school continuum.” These schools are private and public charter schools located in conventional to Native empowerment settings. Supplemental diagnostic data were collected through focus group meetings held at each of the three school sites. The purpose of the focus group meetings at these sites were two-fold: (a) the process acknowledges that schools should be consulted and included in the developmental process of creating instruments that inform practices and can affect their school and students; and (b) the process provides a vehicle for gathering critical data that can inform a more well-rounded and effective Hawaiian CBE inventory tool.

Site selection. Three Hawaiian-medium/immersion volunteer schools participated in the focus group phase of the research study. Although there were a wide variety of schools to choose from within the conventional to Native empowerment schooling environments, I chose to narrow the focus to Hawaiian-medium/immersion schools only. These schools have been chosen from within a large range of possibilities for school site selection for several reasons:

- Hawaiian immersion schools provide a good sampling of school grades P-12.
- Hawaiian immersion schools are available in a variety of urban and rural settings.
- Hawaiian immersion schools straddle the programming model continuum from mainstream to Native empowerment schools.
- Hawaiian immersion schools have been identified as a high priority area by the Nā Lau Lama Community Report and Native Hawaiian Education Council Needs Assessment Report (Kamehameha Schools, 2008; Native Hawaiian Education Council, 2011).

There are twenty-four Hawaiian-medium/immersion schools in the state. They vary depending on the resources accessible to each school along with the leadership and school vision that has developed at each school site. Hawaiian immersion schools include full immersion sites from infant-toddler to high school, partial-immersion, charter schools, stand- alone immersion, and immersion sites that share facilities with English medium schools. For nearly 30 years, these schools have provided a wealth of experience and expertise from the “front-line perspective” in developing HLCB school environments.

Role of the facilitator/research assistant and researcher. As someone who was a Hawaiian immersion classroom teacher in the past and an immersion educator for nearly 25 years, I have a working relationship with the immersion schools that I believe reduced any fear and mistrust factors associated with participating in the study. However, for the context of this phase of the research study, gathering the thoughts, perceptions, and feelings of the teachers independently was crucial to the process so as to maintain validity of the data. Thus, to address issues of congruity and credibility to the focus group method, a separate facilitator was retained. The facilitator/assistant researcher is a fluent speaker of Hawaiian and a Native Hawaiian immersion educator working outside of the classroom setting. As the pool of immersion teachers is a relatively small group, all three schools were already familiar with the facilitator and had established a trust relationship prior to the focus group meetings. My role during these meetings was to serve as an observer, recorder, and note taker.

Conducting the meeting. The volunteer participants consisted of administrators, teachers, and teacher staff. Many of the teachers and the administrators are parents of immersion students and were also encouraged to provide that perspective as well. Each of the three focus group sessions were 90 minutes long with the date and times of the meetings preplanned in agreement with each school's principal.

The rooms were prepared prior to arrival of the participants. Food and drink (very important in Hawaiian gatherings of any sort) was set on separate tables along with registration forms that each participant filled out. The school registration form was dropped off at the school office and either delivered to the meeting room by staff or picked up upon completion of the meeting at the office. Tables were also set-up to allow

for a circular discussion. Participants entered the room, had a bit to eat, and sat in a heterogeneous composition around tables.

After the opening protocol of pule (prayer), the facilitator set the tone of the meeting by providing background information, purpose, agenda, and ground rules. The roll of the facilitator and my role as researcher were shared. The participants were then given a copy of the inventory matrix with instructions and asked to add, subtract, or write any comments on the tool that needed further clarification, discussion, or correction.

To shape the discussions of the focus groups, a series of six guiding questions were used by the facilitator to elicit comments from the volunteer participants. Participants were encouraged to share their thoughts and feelings freely on the registration form, the Kūkohu inventory, and in discussion within the context of the probing questions. The Hawaiian strategy of “talk story” was integrated into the focus group process. “Talk story” is a form of informal open conversation where the group is engaged in listening, commenting, speaking, laughing, and even joking in a comfortable, safe environment free from fear of being judged or reprimanded for their ideas or comments. “Talk story” is still a common practice in Hawai‘i and a perfectly good strategy for eliciting the thoughts, feeling, and experiences of the participants.

This process provided the researcher an opportunity to act as an observer—to listen, take notes, observe, and become more intimately connected with the richness of ideas, experiences, and themes shared by the group members. The facilitator used chart paper and post-it notes to document the ideas that were shared and discussed by the participants. Participants were also given extra post-it notes and invited to add any

additional thoughts, comments, or ideas (See Appendices A and I for procedures and focus group probes).

Phase Three – Triangulation and Data Analysis Qualitative and Quantitative

As a quantitative and qualitative mixed-methods study, the overall combined academic data from the literature review and the data collected from the focus groups were analyzed during phase three. The community participatory process was intended as a group analysis process to aid in the development of the Kūkohu inventory matrix that was then administered at the focus group meetings.

Quantitative literature reviews. The literature review was conducted twice as both a pre- and post- process because of the length of time that had elapsed since the initial literature review performed during the Comprehensive Degree Plan phase of my academic study and the research study phase. As mentioned earlier, there has been substantial literature published in the last few years on CBE; I thus felt it necessary to update the literature review to support the quantitative data needed for the study. Those findings were used in the final analysis of the research study and, most importantly, it was during the later review that the Kūkohu framework became clearer.

Focus group analysis. The focus group analysis was a collaborative activity performed by the researcher and facilitator/research assistant. After each focus group meeting, a debriefing meeting continued for the purpose of review and analysis of the data collected at the meeting. The data provided in the recordings and written on chart paper and post-it notes was reviewed and compared to the researcher's notes.

The analysis process began with a review of the meeting quality and followed with a discussion of possible variables experienced among the participants and through the focus group process. Discussion continued beginning with the data from the summary charts and post-it notes, then incorporated the recorded discussions, and finally the researcher's notes were addressed. At the ending of each debriefing meeting, an identification of the themes, trends, and significant findings were agreed upon. At the completion of all three meetings, we had another discussion to synthesize the major common themes, trends, and findings.

Coding of hard copy data. There was also “hard copy” data that needed coding and analysis: each school and participant who helped pilot the Kūkohu Inventory Tool filled out a registration form that provided baseline quantitative data to analyze along with the qualitative data from the focus group discussions. Each of these documents were alpha coded and categorized for analysis by the researcher separately. Any notes or comments made on the Kūkohu inventory was logged separately and coded by the school.

The combination of the hard copy data and focus group discussions was compared and analyzed to create a picture that would describe the cultural ecology of the learning environments from both an inside and outside perspective. In Chapter 4, these findings that worked to identify current experiences, values, practices, and strategies of the three program models as well as characteristic identities included in the matrix will be discussed. These findings also resulted in the final Kūkohu inventory matrix tool that can be used for future research in the area of CBE.

Assumptions

There were several conceptual assumptions implicit in the study:

- Hawaiian-medium/immersion school teachers, administrators, and staff have important opinions about their school models that should be acknowledged and used to develop instruments that inform practices and school development.
- Hawaiian-medium/immersion schools are CBE settings.
- Hawaiian-medium/immersion schools are located in the same kinds of organized school facilities as other mainstream and Hawaiian-focused schools. These include conventional school settings (as in schools-within-schools) like other mainstream programs: in small communities, rural and urban areas, in public charter schools, and stand-alone schools, covering the major breadth of schooling settings.
- Hawaiian-medium/immersion schools have high enrollment of Native Hawaiian students.
- The research design and methodology were appropriate for the intent of the study.
- The research provided enough data to infer findings.
- All participants chose voluntarily to participate and responded honestly to the Kūkohu Inventory Matrix and in any other data provided (i.e., discussions at focus group meetings).

- Participants' opinions and responses may be influenced by factors outside of the scope of the study.

Summary

This research study contributes to framing the identity characteristics found in Hawaiian CBE environments that may assist these types of schools in identifying the strengths and gaps in their own schooling models. The study utilized a combination of Indigenous and Western research methods in a grounded research agenda. This study contributes to the current body of knowledge on CBE and to the community itself through a useful school tool that was developed through a collective process that included the stakeholders in design of the methodology. Collaborating through the process with those most vested in the outcomes at the “front lines” allows the researcher and schools to build upon the strengths that each bring to the research, and ultimately the education of our keiki.

Chapter 4

Findings

Pupuhi kukui—malino ke kai. ²⁰

Spewed kukui nut—calm sea.

—Pukui

I have an uncle who is a passionate fisherman. It is one of his special gifts. He knows a lot about fishing, and this knowledge he has passed on to his children and grandchildren. One day, I went out with him on his boat to the ‘Alenuihāhā channel between Maui and Hawai‘i Island to catch ‘ahi, a kind of Hawaiian tuna fish you can eat cooked or raw. Delicious! Since I get seasick, I don’t often go out on the ocean with him unless it is relatively calm. On this particular day, he pulled out a long wooden box, maybe three feet long and eight inches around. Nothing fancy, just four pieces of unpainted wood nailed together as a square. At the end of the box was a piece of glass. He called it his looking box. He placed the box into the ocean, inserting the glass end first much like you would a diving mask to see below the surface of the ocean.

²⁰ “To calm the water, fishermen chewed kukui nuts and spewed them” creating a glass effect on the surface of the ocean. Fisherman used this technique to see below the surface of the ocean. The wisdom is a metaphor for the analysis and presentation of the data and findings of the study. Traditional Hawaiian wisdom, # 2755, p. 302. Pukui, M. K. (1993). *‘Ōlelo No ‘eau: Hawaiian proverbs & poetical sayings*. Honolulu, HI: Bishop Museum Press.

Such was a similar Hawaiian practice among fisherman. But instead of a box, they would chew kukui nuts, which extracted the oil. This essence of the nut they would spew out onto the ocean surface. This would create a glass like appearance on the top of the ocean. In this way, they could look into the ocean from the canoe and see what kind of fish and other sea life were in the water. And so it is with Chapter 4 that the findings from the research study are revealed—just like looking through the glassy surface of the ocean to see the life below.

The research design employs a mixed-methods approach, building upon a macro-to micro-review of the literature and including Indigenous heuristics that initiated the creative process for the development of a Hawaiian Culture-based inventory tool called Kūkohu. An expert advisory committee from across the Hawaiian culture-based spectrum provided input on the Kūkohu inventory draft through a community participatory process. Lastly, three volunteer kula kaiapuni Hawaiian-medium/immersion schools piloted the tool and answered critical questions relevant to the identity characteristics and appropriateness of the Kūkohu matrix through a focus group process. The piloting of the Kūkohu instrument and focus group discussions provided qualitative and quantitative data to answer the research question. The Kūkohu Inventory Tool is intended for Hawaiian language and culture-based (HLCB) settings across the schooling continuum, from the conventional to Native empowerment school models.

Research Question

What are the cultural identity features found within Native Hawaiian learning environments, and in what ways do they support or thwart successful outcomes?

Focus Group Data

The focus groups included a small sample size of three Hawaiian-medium/immersion schools. There were 26 participants (n=26), 24 teachers and 2 principals.

Focus Group School Sites.

Site 1. A DOE conventional campus, grades P- 5. The principal for this site does not speak Hawaiian and is the sole administrator for both the English and Hawaiian immersion sectors. 78% of teachers and 100% of the administration participated (n=8) in the focus group. The total student enrollment is 304 students. 174 Hawaiian immersion students make up 57% of the total school student count.

Site 2. A self-contained Hawaiian-medium campus of which grades K-8 are public chartered and grades 9-12 are DOE. The principal is a fluent speaker of Hawaiian. 66% of teachers and 100% of administration participated (n=11). Student enrollment is 239.

Site 3. The school campus is located at multiple locations in two separate self-contained campuses, one accommodating Grades K-6 and the other Grades 7-10. The elementary is a full Hawaiian immersion site and the middle through high school is partial immersion. One principal administers both sites and is a fluent speaker of

Hawaiian. 37% of teachers and 0% of administration participated (n=7). Student enrollment totals 280

The Figures 3-6 below show the aggregated demographics for all the participants in the focus group meetings. The participants span over two generations, with 21% of the teachers having been in the early graduating classes of Hawaiian immersion schools.

Participants were asked to self-select their first language.

