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Ho‘okanaka: Developing Ontological Self-Efficacy and Community Readiness as the Praxis of Participatory Action Research in Hawaiian Education

Keali‘i Kukahiko, Kalanimanuiā Alyssa Wong, Dannia Andrade, Kea Kahoilua-Clebsch, Sarah Rice, Margary Martin, Dawn Kau‘i Sang, Aulia Austin, and Kaleikoa Ka‘eo

*I don't remember when I got lost, on my journey of a‘o.
When did my wa‘a become wa‘awa‘a, or my kumulipo ho‘onalo?*

*I failed to read the compass given to me, a shame to my mo‘okū‘auhau.
No waypoints in sight, from stern to bow . . . an empty waihona for my mo‘o lau.*

*When makani ikaika found me nāwaliwali, my eyes closed to hiamoe.
As I drifted off, I dropped my hoe, and ‘uhane whispered, “Aloha au iā ‘oe.”*

*And when alaula paved the eastern sky, the tides below began to ku‘e.
The new sun wrested me from malu make, and kūpuna yelled, “e ala ē!”*

*As I opened my maka and huli alo ia Kahiki, my wa‘a was with ‘au moku.
I straightened my kua, and my ihu raised too, now I ho‘okele by ulu hōkū.*

*Once a captive of circumstance, a castaway with no mo‘olelo.
I’ve since grasped my hoe as knowledge in action . . . He ‘ike‘ana ia i ka pono.*

— Keali‘i Kukahiko

The Hawaiian Kingdom thrived within a model of *a'o* (teaching and learning) that navigated pathways of guardianship, where youth were observed and identified for interests and strengths in diversified literacies.¹ The content exchanged across generational schools of knowledge disseminated the essential community readiness competencies required for the sustainability of Hawai'i. In this way, the application of knowledge and skills were continuously guided by the collective values of a Hawaiian community that increasingly understood how land and people might flourish together. Indigenous pedagogies guided participants of *a'o* in the development, mastery, and instruction of roles and responsibilities that optimized individual contributions to *kaiāulu* (community), and therefore improved community sustainability and resilience.² These pathways of knowing and being extended *ma ka hana ka 'ike* (experiential learning) beyond the *kauhale* (homestead) and its surrounding ecosystems, unrestricted by any physical or institutional walls of learning.³ This provided fertile soil for generations of scientific *kilo* (observations), *nalu* (reflections), and *makawalu* (methods and/or conditions that apply multiple perspectives) to thrive, a knowledge-making process that equipped subsequent generations with repositories of knowledge. What is more important, it provided the *kuleana* (responsibility) to innovate and apply traditional knowledge in ways relevant and malleable to the sustainability of Hawai'i in the present.

Community readiness pathways were adaptations to seasons of *hulihia* (change), and the natural evolution of an advancing Hawaiian society. Consider how *'ike 'āina* (knowledge of the land) was passed from one generation to the next through *mo'olelo* (stories), *mele* (songs), *'ōlelo no'ēau* (proverbs), and *kānāwai* (laws), and how these strands of knowledge embedded collective values to prevent current usage from exhausting the resources that would otherwise sustain future generations. As one specific branch of knowledge, *'ike 'āina* contributed to a long-term sustainability "playbook" (as opposed to short-term survival for profit), which predicted patterns of nature beyond the scope of the living. This foresight empowered Indigenous Hawaiians to access ancestral knowledge to identify predictive indicators of floods, famine, volcanic eruptions, optimal conditions for fishing and farming, and allowed descendants to optimize conditions for the survivance of contemporary and future generations. *'Ike 'āina* was the baseline for continuous knowledge production and innovation, such as the *lo'i* (irrigation system for taro) and *loko i'a* (fish ponds) that were subsistence techniques unique to Hawai'i. *'Ike 'āina* was just one of the important branches of knowledge that made Hawai'i one of the most advanced civilizations in the world.

It is from these community frameworks of knowing and being that a sustainable model of *a'o* continued to evolve in 1840, when Kamehameha III (King Kamehameha III) codified public education into the constitution of the Kingdom of Hawai'i. In 1825, Kamehameha III called out to his people, "*E nā ali'i a me nā maka'āinana, he aupuni palapala ko'u, a 'o ke kanaka pono a nā'auao, 'o ia ko'u kanaka*" (To all ali'i and commoners alike, mine is a literate country, and the just and intelligent man is my countryman). In this short address, the king made literacy the *kuleana* (responsibility) of all his subjects, an identifiable characteristic of the Hawaiian people. Literacy in Hawai'i flourished as over 100 different Hawaiian language newspapers were established, approximately

125,000 pages published, and roughly 1.5 million pages of *‘ike* (knowledge). Hundreds of multigenerational Hawaiian language medium schools spread across the *paē‘āina* (Hawaiian islands), schools that were attended by entire communities in their most popular gathering spaces. Within his reign, Kamehameha saw the Hawaiian Kingdom establish the first public school system west of the Mississippi, a community-based education system that boasted the highest literacy rate in the world (91–95 percent). The hope for Hawaiian literacy was not simply for *kānaka* to read and write but to create a repository of knowledge during a period of erasure to protect Hawaiian ways of knowing and being—intellectual legacies that connect people, place, and purpose to Hawai‘i—for future generations.

IMPORTANT TERMS FOR DISCUSSION

Term	Definition
Ontological Framework	An ontological framework is made up of three components: (1) axiology—the morals and values that dictate how we interact with our reality; (2) methodology—the methods (and the reasons behind them) of collecting data that define our reality; (3) epistemology—the experiential knowledge that becomes what we “know” about reality.
Open Ontological Framework	An “open” ontological framework describes a process of knowledge production that is guided by the <i>‘ōlelo no‘eau</i> (proverb) <i>He ‘ike ‘ana ia i ka pono</i> : One has seen (knows) the right thing to do and has done it. In an open-ontological framework, learners transition from consumers of knowledge to knowledge producers, a process that enables them to either maintain reality as a state of being or change reality through participatory praxis to manifest a state of being that better aligns with their axiology, methodology, and epistemology. In an open ontological framework, each component informs one another to constantly produce new knowledge and empower communities to actualize desired futurities.
Closed Ontological Framework	In a “closed” ontological framework, objectivity is a standard of dehumanization that dissociates the three components of the ontological framework to restrict knowledge production, thereby creating a singular narrative from a singular perspective that is disseminated by a dominant politics of knowledge through compulsory education. This academic process tells the students to leave their languages and cultural experiences at home, and to constantly code-switch as a means to achieve academic success. This educational process creates knowledge consumers who matriculate from US compulsory education and embed the disorientation of a “closed” ontological framework into the current reality by normalizing assimilation as a desired learning outcome. This model of education reproduces unsustainable realities that force Indigenous peoples to survive within environments of “disassociation,” where they are often measured by lagging student indicators such as achievement gaps, school to prison pipelines, college participation, and so forth.
Ontological Self-Efficacy	Ontological self-efficacy is the liberation from intellectual dependence and represents the transition from knowledge consumption to knowledge production, which empowers learners to actualize alternative realities of their own making. For students, this may be demonstrated by activism informed by engaging in Indigenous axiologies, methodologies, or epistemologies. Closed ontological frameworks become “open” when a critical mass is reconnected to traditional sources of knowledge production and develop ontological self-efficacy.