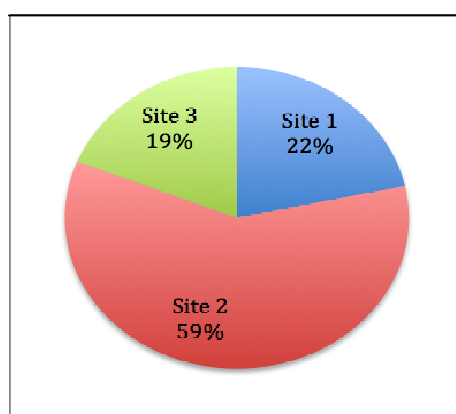


Figure 3. Participation by school

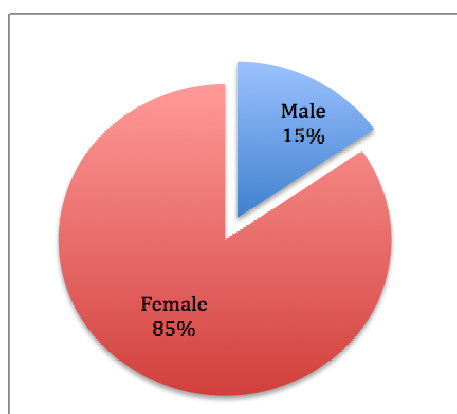


Figure 4. Gender of participants

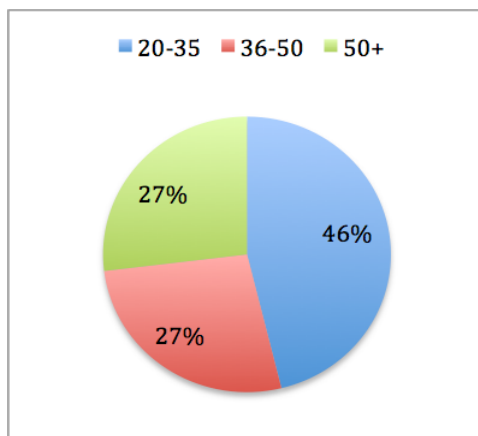


Figure 5. Age of participants

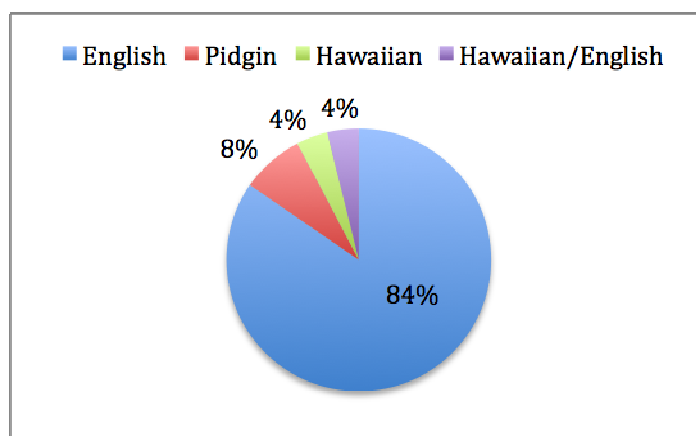


Figure 6. Participant's first language

Interestingly, other demographics were requested from the participants on language and Hawaiian ethnicity to provide a fuller picture on the background of the participants. In CBE schools, Native enrollment is usually high. As shown in Figure 7, Site 1 reported the lowest student percentage of Ethnic Native Hawaiians at 70%. These statistics represent the aggregated figures for both the Hawaiian immersion and regular English setting combined. The principal commented that the disaggregated data would

show much higher figures of Hawaiian language speakers but the exact numbers were unavailable.

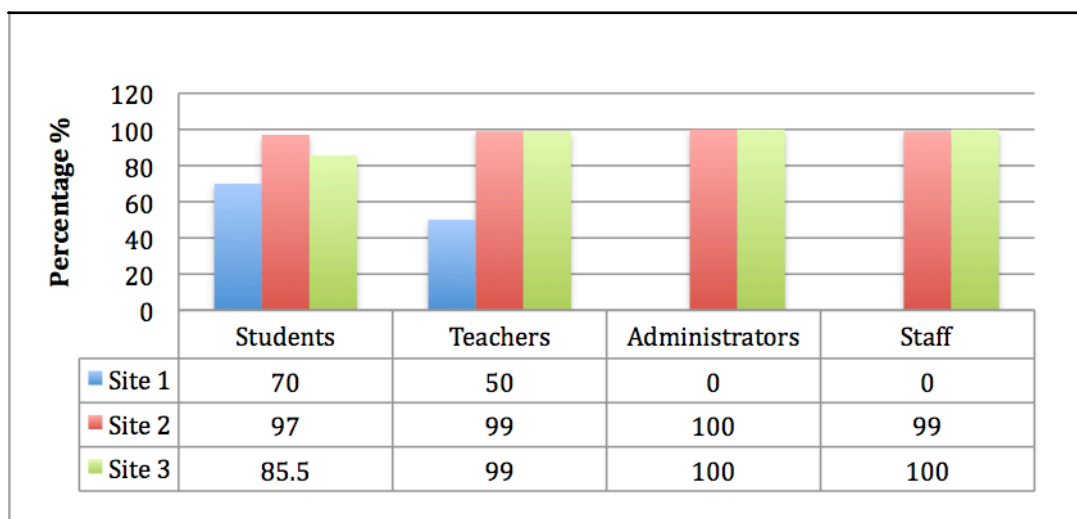


Figure 7. Native Hawaiian population

Figure 8 indicates that there is a direct relationship between Hawaiian language fluency levels and the school model. The Hawaiian language fluency statistics illustrated in Figures 8 through 10 were derived from information provided by individuals and the schools; these levels of fluency were self-determined and based on individual's and/or the school's representatives own ideas of language fluency. For example, Site 2 reported a 77% language fluency rate among their students. The drop in percentages in comparison to the other two schools is due to the preference by the school not to include student language data for students in grades K-1 in the total count of reported scores. It is noteworthy that there are students in both those grades that are new to immersion and there are students who's home language is Hawaiian and/or are graduates from the Pūnana Leo immersion school. These factors suggest that the overall fluency rate could be higher than what is indicated in the figure.

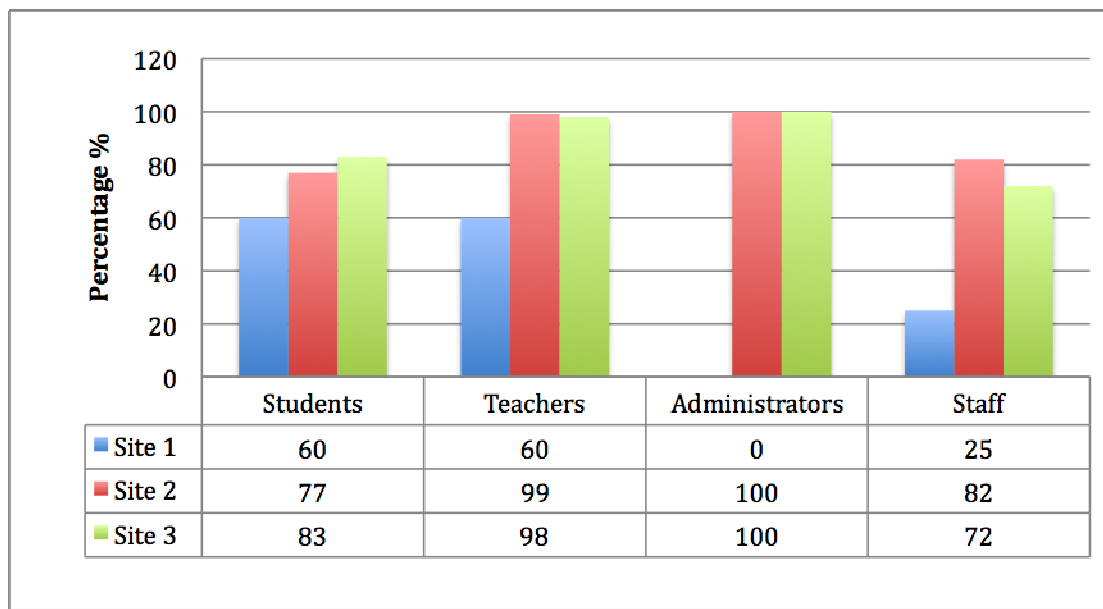


Figure 8. School reported Hawaiian language fluency

Figure 9 is also very interesting. Based on a 10-point scale, schools ranked the use of Hawaiian during instruction and non-instruction time. The “Dif” column shows the point difference between the amount of Hawaiian language used during instructional and non-instructional time. All sites agree that during non-instructional time, the use of Hawaiian drops. Site 1, which is located on a conventional school site reported a 2.6 difference among the teachers and a 4.1 difference among students. All three sites indicated less use of Hawaiian during non-instructional time by at least 2 points.

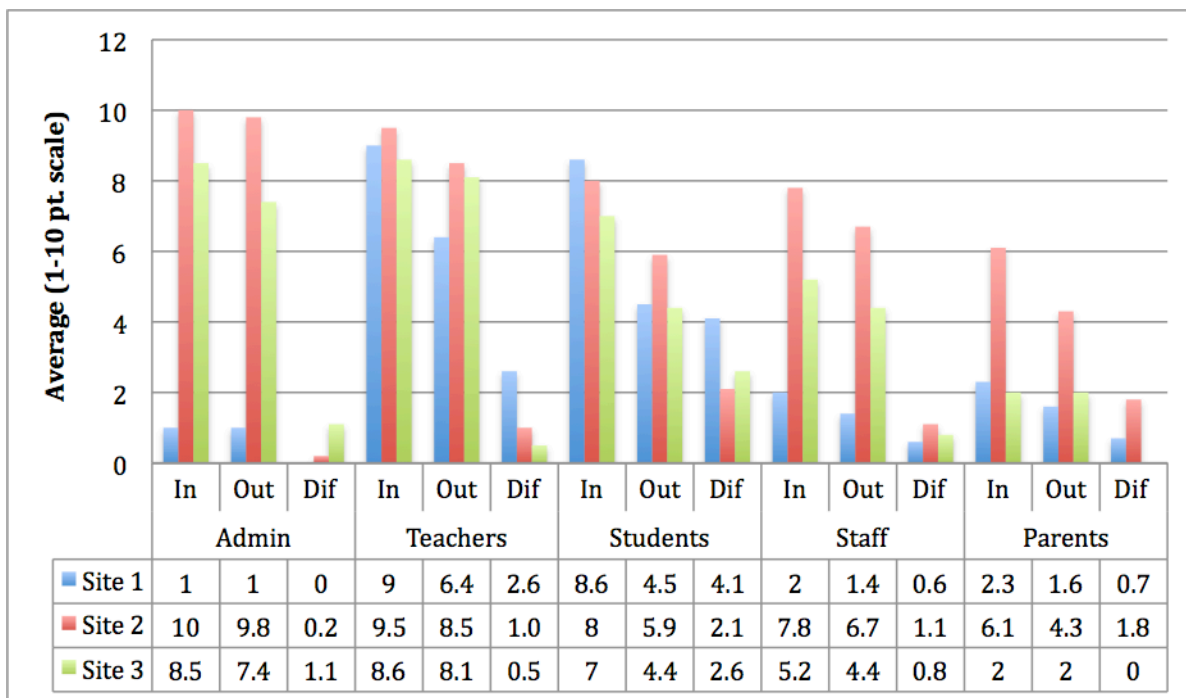


Figure 9. Hawaiian language use during instructional and non-instructional time

The final Hawaiian language graph (Figure 10) depicts self-rated scores of Hawaiian language fluency based on a 10-point scale. Teachers self-evaluated their own Hawaiian language proficiency levels (which are subjective). The results suggest that there are different ideas about Hawaiian language proficiency and what good Hawaiian language levels are.