PURPOSE OF COLONIAL EDUCATION

The purpose of colonial education is inextricably linked to the broader goals of imperialism and colonization. Imperialism is understood as a doctrine aimed at extending power through territorial acquisition or by asserting political and economic control

over foreign areas, while colonization entails the systematic process of creating dependency in those regions. This often involves subjugating the indigenous population, exploiting natural resources, and imposing the colonizer's language and cultural values.⁴ When this process is applied to an already independent nation, the outcome is more accurately termed denationalization, where imperial powers do not establish democratic or governmental infrastructure but instead insert their own leaders into existing power structures. A salient historical example is the case of Hawai'i, where the United States facilitated the forced abdication of the existing monarchy in 1893, subsequently implementing colonial processes to denationalize an internationally recognized sovereign nation. Thus, in contexts like Hawai'i, denationalization became a pivotal purpose of colonial education.⁵

Furthermore, the mechanisms and institutions of US colonial education are designed to achieve four core directives that underpin the colonial project, as articulated by Kukahiko: 1) to rationalize and justify colonization, often through narratives of slavery and genocide; 2) to maintain the colonial privilege of the conquerors, thereby normalizing their socioeconomic, political, and cultural superiority; 3) to alleviate the guilt and historical responsibility of the settler colonialists; and 4) to integrate and subjugate conquered peoples into the existing colonial regime, particularly market capitalism.⁶ This integration and subjugation are profoundly achieved through cultural and linguistic control. Kenyan writer Ngũgĩ wa Thiong'o powerfully describes this process as a "cultural bomb," whose devastating effect is to "annihilate a people's belief in their names, in their languages, in their environment, in their heritage of struggle, in their unity, in their capacities, and ultimately in themselves."⁷ This leads the colonized to perceive their own past as a "wasteland of nonachievement," fostering a desire to distance themselves from their heritage and identify with the colonizer's culture and language. The intended result is a collective sense of "despair, despondency, and a collective death-wish," with imperialism then presenting itself as the only remedy.⁸

The centrality of language in this process is highlighted by Ngũgĩ wa Thiong'o's reflections on linguistics as a colonial strategy: "Economic and political control are incomplete without cultural control. The entire edifice of economic, political, and cultural control remains shaky without control of the minds of the conquered. . . . The easiest route to that conquest is language."⁹ The forced shift to English education was thus a deliberate act of cultural and intellectual suppression, effectively enacting Ngũgĩ wa Thiong'o's "cultural bomb" by undermining the *mo'olelo* (story, narrative, history, tradition)—a crucial repository of Hawaiian knowledge. This profound mental control is the ultimate aim, as "colonialism imposed its control of the social production of wealth through military conquest and subsequent political dictatorship. But its most important area of domination was the mental universe of the colonized, the control, through culture, of how people perceived themselves and their relationship to the world."¹⁰ Thus, the purpose of an Indigenous, Aboriginal, or decolonizing education must be to serve as a critical instrument for achieving comprehensive economic, political, and cultural reclamation, to reclaim control and access to tools for self-definition that reestablish positive perceptions of identity and reciprocal relationships to community and environment.

EMBEDDED VALUES OF COLONIAL EDUCATION IN HAWAI‘I

Colonial education systems were not merely tools for instruction but were deeply imbued with specific values designed to serve imperial objectives and dismantle indigenous ontological frameworks, or ways of knowing and being. These values often centered on the perceived superiority of Western thought, language, and social structures, while actively disparaging and suppressing indigenous epistemologies. For instance, Richard Armstrong, the minister of public instruction in Hawai‘i from 1848 to 1860, openly advocated for the complete assimilation of Hawaiian children into the English language. He declared that it “would be an unspeakable blessing to have every native child placed in a good English school, and kept there until *it* [emphasis added] had [acquired] a thorough knowledge of what is now, in fact, to a great extent, the business language of the Islands, and which would open to its mind new and exhaustless treasures of moral and intellectual wealth.”¹¹ Armstrong’s use of the impersonal pronoun *it* to refer to the “native child” starkly illustrates an inherent dehumanization of Indigenous peoples, reducing them to objects devoid of individual or cultural identity, thereby justifying their reeducation and assimilation. This statement also reveals a core colonial value: the belief that Western (English) language was intrinsically linked to “moral and intellectual wealth,” implicitly deeming Indigenous languages and knowledge systems as deficient or lacking.