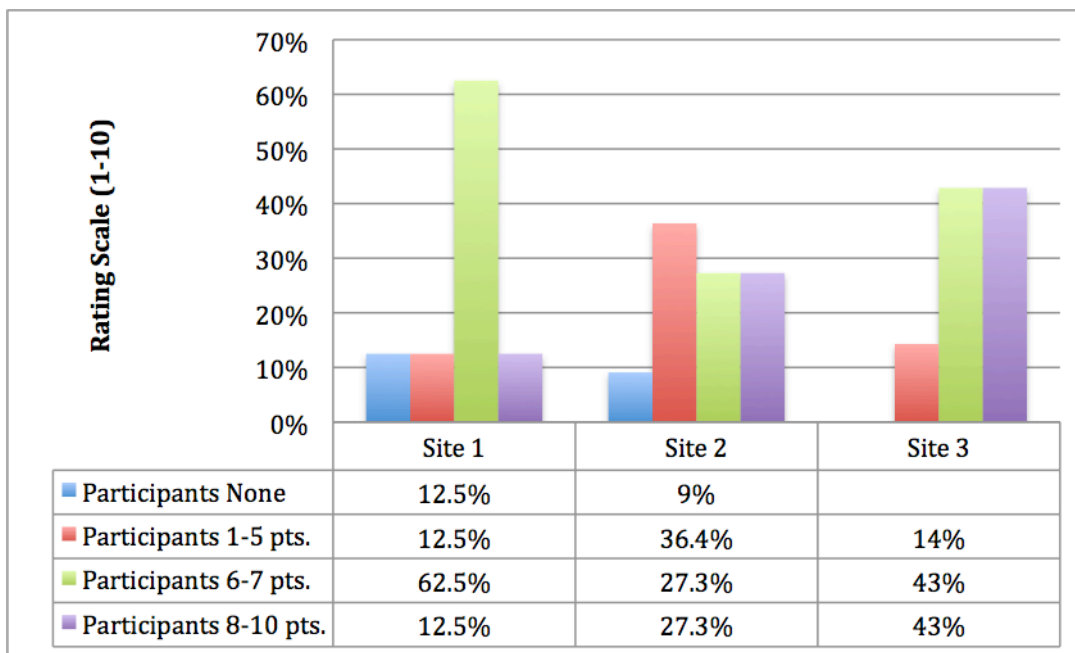


Figure 10. Hawaiian Language fluency (self-rating)

Let's turn now to the data on the school identity characteristics—cultural, curricular, relationship, and linguistic. The Kūkohu Inventory Tool was piloted at the three sites as part of the process for familiarizing them with the inventory tool. After the tool was piloted, the group discussed the tool in detail. These discussions addressed its value and use for school purposes and will be discussed in the Chapter 5.

Figures 11 and figure 12 provide school perceptions about the curricular identity of the school and its alignment with employed curriculum, strategies, and practices. A comparison of the two figures suggests that there is a connection between the curricular identity of the school and the materials and practices being employed by the teachers that is supported in the literature on CBE.

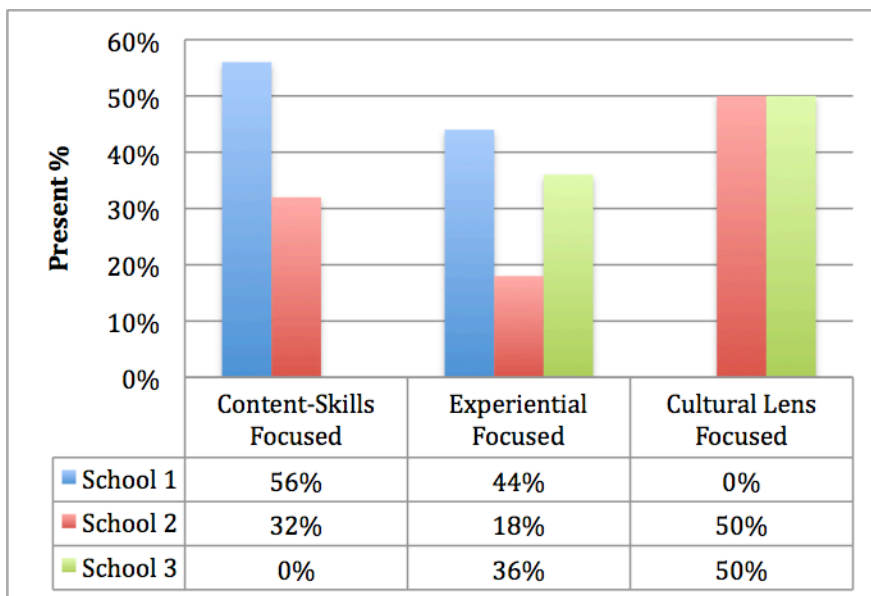


Figure 11. Curricular identity summary

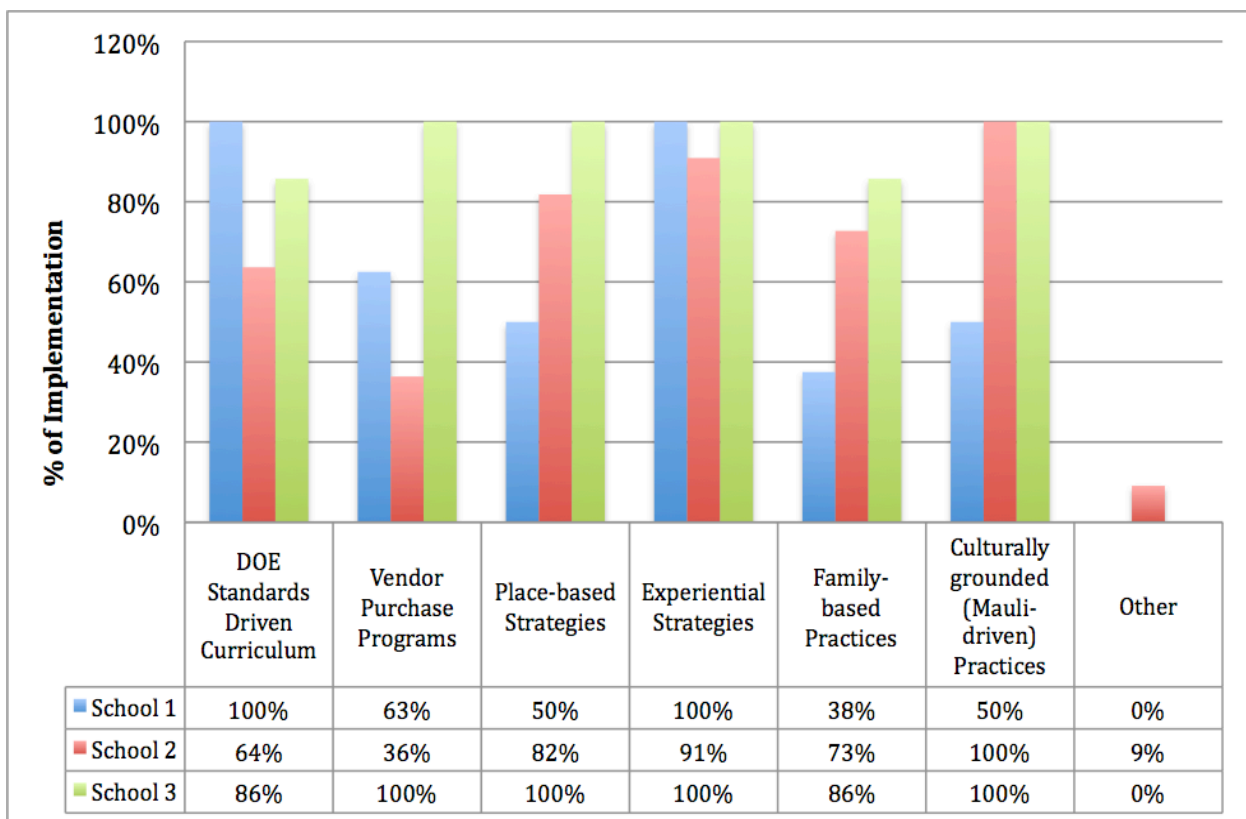


Figure 12. School curriculum, strategies, and practices employed

Figure 13 shows the identity characteristics of each site and where they sit along the continuum of the conventional through Native Empowerment models in terms of the four identifying characteristics—cultural, curricular, relationship, linguistic. Figure 14 illustrates the current identity of each site compared to their identity aspirations for the future.

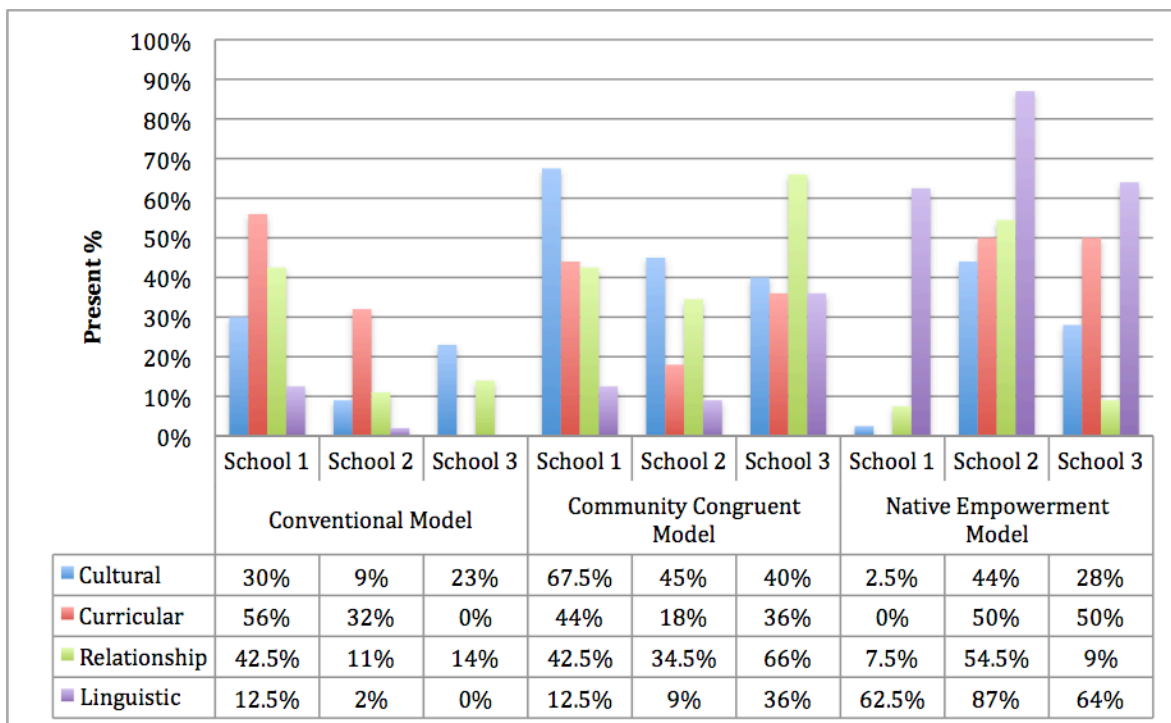


Figure 13. Comparison between school models

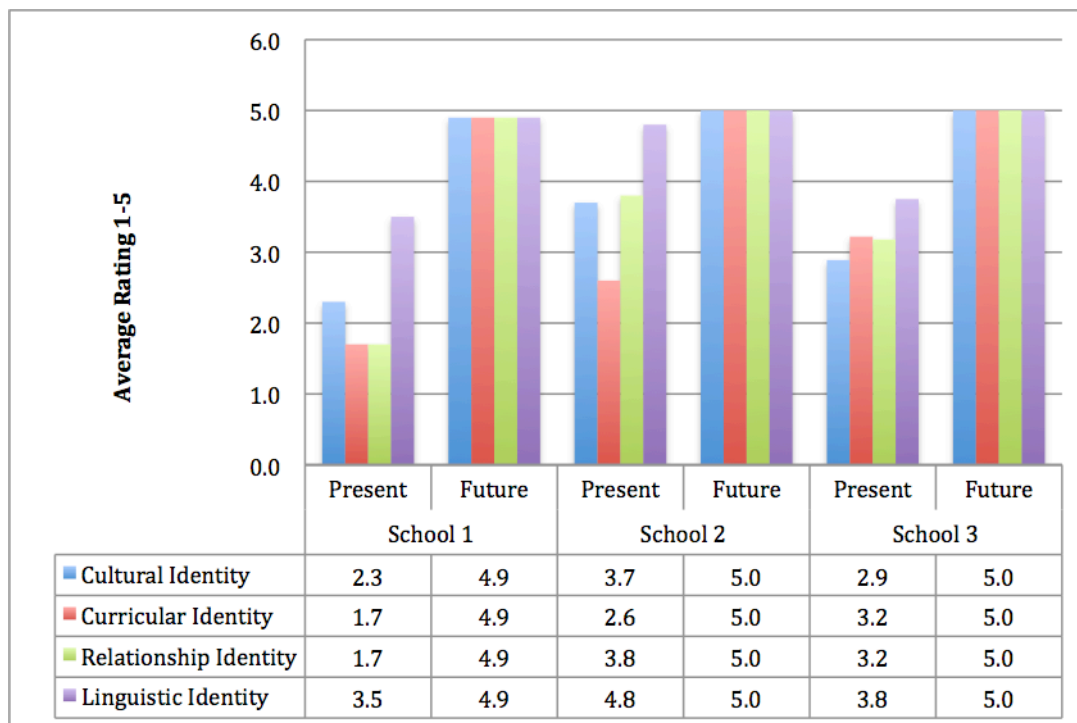


Figure 14. School identity: Present and future

Focus Group Discussions. The participating Hawaiian-medium/immersion schools in the study discussed at varying lengths the strengths, challenges, needs, and opportunities available within the dynamics of each unique schooling environment. After the opening wehena of the meeting, each group piloted the Kūkōhu matrix. There was ample time to discuss the inventory tool but not enough time within the 90 minutes to go through all of the probing questions in organized detail.