This push for linguistic and cultural assimilation was a deliberate strategy to ensure the “conquest” of the minds of the colonized, as echoed by Ngūgĩ wa Thiong’o’s concept of the “cultural bomb.” The Hawaiian epistemology, with its holistic and relational understanding of knowledge rooted in spirituality, connection to *‘āina* (land), and intergenerational relationships, stood in direct opposition to this Western, individualized, and fragmented view.¹² Colonial educators explicitly articulated the need for this transformation. Henry Townsend, inspector general of schools in Hawai‘i from 1896 to 1900, succinctly captured this imperative in his newspaper *The Progressive Educator*, stating, “The edict has gone forth, and it is the edict of Fate that the passive Hawaiian must adapt himself to the active systems of the West or go down. It is the duty of the schools to do their part in adapting him.”¹³ This quote highlights a fundamental colonial value: the perceived “passivity” and inferiority of indigenous systems compared to the “active systems of the West,” placing the onus on the colonized to adapt or face obsolescence. This adaptation was not merely about language but about instilling the values necessary for their integration into market capitalism, notably individualism and meritocracy. Unlike the collective, relational knowledge of *na‘auao* and the community-oriented Hawaiian epistemology, Western education promoted individual achievement and competition, preparing Hawai‘i for Americanization and its associated economic structures.

The drive for linguistic uniformity was also explicitly stated as a means to achieve national cohesion under colonial terms. The 1886 report of the minister of public instruction to the Kingdom of Hawai‘i legislature articulated this fusion: “If these heterogeneous elements are to be fused into one nationality in thought and action, it must be by means of the public free schools of the nation, the medium of

instruction being the English language chiefly.”¹⁴ This demonstrates the value placed on a singular, imposed national identity that necessitated the erasure of linguistic and cultural diversity. Such policies directly undermined the *mo’olelo*, oral traditions, and the very concept of *na’auao*—holistic, embodied knowledge deeply embedded in Hawaiian culture.¹⁵ The values embedded in colonial education, therefore, were not merely pedagogical but deeply ideological, serving to dismantle indigenous self-definition and pave the way for comprehensive colonial control, ultimately preparing the colonized for subjugation within the prevailing market capitalist system. Thus, the values embedded within an Indigenous, Aboriginal, or decolonizing education must recenter community readiness, holism and collective *kuleana* (responsibility) as desired student outcomes.

THE IMPLEMENTATION OF COLONIAL EDUCATION IN HAWAI‘I

The achievement of the aforementioned colonial objectives was not left to chance, but meticulously orchestrated through the deliberate design and implementation of educational P4 strategies (practices, projects, programs, and policies). The 1906 “Programme for Patriotic Exercises in the Public Schools” serves as a stark illustration of this systematic approach, acting as a comprehensive blueprint for instilling American patriotism and civic duty in Hawaiian schoolchildren.¹⁶ This program was a methodical plan for Americanization, explicitly designed to obliterate the national consciousness of the Hawaiian Kingdom in the minds of the schoolchildren throughout the islands, and to have them believe they were Americans.

The implementation involved pervasive daily rituals and symbolism. Children were mandated to assemble and participate in formal flag salutes, repeating the pledge: “We give our heads and our hearts to God and our country! One country! One language! One flag!” This ritual, enforced with military discipline and conduct, directly embodied the values of a singular American identity, suppressing preexisting national loyalties and linguistic diversity. The visual spectacle described by scholar Alexander James Inglis, where children at Ka’iulani grade school marched “just as precise and orderly as you can find them at home” and chanted the pledge with “six hundred fourteen fresh, childish voices chanted as one voice,” underscores the comprehensive and almost militaristic indoctrination.¹⁷

The curriculum was explicitly tailored to Americanize. Teachers delivered “formal talk[s]” on “presidents and famous men,” “great events in history and science,” and “current events in United States,” alongside “vivid descriptions of great industries, cities, famous localities, physical and climatic conditions.” Significant American historical anniversaries, such as George Washington’s birthday and the Fourth of July, were commemorated, ensuring a narrative centered on American leadership and milestones. Concurrently, the Hawaiian language was actively suppressed, with children “severely punished” if they spoke their national language. This deliberate act of epistemicide and deculturalization aimed to dismantle Hawaiian epistemology—a holistic understanding of knowledge deeply connected to spirituality, land, and intergenerational relationships.¹⁸ The forced disassociation from their ancestral

language and *mo'olelo*, the repository of their history and traditions, created “colonial alienation,” replacing Indigenous praxis with a closed ontological framework.¹⁹ Thus, educational P4 within an Indigenous, Aboriginal, or decolonizing education must create conditions for open ontological frameworks where students demonstrate ontological self-efficacy.

CONTEMPORARY CIRCUMSTANCES OF K–12 EDUCATION IN HAWAI‘I

US colonial systems and processes have since severed the cultural connections to people, place, and purpose, or the relational aspects of community readiness that once tethered Native Hawaiians to components of their individual and collective cultural identities for thousands of years. The US market-based education system replaced the Indigenous ontological framework (ways of knowing and being) with its own dominant politics of knowledge: a singular narrative meant to create state dependency among conquered and colonized peoples.²⁰ Without the power to produce and apply knowledge through Hawaiian ways of knowing and being, the Indigenous population was forcibly assimilated to the values and choice-sets of their colonizers.²¹ Cultural dissonance became a natural outcome of this ontological shift, and manifested itself within the lagging student indicators of a compulsory education system in Hawai‘i that was imposed by usurpers.²²

In 2020, the Office of Hawaiian Education (OHE) conducted an investigation on the experiences of Native Hawaiian and Pacific Islander (NHPI) students in the Hawai‘i Department of Education (HIDOE). The Kukahiko et al. study identified three areas of concern: the first stated that cultural-racial differences—*not* economic advantage—was the leading predictive indicator of the achievement gap across all core four subject areas (language arts, mathematics, science, and social studies).²³ This finding disrupted the common-sense rhetoric of a market-based education in Hawai‘i, which has driven educational policy, out-of-state procurement for academic consultants, curricula, and technology. Disrupting economic advantage as the leading academic success indicator also challenged the Hawaiian education system to test its assumptions. The Kukahiko et al. study showed evidence that student groups with the highest proficiency scores and lowest “disciplinary” rates were also the only groups to achieve a 1:1 student to teacher congruency ratio.²⁴ This finding suggests that implicit bias plays a significant role in student success.²⁵

Beyond the achievement gap, the existing literature suggests that cultural dissonance manifests within learning environments that implement colonial ideologies and the assimilation of those normalized preferences and beliefs.²⁶ The data collected in the Kukahiko et al. study illustrates the institutionalization of cultural dissonance in HIDOE, as NHPI students were overrepresented in nearly every negative student indicator. Examples include the following: NHPI proficiency rates that were nearly half the scores of their non-NHPI peers; NHPIs were four times more likely to be identified for discipline and suspended than their non-NHPI peers, while NHPI special education students were seven times more likely and NHPI male special education students nine times more likely; NHPIs maintained the highest dropout rates;

NHPIs had the highest college aspiration-participation gap (33 percent in 2019); NHPIs maintained the highest arrest (42 percent) and incarceration (54 percent) rates, and NHPI juveniles and adults were the only population to increase their representation at each progressive stage of the criminal justice system in Hawai'i; NHPIs were more likely to attempt suicide than any other ethnic group in the United States.²⁷