Table 2 provides an overview of the essential thoughts shared by the schools concerning how support is or is not experienced for each of the identity characteristics. In general, the schools were able to identify more ways than not in which the school works together to provide a culturally supportive environment. They also provided specific kinds of activities and best practices for supporting culturally strong environments on campus and between the home and school.

The most daunting of concerns for the schools are highlighted in the issues identified as thwarting successful outcomes. These were much bigger and more complicated issues that require the school focusing on such things as the alignment between the school vision and model, teacher development, curriculum, methodology, and language.

The focus group process revealed insightful results that can serve as a means for assisting schools in strengthening the areas of concern identified by the school as a collective group. After careful analysis and synthesis of the data presented through stories, thoughts, and experiences shared in each of the focus groups, four enduring themes surfaced as follows: ‘o ka ‘ōlelo Hawai‘i, he ola, he nohona a he lawelawe ‘oihana—Hawaiian language is a construct for life, living, and professional service; ko‘iko‘i ka pilina, ka nu‘ukia,, a me ka lōkahi ma ka ho‘oulu ‘ana i ka papahana ho‘ona‘auao Hawai‘i—attention to relationships, adherence to vision, and unified action are essential in cultivating resilient culturally grounded models; he ao hi‘ialo, he ao hi‘ikua ke kuana‘ike maui ola—being culturally secure in one’s own worldview is foundational for successful navigation of life; and he ‘imi loa ke kuleana ho‘ona‘auao — educational improvement is an on-going civic responsibility. Clearly the responses in their totality answer the research question with details of the school practices that support or thwart outcomes at their schools.

Table 2. Focus group discussion chart

Characteristic	Support	Thwart
Cultural	Integration of cultural standards & assessment (i.e. NHMO, Puakō)	Only core and HCPS standards used. No cultural standards encouraged.
	Ritualize the environment (i.e. piko, opening/closing school day)	
	Establish set activities and events (i.e. puka kula, makahiki)	
	Use Hawaiian perspective to integrate curriculum, language, and culture.	
	Employ traditional methods and other culturally relevant methods of instruction (mo'oki'ina, Moenahā, He Aupuni Palapala)	
	Apply Hawaiian concepts, values, and worldview (i.e. mo'okū'auhau, ola kino, ho'okuleana)	
	Maximize a Hawaiian cultural environment	
Curricular	Integrate hands-on, place-based, outside classroom contexts to integrate and scaffold curriculum (i.e. science in the māla)	American holidays celebrated. Hawaiian holidays should be celebrated too. A missed opportunity.
	Active engagement in healthy living practices (i.e. teaching through not about)	Lack of appropriate CBE and Hawaiian language materials and resources
	Teachers teaching teachers and sharing what they know about	More professional development for Hawaiian

	culturally relevant and responsible instruction	language/CBE methods and curriculum
Relationship	Maintain support and communication between families and teachers (i.e. set family events, teacher meetings between grade levels and schools sections)	No vision that is clear, shared, relevant. (School vision not aligned or clear)
	Guidance through a cultural philosophy and framework (i.e. Kumu Honua Maui Ola)	
	Operationalize Family-based environment	Culturally equitable leadership (Equal means same for you but more work for me)
	Prepare for rigor of living in dual worlds	
Linguistic	Rich language environments	Hawaiian in class; English outside of the class
	Life in language; language in life. Language expresses who we are, a lifestyle.	Broader school environment does not support language development/maintenance

Summary

Chapter 4 provided the important details of the data gathered in this research study. There were many rich layers of learning and growth that went into the multi-layered processes involved in this project. The array of opportunities encouraged the thinking about new ideas and also confirmed many personal lived experiences that told stories of the many ways culture, curriculum, relationships, and language can be both rich and missed opportunities to cultivated learning and living. Chapter 5 will share some of those important stories as part of the supplemental diagnostics and collaborative data collected.

Chapter 5

Summary and Discussion

*Ka malu hālau loa o ke kukui.*²¹

The long shelter of the kukui trees.

—Pukui

Trees provide a place of shelter to rest and reflect. Within the reflection process, the inner light of the kukui can be revealed and enlightenment attained. It is a continuous process of ‘imi loa, a long searching that does not end but continues as a lifelong process of living, learning, knowing, and becoming. The hālau loa is a traditional formal place where learning and training occurred. It is also the shelter, the “shade of trees,” that surrounds the learner with the brilliance of knowledge and potential that embraces the learner.

Chapter 5 is the hā‘ina ka puana, the final refrain of the song. Summary and discussion for this chapter will focus on the research question, the Kūkōhu Inventory matrix as well as provide recommendations for next steps. Overarching throughout this discussion will be the four enduring themes that were captured through the synthesis of the lessons learned from the research study.

²¹ “A kukui grove shelters like a house.” The term hālau or hālau loa is also used to describe a traditional school where learning took place. In addition, the term kukui figuratively means light used to enlighten. In the closing chapter, wisdom is used to play with the puns of the language to describe the learning and wisdoms gleaned from the study. Traditional Hawaiian wisdom, # 1474, pp. 159-160. Pukui, M. K. (1993). *‘Ōlelo No‘eau: Hawaiian proverbs & poetical sayings*. Honolulu, HI: Bishop Museum Press.

Research Question

What are the cultural identity features found within Native Hawaiian learning environments, and in what ways do they support or thwart successful outcomes?

Summarizing the Journey

There were three phases of research that took place through the process of developing and piloting the inventory tool. The first began as an internal process to ground the “identity” of the tool as a Hawaiian educational tool through the Kumu Honua Maui Ola philosophy. That was followed by an intense literature search to examine the existing knowledge on Indigenous learning environments. Three well-being models and three culture-based models were used in conjunction with the guiding pillars of the Kumu Honua Maui Ola philosophy to shape the identity characteristics—cultural, curricular, relationship and linguistic—of the inventory tool, which was designed to capture the landscape and soundscape of the cultural learning environment.

The second phase acknowledged the importance of a community participatory process so as to bring into the fold of the research process invested stakeholders representing a broad spectrum of Hawaiian education. Ideally, I would have preferred to meet collectively as one large group in three-hour sessions in one or two meetings. Unfortunately, that was not an option due to the time constraints and availability of the participants. However, there were rich and deep discussions about Hawaiian philosophy and its role, place, and the way it serves to guide Hawaiian culture-based education in the landscape and soundscape of the schooling experience. Those ideals further informed

and shaped the inventory tool that was used in the final process with the front line educators at three Hawaiian-medium/immersion schools during the focus group process.

Each school has its own unique history and special characteristics that contributed to the understanding of the richness and multitude of layers of HLCB learning environments. In phase three the researcher and co-researcher went together to each of the participating school sites. As a long time Hawaiian immersion educator, the co-researcher was familiar with most of the teachers and schools and also a fluent Hawaiian speaker. The co-researcher facilitated all the meetings and the researcher served as an observer and note taker in order to fully grasp the many the ideas, tensions, values, and beliefs discussed at the meetings. Each meeting began with the administering of the Kūkohu inventory, which was followed by focus group discussion probes. The meetings were conducted solely through Hawaiian at Sites 2 and 3. At Site 1, the meeting was conducted in both Hawaiian and English to accommodate the principal who is not a speaker of Hawaiian.

Over the past several years, culturally relevant learning as a valuable solution for improving student success has received increasing attention within both the national and international arena and the movement promoting such learning environments has gained significant momentum. In Indigenous understanding, student success is not gauged on academic success alone; student success is a totality of all the dimensions that ho‘oulu kanaka, or cultivate enlightenment for the Native child by increasing cultural identity and competency, socio-cultural maturity, Hawaiian language vitality, and positive academic outcomes. The learner is not viewed as a single isolated individual but a member of a larger community and, therefore, success of the individual is seen as success of the family

and community and vice versa. It is a quite complicated and yet simple way of being and interacting with the world.

Kūkohu – Data Shows

The piloting of the Kūkohu matrix provided some critical quantitative data that also supported the qualitative data acquired from the focus group discussions. The sampling size included only three schools and it is impossible to determine in what ways the data might alter if the sample size were larger. Thus, in the context of this research, the data yielded several interesting results:

- Hawaiian-medium/immersion schools do have high percentages of Native Hawaiian students, with Native Hawaiians making up 70-97% of the student population in the schools that participated in the study.
- The stronger the language model, the higher Native Hawaiian student enrollment; thus, the 70%-97% student enrollment range.
- There are a range of differences in opinion concerning what constitutes Hawaiian language fluency, including the range between the levels of fluency in the school environment and in personal skill. For example Sites 2 and 3 ranked the teachers at a 98-99% fluency level overall in the school environment; however, in terms of personal skill, language fluency of teachers ranged at the low end of the spectrum between 14%-36.4%, and at the mid- to high end of the spectrum at 27.3%-43%.
- In all schools, Hawaiian language usage decreased when students and teachers are in non-instructional settings. The difference between the use of Hawaiian

during instructional and non-instructional time is greater in Hawaiian immersion schools than in those that share English setting facilities. On a scale of 1-10, the range of difference in out-of-school usage varies from .5-2.6 for teachers and 2.1-4.1 for students.

- Hawaiian-medium/immersion schools employ a range of curriculum strategies and practices. The use of CBE strategies are higher in schools that have a strong cultural-base implicit in the philosophy of the school, 44% representing a low range of use compared to 68% and 86% in the schools where Hawaiian culture is strongly reflected in the philosophy of the school.
- Hawaiian-medium/immersion schools aspire to be Native empowerment models. There is a relationship between the clarity of the school vision and the alignment of the identity characteristics found in the school model to the school vision. For example, based on a 5 point ranking scale with 1 representing a conventional model, 3 a community congruent model, and 5 a Native empowerment model, site 1 scored at 1.7 to 3.5 in ranking the identity characteristics of the present school environment and 4.9 for characteristics in future aspirations.

Kūkohu – Hawaiian Culture-based Inventory Tool

The Kūkohu Inventory Tool was well-received. The participants were engaged in the discussion as was evidenced by their questioning, responding, and interacting with sincere intentions to enter into the process and have a voice in the development of a Hawaiian culture-based inventory tool. Showing up and being present is the first step in

creating a collaborative environment. Allowing a safe space and being comfortable in the space to discuss openly was an important part of the process, and a good facilitator makes all the difference in the world. Laughter is a healthy sign of that kind of interaction.

The suggestions for improvement of the Kūkohu matrix were centered mainly on wording clarity and design layout. The participants were given the tool on a smaller size paper that made it challenging for some to read, let alone grasp the ideas quickly. One of the first “next steps” is to find a professional who can improve the layout and design of the tool. First impressions and presentation of the tool make a difference.

I have made all the final revisions as recommended during the focus groups meetings and the final version appears in Appendix J. It would have been more convenient to have it available in this section, but the print size would have made it difficult to read. The four major changes made to the Kūkohu inventory are described below. A suggestion that language similar to the language that was used in the registration form that each participant filled out for collecting demographic information be added was also addressed.

Identity Descriptor Changes.

1. Cultural Identity – Native Empowerment Model: 1. Assumes NH students have dominant NH ethnic identity.
2. Linguistic Identity – Native Empowerment Model: 2. Students may study multiple foreign/other languages either as a requirement or elective for enrichment.

Discussion over simplifying the descriptor on Native Hawaiian ancestry verses Native Hawaiian ethnic identity required merely shortening and simplifying the sentence.

Reducing the wordiness of the sentence to a short description is much cleaner and easier to understand.

Linguistic identity for the Native Empowerment Model involved a more robust discussion at Site 2. The role of Hawai‘i Creole English, “Pidgin English,” although recognized as a home language for many of the children, is not considered a language being developed through instruction at the Native Empowerment level. It was felt that Pidgin English is a “local” identity definer that best fits in the English Language Medium and Mixed Language categories. It was recommended that the Native Empowerment model focus on fluency in the Hawaiian language, English, and other foreign languages so as to meet requirements for graduation and encourage multilingual competencies of the children.

Heading Descriptors Changes.

1. Mainstream/Institutional changed to Convention Model.
2. Hawaiian Language Medium changed to Hawaiian/Multi Language Medium

The heading descriptors simply clarify the identity group within the learning continuum. The word conventional was preferred over mainstream or institutional model because it seemed to be a much more neutral term. Mainstream triggered a discussion over colonized thinking, similar to how we use the word “Mainland” in Hawai‘i to describe the continental U.S. It also refers to the Western culture as the primary culture.

The last heading change on Hawaiian language Medium to Hawaiian/Multi Language Medium supports the intention for the description change in item 2 above. It is a small word change but represents a huge shift in focus on language and multilingualism.

Kūkohu as a Useful Tool. The schools were each asked to provide feedback to two questions relating to the Kūkohu inventory. The questions provided direct input on the ideas, language, and concepts described through the four identity characteristics of the inventory tool. The purpose and usefulness of assisting schools in facilitating their school improvement plan by using the results of the Kūkohu inventory was also discussed. The participants at each school site collectively agreed that the Kūkohu matrix can assist in guiding the members of the school community in culturally responsive and responsible focused discussions that could lead to further enhancement and improvement of the school model. Participants also expressed that they felt the tool could specifically help cultivate the areas of leadership, curriculum, culture, language, and professional development. I share the following thoughts from the participants themselves with an interpretative translation of the quotes to maintain the context and flow from the discussions.

Kūkohu Discussion Questions.

1. Do you agree that the four identities —cultural, linguistic, curricula, and relationship— describe the cultural landscape and soundscape of the Hawaiian learning environment? If not, how can the descriptions be improved?
2. Does the matrix allow you to accurately describe the status of your school? If not, what is missing?

Results from participants on the usefulness of the Kūkohu Inventory Tool.

1. Kūkohu can be used to assist teachers/schools to self-assess their classroom and curriculum instruction and instructional accountability:

Story 1: Participant 2.7

Hiki ke ho'ohana 'ia ma ke 'ano he loiloi kumu kekahi. Ma ka nana 'ana i kāu hana ma ka papa a 'ike he aha ka 'u e hana ana me ka 'u papaha 'awina a i hea ana wau me ka 'u papaha 'awina.

Kūkohu can be used for teachers to self-assess their work as well—in looking at your own classroom instruction and knowing just what to do and where to go with the curriculum.

2. Kūkohu can be used to assist the teachers/schools in collective visioning and action planning to build stronger continuity of the curriculum and school model:

Story 2: Participant 2.4

... Mana'o au he maika'i no ka ho'olōkahi 'ana i ka mana'o o nā kumu kekahi ma ka 'ike 'ana i ka pahuhopu...inā a'o au i ka 'u mau haumāna...a laila, pi'i aku a 'oko'a ka mana'o o kekahi kumu.

I think the tool could be used to unify the thinking of the teachers to see/understand the goals. There is a discontinuity if I teach my students and then they continue to another class and the teacher's thoughts about teaching are different.

3. Kūkohu can be used to encourage conversation between teachers/schools to think about the philosophical underpinnings and appropriate approaches and actions that can collectively strengthen the quality of the identity characteristics in the learning environment—cultural, curriculum, relationship (leadership), and linguistic:

Story 3: Participant 2.6

It's a beautiful thing and the reason it is, is because it provokes you to no'ono'o 'ana (deep thinking). When you start to do that, then you start to develop a mana'o, (a thought/idea) that's a kālai (formulate). And this whole idea of a philosophy becomes a kālaimana'o (philosophy – formulating thought).

4. Kūkohu can be used as a beginning place for schools to reflect and strengthen the cultural dimensions of their own school models on an individual or collective basis:

Story 4: Participant 2.10

'O kēia kōkua he kēia ia 'u... Puni au i ka 'ike i ka wehewehe. No laila, ma ke 'ano he pahuhopu he kōkua paha inā makemake kākou (ma ke 'ano he kula) e huki i kēlā "Native Empowerment model" a laila, e nānā a ho'onui a ho'opu'ipu'i a ho'ēmi e like me ko kākou mana'o. He kahua kēia ma ka ho'omaka i ka wala'au 'ana. Ia 'u, 'o ia kona waiwai.

This [Kūkohu inventory] is helpful to me ... I'm fond of looking at the descriptions. Because, by looking at it as a goal set, this could be helpful if we "as a school" take the descriptions of the "Native empowerment model" and then, look over it, expand and fill in the ideas or maybe reduce however we want to. This is a place to begin our discussions. To me that's its value.

Enduring Themes

There were four major themes that surfaced throughout the entire research process and at all levels. As the facilitator/co-researcher and I reviewed the meetings' data, we had several healthy discussions and came to agreement as to the enduring themes and what we heard being expressed about those themes. In my own voice I shall describe the themes, ideas, cautions, and recommendations.

Enduring Thought One. 'O ka 'Ōlelo Hawai'i, he Ola, he Nohona a he Lawelawe 'Oihana - Hawaiian language is a construct for life, living, and professional service. The most passionate discussions centered at every level around the Hawaiian language. It is widely known and believed that through language our worldview is maintained and expressed. The Hawaiian language is fragile, and there is a high likelihood that fewer than 100 Native speaking elders remain, despite that we are at the beginning of the third generation of Hawaiian revitalization efforts. The schools have grown quickly and are severely under-funded and under-resourced. In many cases, the schools are placed in regular English conventional settings that are problematic, which leaves schools in precarious and challenging situations—trying to survive and find a good fit that is equitable for Hawaiian immersion needs. From these places, Hawaiian-medium/language schools have evolved in multiple shapes and forms. A growing number of the schools have become start-up or conversion charter schools, taking on the leadership and accountability for providing a better quality of education for its students. This is social justice in action.

One participant reminded the group that, “feeling a loss is not necessarily being lost.”²² Hawaiian language vitality is a way of life and a lifestyle for many of its teachers and families. *He hale, he kanaka; he kanaka, he hale* (a house, a person; a person, a house). Commitment to speaking the language represents a paradigm shift that moves one’s being—language, culture, and lifestyle choices—to Hawaiian. More and more young people are raising their families and living their lives through the Hawaiian language. As a people, they are remembering that Hawaiian language was once the medium of education, business, and commerce in Hawai‘i for all ethnic groups. Wilson (2008) challenges us to revernacularize our efforts to educate and live through our Native languages. That effort requires strong commitment to, sacrifice and aloha for, as well as affiliation with the language, culture, and people (Kawai‘ae‘a, 2008; Kawai‘ae‘a, Alencastre, & Housman, 2007).

Strong Hawaiian-medium/immersion schools provide the supportive environments that assist families who have made this choice, which has resulted in growth of an extended family and language community (Demmert & Grissmer, 2005; Wilson & Kamanā, 2001). Schools serve families; families serve schools. There are high enrollment numbers of Native Hawaiian children at all immersion schools (Native Hawaiian Education Council, 2011). Hawaiian-medium/immersion schools also have non-Hawaiian children enrolled and these students also benefit from the learning environment.

Enduring Thought Two. Ko‘iko‘i ka Pilina, ka Nu‘ukia a me ka Lōkahi ma ka Ho‘oulu ‘ana i ka Papahana Ho‘ona‘auao Hawai‘i - Attention to relationships,

²² Quoted from participant 2.6.

adherence to vision, and unified action are essential in cultivating resilient and culturally grounded models.

Story 5: Participant 2.11

...ka mea kūikawā o kēia kula 'o ia ho'i, alu like ka po'e. Maopopo ka pahuhopu a e 'imi ana i kēlā pahuhopu i loko o ka hemahama, ka piholo i kekahi manawa, 'imi mau i ka pahuhopu.

The thing that is special about this school is the ability of the people to pull together.

The goals are clear and everyone puts effort into attaining the goal even if its awkward or sometimes we fail, we keep seeking to achieve the goal.

Story 6: Participant 2.3

Loa'a ka nu'ukia...a loa'a ke kālaimana'o ma luna o ke KHMO. Kēlā mau kuana'ike, 'ike ka po'e. 'Imi mau i kēlā. 'A'ole loa'a piha i kēlā me kēia kanaka ma nā minuke a pau o ka lā, akā, 'o ia ke 'ano o ke kālaimana'o. Ho'omana'o i ke kuana'ike ma ka hana 'ana i kēia 'ano kula, nā mana'o nui. A laila, ho'onohonoho 'ia nā hana i loko o ke KHMO.

There is a vision statement and a philosophy that is built upon the Kumu Honua Maui Ola. Everyone knows those perspectives and constantly search in that way. Not everyone has grasped it completely in every minute of the day, but that is the nature of the philosophy that drives us. That lens is remembered in the work done in this kind of school. Therefore, all the work is organized within the Kumu Honua Maui Ola philosophy.

Most of the schools operate from a deep philosophical framework, so the Kūkōhu matrix was an exciting opportunity for schools to talk about their school. All of the participants engaged in discussion about their school's philosophies, visions, and goals and, more importantly, how the school operationalized itself and the role teachers, administrators, family, and community play as collaborative partners in order to culturally synchronize and cultivate healthy, responsive, and responsible Hawaiian learning environments. More of this kind of healthy discussion should happen at schools for it helps to collectively deal with the unsaid tensions that often occur in schools as a result of conflict, inconsistencies, and mixed messages and agendas about the operationalization of the school model as a unit.

Each school talked about their own school's philosophy and had different degrees of competency in terms of understanding what that meant and how it applies to their daily work in the education and caring for the well-being of children. Kawai'ae'a, Alencastre, and Housman (2007) discuss the role vision has played in the development of Hawaiian-medium/immersion education over one generation and summarizes the role vision has played in building relationships, strengthening commitment, and rallying unified action to reclaiming one's Native language—in creating and implementing optimum learning environments for families and in educating children and families through reestablishing an education system grounded in language on a Hawaiian foundation.

As an aside, administrators, teachers, and teaching staff (still considered kumu or teachers at the schools) participated in the focus groups as one unit. As an observer, watching the dynamics between teachers and administrators, I also sensed some nuances that indicated possible power struggles that are naturally present in social environments

like schools. One factor that enables the neutralizing of that kind of tension is having a clear and well-supported vision for the school that everyone can rally around to support with the strengths and talents they have to contribute.

Enduring Thought Three. He Ao Hi‘ialo, He Ao Hi‘ikua ke Kuana‘ike

Mauli Ola - Being culturally secure in one’s own worldview is foundational for successful navigation of life.

Story 7: Participant 3.2

*No ‘u, inā moemoeā au i kekahi mea maika ‘i loa, ‘o ia ka ho‘ohui ‘ana i nā mea
‘ekolu... ‘o ia ka mea ‘oi loa aku.*

For me, if I envision something excellent that would be something that brings all three things together into one...that would be the greatest of them all.

It is hard to recognize or even admit the level of impact colonization has on our thinking and behaviors, but Native people are often faced with “reality checks” as they live in the world. Being “Hawaiian to the core” means that one can interact within the multiplicity of worlds confronted everyday and greet them with confidence and aloha. For some, it is a huge internal tension that pulls and tugs at the fiber of one’s core, making one think that a choice between cultures needs to be made. One of the driving motivations of Hawaiian education is that when one is grounded in who one is, knows where one comes from, and feels that sense of belonging and affiliation (not as an academic exercise but an internal knowing), then one walks proudly in that knowing and in being Hawaiian.

Henze (1993) acknowledges, “we see an inherent conflict in asking students to embrace two worlds whose value systems may be contradictory” (p. 130). Experiencing dual worlds through a brown lens situates the presence of that person through that worldview. A strong Hawaiian cultural identity also means a strong Hawaiian maui—life force. Bendtro, Brokenleg, and Bockern (2002), who designed one of the well-being models that was used in developing the Kūkohu inventory, talk about the importance of cultural identity in their work with at-risk Native American youth. And Harcharek (2011) presented testimony in Washing D.C. on Inupiat CBE wherein she spoke about the importance of being grounded first in the Native worldview:

Five years ago the North Slope Borough School District finally decided that it was time to go to the people. It was time to forego the abysmal philosophical underpinnings of the district to impose a system created in white urban America for white urban children on Inupiaq children because it was failing.