The conditions that create cultural dissonance exacerbates the atrophy of Indigenous identities, conditions that, if left unchecked and untreated, progressively degenerate until anomie becomes the vestigial remains of Native self. Scholar Taiaiake Alfred describes anomie as "the state of profound alienation that results from experiencing serious cultural dissolution, which is then the direct cause of serious substance-abuse problems, suicide, and interpersonal violence."²⁸ Of these manifestations of anomie, suicide is the most prevalent for NHPI adolescents.²⁹ Eleven percent of all deaths for adolescents between the ages of fourteen and eighteen in the United States are due to suicide, and in a study whose analysis identified eight different ethnic groups, NHPI adolescents in Hawai'i had the highest suicide rates, with a risk comparable to American Indian and Alaska Native adolescents. In the 2000 Yuen et al. study (*Cultural Identification and Attempted Suicide in Native Hawaiian Adolescents*), 12.9 percent of NH adolescents had attempted suicide, as opposed to 9.6 percent of non-Native Hawaiians, and NH females had attempted suicide more frequently than males.³⁰ Hawaiian males in ninth and twelfth grades were 2.39 times more likely to attempt suicide as compared to non-Hawaiian adolescents, suggesting transition points are especially problematic for this specific demographic. Cultural dissonance was the highest predictor for suicide attempts by NH adolescents, independent of ethnicity, socioeconomic status, and psychopathology.³¹ The obstinate nature of this data suggests that counting professional development hours for teachers and administrators as indicators of change, or system-level measurements of success, is not enough.

STATEMENT OF RESEARCH IMPERATIVE

What becomes clear within the context of Hawaiian education is that the colonial process that severed and caused the erasure of the Indigenous identity continues to sever Indigenous connections to people, place, and purpose today. If educators hope to reconnect, restore, or revitalize these relationships in the development of community readiness, then community readiness must become a perpetual mechanism of change itself—an iterative change process guided by the past, in relation to the present, to arrive at desired futurities. This generative model of community readiness is not a reactive process designed to mitigate cultural dissonance or outcomes characterized by anomie, but rather a preemptive process that inserts Hawaiian culture-based education (HCBE) inputs (values, purpose) and outputs (P4, implementation) as alternatives to those associated with the lagging student indicators of a US colonial education. Thus, the following research questions guide the investigation of how community readiness is being initiated as a decolonizing change process in Hawaiian education:

RESEARCH QUESTIONS

1. How can HCBE strengthen community readiness values as desired student outcomes?
2. How can HCBE develop community readiness by reconnecting students to tools for self-definition that reestablish positive perceptions of identity and reciprocal relationships to community and environment?
3. What types of P4 (practices, projects, programs, policies) help students to articulate, elevate, and activate ontological self-efficacy?

LITERATURE REVIEW

The following Literature Review provided the researchers of this study a reasonable foundation to hypothesize that HCBE might (1) reconnect students to tools for self-definition; (2) strengthen community readiness values in students; and (3) develop student ontological self-efficacy. The following literature review also identified characteristics of HCBE indicators for student researchers to look for in the data, as well as indicators that HCBE might be developing *ho'okanaka*, or ontological self-efficacy.

HAWAIIAN CULTURE-BASED EDUCATION (HCBE): DEVELOPMENT, STRATEGIES, AND LINKS TO IDENTITY AND FUTURE ORIENTATION

E hoomaopopo ia, he lahui kakou me ko kakou Moolelo Kahiko, i ano like loa aku me ka moolelo kahiko o ka lahui o Helene; a he mau mele kahiko hoi ka ko kakou mau kupuna i like aku a i oi aku nohoi ko lakou hiwahiwa ame ke kilakila i ko na mele kaulana loa o ua lahui Helene nei.

And let us remember, we are a nation with our own ancient history, which is strikingly similar to the history of the people of Greece—and our forefathers were in possession of age-old poetry [songs, *mele*] whose quality and majesty rivaled, and perhaps bested, even the most famous poetry produced by the Greek civilization.