It was time to begin building the bridge of trust between school and community. So the district went to the people and the people spoke. The people said loudly and clearly that they want their children's schools to reflect who they are. They said their children no longer should have to leave their identities outside when they walk into their schools. They should know their history and who their leaders are. They should see Inupiaq art forms in their buildings. They should learn to think like Inupiat because they are Inupiat. (pp. 1-2)

In 2002, the Native Hawaiian Education Council, & Ka Haka ‘Ula O Ke‘elikōlani college published a document called *Nā Honua Maui Ola: Hawai‘i Guidelines for Culturally Healthy and Responsive Learning Environments*. The document was the first set of

Hawaiian cultural guidelines published to assist schools with the thinking processes and strategies necessary to build more conducive Hawaiian learning environments, and it was strongly endorsed by Hawaiian organizations. An upcoming edition focuses on nine cultural pathways as a conceptual framework for schools to strengthen healthy and responsive Hawaiian learning environments:

- ‘ike pilina relationship pathway
- ‘ike ‘ōlelo language pathway
- ‘ike ola pono wellness pathway
- ‘ike piko‘u personal connection pathway
- ‘ike ho‘okō applied achievement pathway
- ‘ike honua sense of place pathway
- ‘ike kuana‘ike worldview pathway

(Kawai‘ae‘a et al., in press)

Enduring Thought Four. He ‘Imi Loa ke Kuleana Ho‘ona‘auao - Educational improvement is an on-going civic responsibility. As one of the participants so nicely put it, “We are not providing the right kind of environment and need to ho‘oikaika (strengthen).”²³ Culture-based education (CBE) provides strategies for cultivating responsive and responsible culturally holistic environments. Understanding that there is a difference between learning about a culture and through the culture and that schools operationalize differently around this idea is important (Native Hawaiian Education Council & Ka Haka ‘Ula O Ke‘elikōlani, 2002). One treats culture as a content/subject to learn and the other as a process of experiencing the culture through authentic practices

²³ Quoted from participant 1.5.

and culturally appropriate behaviors. The research studies on Hawaiian Cultural Influences in Education (HCIE) and Culturally Responsive Schooling (CRS) provide evidence and support for CBE education. Both teaching about and teaching through the culture need to happen across the continuum as both part of the academic content and lived cultural experiences, practices, and behaviors in order to build cultural-socio maturity within the learning environment (Barnhardt, 2001, 2005; Barnhardt & Kawagley, 2005, 2010; Kawagley & Barnhardt 1999, 2003; Castagno & Brayboy, 2008; Demmert, 2008, 2010; Kana'iaupuni, Ledward, & Jensen, 2010; McCarty, 2009).

In order to support this effort, on-going teacher education is crucial. There is a need for professional development (PD) at all levels to learn language, culture, CBE foundations, and appropriate strategies and approaches. Understanding CBE foundations, the Hawaiian language and culture, and learning “how” to instruct through compatible strategies and approaches across the curriculum will improve teacher practices and, therefore, student outcomes. In this way, viewing traditional Hawaiian ways of knowing, learning, and pedagogy is essential for building teacher expertise and confidence that can assist teachers to assume a strong role in the preparation of students and the overall educational quality of schools. In all the models of education, even in Native empowerment settings, teachers want more on-going PD through teacher in-service and teacher education programs. In addition, there is a great need for more culturally appropriate curriculum and supplementary materials and resources. Teachers need more tools and more training (Kanu o ka 'Āina, 2009; Wilson & Kawai'ae'a, 2007).

Limitations

The following limitations of this study should be noted:

- The study was designed to investigate the characteristics of Hawaiian culture-based environments that exist in Hawaiian-medium/immersion schools.
- The research study was limited to a small sample size of three schools and conducted within the amount of time available for the study.
- Only one focus group meeting was conducted at each school on a date and time agreed to between the researcher and the school administration.

He Panina Aloha – The Closing Salute for Next Steps

The No Child Left Behind (NCLB) federal laws has, in fact, left many Native Hawaiian children behind, with a large percentage of those schools where Native Hawaiian children attend nearing restructuring status. Hawai‘i state data shows 79% of predominately Hawaiian conventional schools are in corrective action as compared to 51% of the total public schools in restructuring (Kana‘iaupuni & Ishibashi, 2003; Kana‘iaupuni & Pahio, 2006). Research in culture-based education (CBE) is attracting growing interest from Native Hawaiian families due to the success of Hawaiian language immersion and Hawaiian-focused charter schools that make up about 70% of the charter school total in the State of Hawai‘i. These schools report over 80% Native Hawaiian enrollment with 79% of the students being economically disadvantaged (Native Hawaiian Education Council, 2011).

HLCB schools, like Hawaiian-medium/immersion schools, aim to increase cultural identity and competency, socio-cultural maturity, Hawaiian language vitality, and

positive academic outcomes as a holistic vision for achieving the well-being of the Native Hawaiian child. Student success is not measured solely on academic success, which falls short in terms of the larger Indigenous goal to ho‘oulu kanaka, cultivate enlightenment and the well-being of the whole Native child. Research shows that CBE use in schools positively impacts the student’s socio-emotional well-being and “positively affects math and reading test scores” (Kana‘iaupuni, Ledward, & Jensen, p. 1). Takayama’s (2008) work on HLCB schools also supports CBE as “a promising means of raising student achievement for both Hawaiian and non-Hawaiian students” (p. 274). Research data shows that HLCB schools show positive academic achievement and growth consistently over time. The 2009 AYP data shows that 29% of the HLCB schools met their AYP, and in 2010, that number increased by 10%, with 39% of the schools meeting their AYP (Hawai‘i Department of Education, 2010).

Indigenous research values relationship as a valid process for building rigor and balance contexts in research. Schools and teachers are underutilized as research collaborators in the research process. By paying attention to the issues, challenges, strengths, and opportunities raised by those vested in the success of student outcomes from the frontlines, we can collectively work together towards improvement of the schooling experience through cultural, curriculum, relationship, and linguistic choices that deliver responsible strategies and possible professional development activities to improve school quality.

The Hawaiian-medium/immersion community has had 30 years of experience in developing Hawaiian CBE environments and embodies a wealth of untapped expertise and strengths in terms of how to serve Native Hawaiian children and non-Hawaiian

children alike. Others can benefit from the research on Native Hawaiian learning environments as represented in this study so as to create better alignment of culturally congruent solutions.

The research study on Native Hawaiian learning environments may further assist schools in identifying their strengths in ways that are culturally sound and supportive in promoting successful outcomes for students. The development of an inventory matrix focused on a “school for Hawaiians” to a “Hawaiian schooling” continuum as an invitation to identify the landscape and soundscape of schools/programs as a pathway for strengthening culturally congruent learning environments was at the center of the research agenda. Such a tool could be used by schools to self-evaluate their own practices, collaborate, and pair with other appropriate professional development activities as an on-going process to improve the schooling experience—which contributes to building healthy relationships, responsive and rigorous learning, and responsible outcomes for all.

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Appendix A: Focus Group Guide & Protocol Texts

Focus Group Guide

The following guidelines informed the text language used for conducting focus groups. The purpose of the study is to develop a greater understanding of culture-based learning environments and the perspectives, goals, visions, practices, and experiences of administrators, teachers, and staff of Native Hawaiian and Hawaiian-medium/immersion education students. These guidelines are not intended to be strictly followed, rather they merely represent suggestions for facilitating a discussion to inform project personnel as they develop a greater understanding of culture-based learning environments.

1. **For initial contact to head administrator** for each focus group, phone the head administrator of the schools selected to participate in this project to request their approval and assistance in coordinating the focus group meeting. Request their help with:
 - a. (a) selecting and securing a day, time, and location on the school campus for the focus group within two weeks of initial contact;
 - b. (b) disseminating the invitation and project information sheet to participants (administrators, teachers, staff);
 - c. (c) encouraging volunteer attendance and participation, including the following:
 - i. Email the head administrator with a letter of invitation and information sheet for school approval (Appendices B and D);
 - ii. Secure a response from the head administrator within 3 days of contact.
2. If the **response is yes**, provide participant invitations and the study information sheet for dissemination to administrators, teachers, and staff at the school in electronic or hard copy as indicated by the head administrator. Upon request from the principal, a short presentation about the study can be provided prior to the meeting. The presentation will cover the same information on the research information sheet (Appendices C and D).

If the **response is no**, email a thank you response.

3. **Three days prior** to the focus group meeting, contact the principal regarding: (a) confirmation of the time and location; (b) reminders that the researcher will provide refreshments, the meeting will be recorded, and Pūlama Collier will be the facilitator; (c) inquiries as to the social protocols of the school; and (d) inquiries as to the number of participants.
4. **Suggested items to take:** (a) digital recorder and extra set of batteries; (b) hard copies of this focus group guide; (c) hard copies of the consent and registration forms for school and participants (Appendices E-H); (d) laptop computers; (e) poster paper; and (f) several pens.
5. **Day of meeting.** Arrive at the focus group site one hour prior to the established time to allow for parking, introductions, locating room, and setup. Prior to the arrival of participants, test the recorder. You may want to place extra consent forms and pens near the door for participants who arrive late so you can continue the discussion as they enter into it (Appendices E-H).
6. **Register school and participants** before session commences (consent and registration forms). Participant may also choose a gift card as a token of appreciation for participation.
7. **The facilitator, Pūlama Collier,** will conduct the focus group conversation, take notes on poster paper, and monitor the time. The researcher will record the session, listen, and take notes. Expected duration of each session is 90 minutes.
8. **For each question,** attempt to get all participants to respond, whether to agree or disagree, to others' contributions. Suggested questions to accomplish this: Do others agree? How do others feel about that? Any other responses? Ideas? Thoughts?
9. **Other useful prompts for clarification and elaboration:** Can you tell me more? Can you provide an example? Go on. What was that like for you? That's interesting. I see.
10. **Late Arrivals:** If a participant arrives late to the focus group, direct their attention to the consent forms and indicate they are welcome to join the discussion.

Protocol Texts for Focus Group Guide

1. Initial contact to head administrator.

Aloha _____,

This is Keiki Kawai‘ae‘a. I am working on my dissertation study on culture-based learning environments called Kūkohu. The purpose of the study is to develop a greater understanding of culture-based learning environments and the perspectives, goals, visions, practices and experiences of administrators, teachers and staff of Native Hawaiian and Hawaiian-medium/immersion education students. As part of the study, I will be conducting focus group sessions at three different Hawaiian-medium/immersion schools. The information gleaned from the study will assist in providing valuable insights about culture-based Hawaiian-medium/immersion learning environments.

Participation is voluntary and open to administrators, teachers and staff at the school. There is no risk involved for the school or participants. If (name of school chooses to participate, I would like to conduct the focus group session at the school on a date, time and location of your choice sometime over the next two weeks. The focus group session will run for 90 minutes.

I have prepared a letter of invitation for the school and an information sheet describing the project. May I forward it to you following this phone call with a request for a response over the next three days? Thank you for your time and consideration in participating in the study.

2. **Follow-up with an email** to the head administrator that includes the letter of invitation to the principal (Appendix B) and Kūkohu project information sheet (Appendix D).

(Text for email)

Aloha _____,

Thank you for your interest in the Kūkohu study. I have attached the letter of invitation for the school and an information sheet about the study. Participation of the school and individuals is on a voluntary basis and there is no risk involved for the school or participants.

I look forward to your response within the next 3 days. Your consideration and assistance is greatly appreciated.

Me ka ‘oia‘i‘o, (sincerely),

3. **If response is yes.** Individual invitation (Appendix C) and Kūkohu project information sheet (Appendix D) will be forwarded with a short response based on the email from the administrator.

(Text for email)

Aloha,

Thank you for agreeing to include (name of school) as one of the focus group sites for (date, time and room location). I have attached the participant and information sheet for distribution at the school. If you have requested hard copies you should receive them in 1-2 days. Mahalo (thank you) for assisting with the distribution of the invitation and information sheet requesting participation of the administrators, teachers and staff of the school to the focus group session.

On the day of the session, I will come 1 hour early and bring with me the school and individual participant registration and permission forms. I will attend that day to set-up, record and take notes of the meeting. Pūlama Collier, a long time immersion teacher and Hawaiian language immersion state specialist will conduct the focus group meeting. I will also bring light snacks and drinks for the participants. At the end of the session, each participant will receive a \$20 gift card in appreciation for their time and participation in the study. Me ka mahalo nui,

If response is no.

(Text for email)

Aloha,

Thank you for your response and interest in the study. I appreciate your time in reviewing the materials and providing a timely response.

Me ka mahalo nui,

4. **3 days prior to meeting.** Email the principal and participants a reminder of the meeting date and time.

(Text for email)

Aloha,

This is a gentle reminder that the Kūkōhu focus group session on culture-based learning environments will take place at your (school name) on (date and time).

Mahalo for your voluntary participation to the study. A hui hou ma laila!

Na‘u iho nō,

Appendix B: School Invitation

Oct. 5, 2011

Aloha Immersion School Principal,

My name is Keiki Kawai‘ae‘a and I am a doctoral student with Union Institute and University. My work and interest in culture-based learning environments stems some 30 years of active engagement in Hawaiian-medium/immersion education as a parent, an immersion teacher (Pā‘ia school), the Director of the Hale Kuamo‘o Hawaiian Language Center (servicing Hawaiian-medium curriculum and teacher inservicing statewide), in the preparation of new Hawaiian-medium culture-based teachers for the Kahuawaiola Indigenous Teacher Education Program at the UH-Hilo, and a kupuna (grandmother) of two immersion children.

Currently, I am preparing to conduct my project demonstrating excellence (PDE) on Hawaiian-medium/immersion culture-based learning environments that includes focus group sessions at three Hawaiian-medium/immersion schools. This informative process will assist in understanding how to develop and foster healthy culture-based learning environments that are relevant, responsive, and responsible to the language and cultural learning community and mission that it serves.

The purpose of this letter is to invite your school to be a part of the focus group component of the research study. As a part of the research three focus group sessions will be conducted, one per site in November 2011. The meetings are open to administrators, teachers and staff of the Hawaiian-medium/immersion program at your school. With your approval the session will be scheduled for 90 minutes on a date, time and location at the school.

During the focus group sessions, participants will be asked a series of questions related to the topic and given an opportunity to engage in conversation. Findings from the focus groups sessions will be recorded and a summary of your schools results will be available to the participants and the school after the research study is concluded. The information that emerges from the focus group discussions will be used to develop a culture-based learning environment matrix that describes the characteristics and dynamics of Hawaiian culture-based environments within Hawaiian-medium/immersion settings.

There is no risk involved for the participants, only your time and willingness to be a part of the research study. If you are interested in supporting a focus group session at your school, please email your response within 3 days along with a suitable date, time and location for the session within 2 weeks. I will follow-up with an electronic copy of the participant invitation and information sheet on the Kūkōhu project for distribution to the school administration, faculty and staff. I can also provide hard copies if that is preferred method for distribution. Upon request, I would also be willing to provide a short presentation at the school prior to the focus group session.

I look forward to hearing from you over the next three days. If you have any other questions, please feel free to contact me via email or phone. I would be glad to answer any questions that you may have concerning the Kūkōhu study.

Sincerely,

Keiki Kawai‘ae‘a

Phone: 808-430-3907

Email: keiki@leoki.uhh.hawaii.edu

Appendix C: Participant Invitation

Aloha,

You are invited to participate in the Kūkohu focus group session on culture-based learning environments. Your expertise will provide new insights to understanding about the characteristics and dynamics of culture-based learning environments. Participation is voluntary and open to administrators, teachers and staff. There is no risk to the school or participants. As a gesture of appreciation for participation, a \$20 gift card for Office Max, Starbucks or iTunes will be given at the completion of the focus group session. An information sheet on the study is provided for your review. For planning purposes, please register your attendance by emailing your name and school to keiki@leoki.uhh.hawaii.edu by (insert deadline date).

Me ka mahalo,

Keiki Kawai‘ae‘a

Date:

Time:

Location:

Appendix D: Kūkohu Study Information Sheet

Kūkohu Study Information Sheet

Who is conducting the study?

Keiki Kawai‘ae‘a, a doctoral candidate at the Union Institute & University in Cincinnati, Ohio, is conducting this study on culture-based learning environments in partial fulfillment of her doctoral degree.

What is known and not known about culture-based learning environments?

At the local, state, and international levels, culture-based education (CBE) has shown promising results for addressing academic and cultural needs of Native students. Strong Hawaiian identity, academic success, socio-cultural maturity, and language revitalization are the goals of many Native CBE programs. More information is needed to understand how to develop and foster healthy CBE learning environments that build positive relationships, academic rigor, and socio-cultural maturity that are relevant, responsive, and responsible to the learning community that it serves.

What new learning shall be gained?

The purpose of the study is to develop a greater understanding of culture-based learning environments and the perspectives, goals, visions, practices, and experiences of administrators, teachers, and staff of Native Hawaiian and Hawaiian-medium/immersion education students.

The research study is designed to better understand the fundamental characteristics and identity features found in culture-based learning environments. The premise guiding the project is that schools/programs that build upon Hawaiian language and culture within the learning environment and across the school curriculum in authentic, purposeful, meaningful, and engaging ways promote a positive cultural model that builds relationships, academic rigor, and socio-cultural maturity for all learners.

Research Question.

What are the cultural identity features found within Native Hawaiian learning environments, and in what ways do they support or thwart successful outcomes?

Who are the participants?

- Administrators, teachers, and staff from three Hawaiian-medium/immersion schools will be invited to participate in the study.
- Participating Hawaiian-medium/immersion schools range from a variety of geographic, population dense, and culturally diverse settings that will help to describe the cultural ecology of Native Hawaiian-medium/immersion learning environments.

What does the study involve?

Focus group meeting for participants at designated sites on a voluntary basis.

Kōkua is needed by all administrators, teachers and staff at your school.

Your insight and expertise are invaluable to the success of the project. Your *kōkua* is needed to help better understand the ways in which immersion practices build school success and cultural maturity within the culture-based learning environment.

Your input will assist in providing a full spectrum of responses to better understand the nature and potential of culture-based learning environments for the Hawaiian-medium/immersion context. Understanding the diversity of approaches used across the K-12 Hawaiian-medium/immersion schools and in different community/school settings will provide the depth and breadth of input crucial for the study.

Are there risk factors?

- There are no known risks involved in participating in the focus group.
- Data from the study will not be used to assess individual or school performance.
- Analyses will be run at the summary level to protect the identity of all participants.
- Participation is voluntary.
- No financial compensation is given for your participation in the research project.
- Should you choose to withdraw your participation later, please notify us by email to keiki@leoki.uhh.hawaii.edu. Please forward your study identification number, email address, and/or telephone number.

Promise of confidentiality.

- All information provided will be kept strictly confidential. A study identification number will code all or any materials containing identifying information so that no one outside of the immediate research team can trace your answers back to you.
- Individual site data will not be shared with others outside of the particular school.

How do teachers and principals benefit from participation?

- As a participant of the study, you may receive a report summary of the findings. The report will include recommendations gleaned from the results of the focus group meeting.
- The study is aimed at contributing to the quality of the Hawaiian-medium/immersion experience. Results of the study may also contribute towards strengthening the alignment between the Hawaiian language immersion schools, teacher education, leadership, and curriculum preparation through broader collective efforts to develop practical solutions for the immersion learning environment.
- Schools may also request a presentation of the results at your school site.

How to find out more

If you have any questions before, during, or after participation in this research project or in case of a research-related emergency, please feel free to contact Keiki Kawai'ae'a at 808-974-7794 or keiki@leoki.uhh.hawaii.edu. If you have any questions or concerns about your rights as a participant in this project, you may contact Mary Ginn of Union Institute & University at irb@tui.edu or 800-486-3116, ext 1153.

Appendix E: School Registration Form

SCHOOL REGISTRATION FORM

Please fill in the information below.

School _____ Contact Person _____

Email address _____ Phone number _____

BACKGROUND INFORMATION:

Section 1: Check all the boxes that best describe and apply to your school.

1. Our school campus is ... DOE Charter Private

2. Our school is...

located on a conventional DOE campus

a community-focused campus using a single or combination of local facilities

a self-contained or independent campus

3. Our school offers the following grade levels...

Infant-toddler/Preschool Elementary (K-5/K-6) Middle (6-8/7-8) High (9-12)

4. Does your school have a vision and mission statement for the immersion setting?

If yes, please include: yes no

Vision

Mission

Section 2: Fill in the estimated number that best reflect your school.

1. What are the numbers of...

___ students ___ teachers ___ administrators ___ staff

2. What percentage of your school population is Native Hawaiian?

___ % students ___ % teachers ___ % administrators ___ % staff

3. What percentage of your school population are fluent speakers of Hawaiian?

___ % students ___ % teachers ___ % administrators ___ % staff

As a voluntary school participant in the focus group session, I understand that the session will be tape recorded for data analysis purposes of the research study only.

Appendix F: Individual Registration Form

PARTICIPANT REGISTRATION FORM

Participant Information: *Please fill in the information below.*

School _____ administrator teacher parent staff

_____ age male female _____ first language

BACKGROUND INFORMATION:

1. Check the kinds of school curriculum, strategies and practices that are regularly utilized at the school.

- ___ DOE standards/Content-Skills driven curriculum
 - ___ Vendor Purchased Programs
 - ___ Place-based/community-based strategies
 - ___ Experiential/hands-on strategies
 - ___ Family-based practices
 - ___ Culturally grounded/Maui-driven practices
 - ___ Other
-

2. ___ Using the number 1-10, (10 being the high Native fluency) what number would best describe your Hawaiian language fluency level.

3. Using the number 1-10, (10 being the highest) what number would best describe the use of Hawaiian language used during...

Instructional time by:

- ___ administrators
- ___ teachers
- ___ students
- ___ staff
- ___ parents

Non-instructional time by:

(i.e. recess, after school, hallways etc.)

- ___ administrators
- ___ teachers
- ___ students
- ___ staff
- ___ parents

As a voluntary participant in the focus group session, I understand that the session will be tape recorded for data analysis purposes of the research study only.

Appendix G: School Permission Sheet

Principal Permission Sheet

Kūkohu Hawaiian-based Programming Model Project

Ua heluhelu au i ka palapala ‘ōwehe no ka pāhana noi‘i e kapa ‘ia ‘o Kūkohu. Ua moākāka no ka mana‘o a ‘ike ‘ia ke kumu a me ka waiwai o ka pāhana noi‘i. ‘Āpono au i ke komo ‘ana o ke kula i ka pāhana noi‘i ma ka hālāwai pū‘ulu kūkā ma ka honua kula a e komo manawale‘a ka po‘e hoihoi i ka hālāwai kūkā. ‘Ike pū au ‘a‘ohe mana ko kēia pāhana ma luna a‘e o nā kānāwai ke hemahema a i ‘ole ke a‘e kānāwai kekahi o ke kime pāhana. Moākāka ia‘u ‘a‘ohe mea ma kēia palapala e pani ana no kekahi kānāwai pekelala, moku‘āina a kaiāulu ho‘i. Inā ma hope aku, e koho au e huki i ka ‘āpono o ke kula ma ka hapa a i ‘ole o ka piha, ‘o ka ho‘omaopopo wale nō ka‘u hana ma ka leka uila ‘ana aku iā keiki@leoki.uhh.hawaii.edu. ‘Ike pū au no ka ‘oki leo ‘ia o ka hālāwai no ke kālailai wale ‘ana nō i ka ‘ikepili o ka hālāwai no ka pāhana noi‘i.

(I have read the information sheet about the research project and understand the purpose of the consent form. Our school voluntarily chooses to participate in the research study including, holding the focus group activity at the school. I understand that no financial compensation is given for participation and that my consent does not take away any legal rights in the case of negligence or other legal fault of anyone who is involved in this study. I further understand that nothing in this consent form is intended to replace any applicable federal, state, or local laws). Should I choose to withdraw our participation later, I agree to notify you by email at keiki@leoki.uhh.hawaii.edu.

As a voluntary school participant in the focus group, I understand that the session will be tape recorded for data analysis purposes of the research study only.

E ma‘ema‘e ke kākau ‘ana (*Write Legibly*)

Ka Inoa o ke Kula (*Name of School*)

Inoa Po‘okumu/Luna Ho‘okele
(*Principal/Director's Name*)

Pūlima Inoa Po‘okumu/Luna Ho‘okele
(*Principal/Director's Signature*)

Helu o ka Lā
(*Date*)

Appendix H: Participant Permission Sheet

Participant Permission Sheet

Kūkohu Hawaiian-based Programming Model Project

Ua heluhelu au i ka palapala ‘ōwehe no ka pāhana noi‘i e kapa ‘ia ‘o Kūkohu. Ua moākāka no ka mana‘o a ‘ike ‘ia ke kumu a me ka waiwai o ka pāhana noi‘i. ‘Āpono au i ke komo ‘ana i ka pāhana noi‘i ma ka hālāwai pū‘ulu kūkā a e komo manawale‘a au i ka papahana. ‘Ike pū au ‘a‘ohe mana ko kēia pāhana ma luna a‘e o nā kānāwai ke hemahema a i ‘ole ke a‘e kānāwai kekahi o ke kime pāhana. Moākāka ia‘u, ‘a‘ohe mea ma kēia palapala e pani ana no kekahi kānāwai pekelala, moku‘āina a kaiulu ho‘i. Inā ma hope aku, e koho au e huki i ka‘u i hō‘ike ai ma ka hapa a i ‘ole o ka piha, ‘o ka ho‘omaopopo wale nō ka‘u hana ma o ka leka uila ‘ana aku iā keiki@leoki.uhh.hawaii.edu. ‘Ike pū au no ka ‘oki leo ‘ia o ka hālāwai no ke kālailai wale ‘ana nō i ka ‘ikepili o ka hālāwai no ka pāhana noi‘i.

(We have read the information sheet about the research project and understand the purpose of the consent form. I voluntarily choose to participate in the research study through the focus group activity. I understand that no financial compensation is given for my participation and that my consent does not take away any legal rights in the case of negligence or other legal fault of anyone who is involved in this study. I further understand that nothing in this consent form is intended to replace any applicable federal, state, or local laws). Should I choose to withdraw my participation later, I agree to notify you by email at keiki@leoki.uhh.hawaii.edu.

As a voluntary participant in the focus group session, I understand that the session will be tape recorded for data analysis purposes of the research study only.

E ma‘ema‘e ke kākau ‘ana (*Write Legibly*)

Ka Inoa o ke Kula (*Name of School*)

Inoa
(*Print Participant Name*)

Pūlima Inoa
(*Participant Signature*)

Helu o ka Lā
(*Date*)

Appendix I: Focus Group Probes

Focus Groups Probes:

What are the cultural identity features found within Native Hawaiian learning environments, and in what ways do they support or thwart successful outcomes?

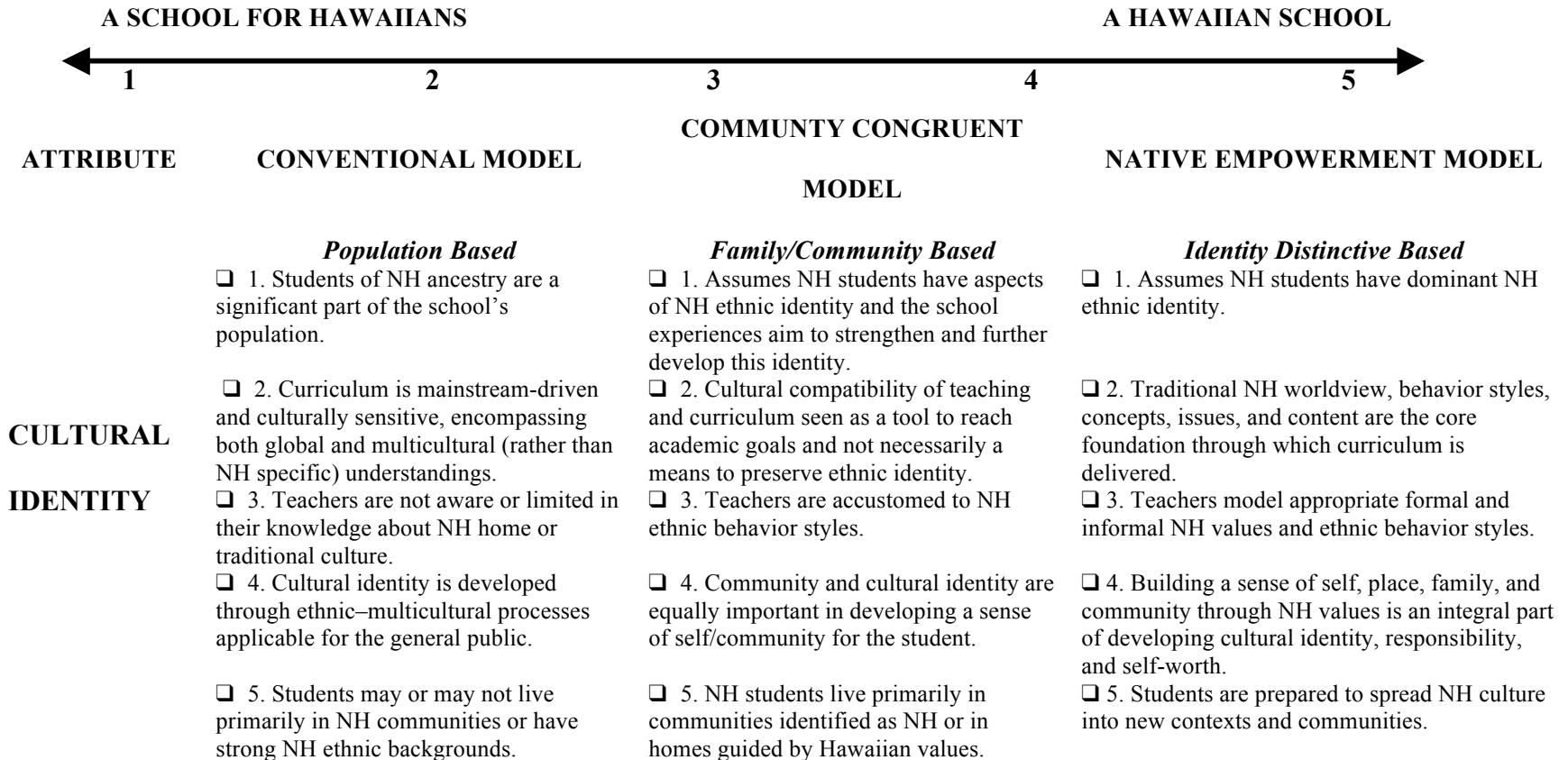
Guiding Questions:

3. Do you agree that the four identities —cultural, linguistic, curricula and relationship— describe the cultural landscape and soundscape of the Hawaiian learning environment? If not, how can the descriptions be improved?
4. Does the matrix allow you to accurately describe the status of your school? If not, what is missing?
5. How do current practices support or thwart successful outcomes?
6. How does the identity features of the school/program align with the school's vision/mission? What is working well? What can be improved?
7. How does the school/program imbue language and cultural practices within the learning environment that develop relationships, academic rigor, and socio-cultural maturity? Describe 3-4 practices that you believe strengthen the language and cultural effectiveness within the school.
8. What can administrators, teachers, students, families, and communities do to improve the cultural quality of the school setting in ways that support successful program and student outcomes? (The umbrella question will be solicited through five smaller questions.)
 - a. In what ways do administrators support, demonstrate and empower the cultural quality of the school setting in ways that support successful program and student outcomes?
 - b. In what ways do teachers' practices contribute to the cultural quality of the school setting to support successful program and student outcomes?
 - c. In what ways do students demonstrate the cultural quality of the school setting to support successful program and student outcomes?
 - d. In what ways do families contribute to the cultural quality of the school setting in ways that support successful program and student outcomes?
In what ways is the community enhancing the cultural quality of the school setting in ways that support successful program and student outcomes?

Appendix J: Kūkohu Hawaiian Culture-based Inventory

Cultural Identity

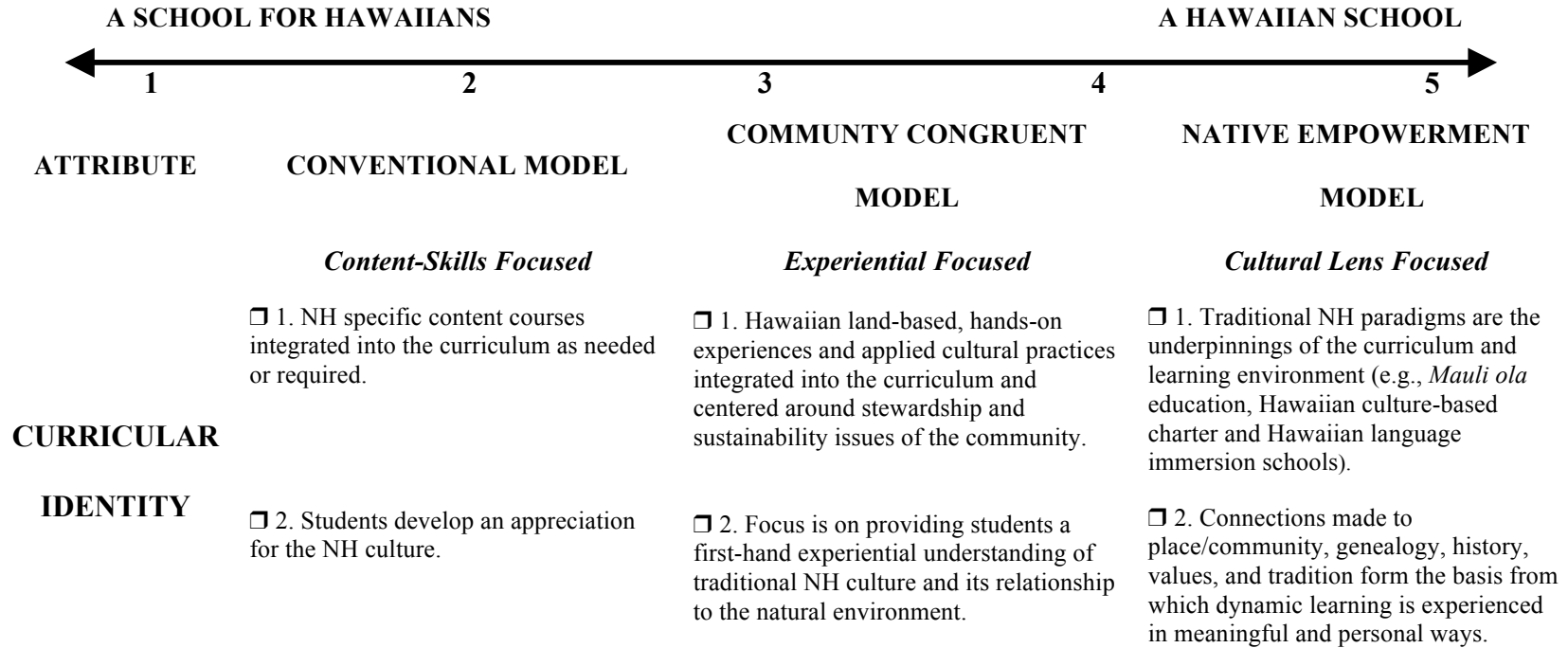
Instructions: Mark on the line 1) ☉ current 2) ★ desired.



Concerns/strengths/opportunities/challenges about how cultural identity is being developed and fostered within your school/program.

Curricular Identity

Instructions: Mark on the line 1) ☉ current 2) ★ desired.



Concerns/strengths/opportunities/challenges about how cultural identity is being developed and fostered within your school/program.

Linguistic Identity

Instructions: Mark on the line 1) ● current 2) ★ desired.

	← A SCHOOL FOR HAWAIIANS		A HAWAIIAN SCHOOL →		
	1	2	3	4	5
ATTRIBUTE	CONVENTIONAL MODEL		COMMUNITY CONGRUENT MODEL	NATIVE EMPOWERMENT MODEL	
LINGUISTIC IDENTITY	<p style="text-align: center;">English Language Medium</p> <ul style="list-style-type: none"> <input type="checkbox"/> 1. Standard English is the medium of instruction across the curriculum and expected language of use by the student in and out of class. <input type="checkbox"/> 2. Standard English is taught although students may study Hawaiian parallel to other foreign languages for enrichment. <input type="checkbox"/> 3. All graduates are expected to be fluent in Standard English, without fluency in other languages. <input type="checkbox"/> 4. Range: Most NH students assumed to already be fluent speakers of Standard English with some in process of transitioning from Hawai'i Creole English (Pidgin) to Standard English. 		<p style="text-align: center;">Mixed Language Medium</p> <ul style="list-style-type: none"> <input type="checkbox"/> 1. Focus is on quality of communication and expression of English. Hawai'i Creole English not discouraged and used for expressive purposes in and out of class. (Hawaiian vocabulary and influence in Hawai'i Creole English (Pidgin) seen as positive communicative feature that is encouraged.) <input type="checkbox"/> 2. Standard English taught as a second dialect although students may study Hawaiian either as a requirement or elective parallel to foreign languages for enrichment. <input type="checkbox"/> 3. All graduates expected to be fluent in Standard English and Hawai'i Creole English (Pidgin), but there are no other fluent language expectations of graduates. <input type="checkbox"/> 4. Range: Most NH students enter school as Native speakers of Hawai'i Creole English (Pidgin) with some entering school already knowing Standard English, Hawaiian, or other languages. 	<p style="text-align: center;">Hawaiian/Multi Language Medium</p> <ul style="list-style-type: none"> <input type="checkbox"/> 1. Hawaiian language is the medium of instruction across the curriculum and the expected student language of use by the student outside of the class and at the school. <input type="checkbox"/> 2. Hawaiian taught as the primary language with English being taught as a secondary language with equally rigorous expectations. Range from partial to full immersion—second language to Native speaker. Students may study multiple foreign/other languages either as a requirement or as an elective for enrichment. <input type="checkbox"/> 3. All graduates expected to be fluent in Hawaiian, Hawai'i Creole English (Pidgin), and Standard English, but there are no other fluent language use expectations. <input type="checkbox"/> 4. Range: Many NH students enter school with two years of preschool experience in Hawaiian although most use Hawai'i Creole English (Pidgin) at home or with significant numbers of relatives. Most families also use some Hawaiian with a few using only Hawaiian. The percentage of families using only Hawaiian at home constantly increases. 	
<p>Concerns/strengths/opportunities/challenges about how cultural identity is being developed and fostered within your school/program.</p>					