—Joseph Poepoe, 1906³²

Joseph Poepoe's statement reminds contemporary educators that Indigenous intelligence is not something to be bought and shipped to Hawai'i from somewhere else, it must simply be remembered and applied to the present age. In direct opposition to the dehumanizing values and assimilationist designs of colonial education, the revitalization of Hawaiian culture-based education (HCBE) serves as a powerful, liberating countercolonial practice aimed at reconnecting students to tools for self-definition. HCBE is commonly defined as grounding teaching and learning in the values, practices, places, language, and histories foundational to *Kānaka ʻŌiwi* (Native Hawaiian) culture.³³ In Hawai'i, HCBE emerged within a broader Indigenous education movement that seeks to correct cultural discontinuities between home and school by centering Native ways of knowing and being.³⁴ Research across Hawai'i shows that when classrooms and schools implement HCBE at high levels, students—especially Indigenous learners—exhibit stronger socioemotional development, cultural identity, engagement, and aspirations.³⁵

A Kānaka ‘Ōiwi Methodology for Reviewing HCBE

Recent scholarship advances not only HCBE practice, but also methods for reviewing HCBE knowledge. Scholar Kourtney Kawano proposes a Kānaka ‘Ōiwi literature review methodology that decenters colonial review conventions and intentionally privileges Kānaka voices, values, and lived knowledge in synthesizing research on Native Hawaiian culture-based education.³⁶ This approach frames HCBE as an enactment of self-determination and *Ea* (sovereignty, life force), and it clarifies five core HCBE elements: ‘ōlelo Hawai‘i (Hawaiian language), Indigenous pedagogies, curriculum grounded in Native traditions, Kānaka leadership-participation, and Hawaiian assessment methods.³⁷

‘Ōlelo Hawai‘i Education and Assessment

‘Ōlelo Hawai‘i is both a subject and a medium of instruction essential to HCBE’s identity aims. Scholar Cyrus Pōki‘i Seto traces how nineteenth-century missionary influences shaped contemporary Hawaiian language forms and pedagogies, arguing for renormalizing teaching toward *Kūpuna* (ancestor)-grounded usage to align language, ‘ike (knowledge), and *piko‘u* (identity).³⁸ This line of inquiry underscores why language revitalization is inseparable from cultural identity development and future self-definition for learners.³⁹ Parallel work on assessment emphasizes cultural validity for Hawaiian-medium contexts. Scholars Pōhai Kūkea Schultz and Kerry Englert articulate how culturally valid constructs, items, and interpretive frameworks are prerequisites for fair evaluation of Hawaiian language proficiency and content knowledge. “Cultural validity” reframes assessment around community sovereignty, self-determination, and language revitalization goals.⁴⁰ Together, these strands position *Kaiaipuni* (Hawaiian-medium education) as a site where pedagogy and measurement must be codesigned with culture at the center.

Community Development and Cultural Practices: Cultivating Cultural Kīpuka

HCBE also advances identity through community-anchored practices that create what scholars Kēhaulani Vaughan, Natasha Saelua, and ‘Asena Taione-Filipia call cultural *kīpuka*—intentional spaces where Indigenous values, protocols, and language nourish student belonging, leadership, and purpose. Their practitioner reflections detail strategies such as authentic partnerships with community organizations, faith-based networks, and campus units to scaffold praxis and leadership pathways for Pacific Islander students; these *kīpuka* become spaces where *pilina* (relationships), *mo‘okū‘auhau* (genealogy), and *kuleana* (responsibility) are lived, not just taught.⁴¹ Such community-rooted practice aligns with HCBE’s emphasis on reciprocal relationships and expands students’ opportunities to narrate their identities in ways that guide future educational and career goals.

The Impact of ‘Āina-Based Learning on Identity

Place-based strands of HCBE treat ‘āina (lands, waters) as teacher; engaging in restoration and stewardship weaves cultural practice, science learning, and identity in

place. For example, scholars Katie Kamelamela et al. demonstrate how community-based forest restoration and subsistence knowledge revitalize cultural relationships and Indigenous environmental governance, while also building youth and community capacities.⁴² These studies illustrate how participating in ‘āina work supports a future-oriented sense of self—students practice *kuleana* and envision roles as caretakers and knowledge-holders. Complementing this, a 2021 scoping review of nature-related psychometric instruments in public health synthesizes links between nature connectedness and well-being, suggesting mechanisms by which place-immersed HCBE can strengthen socioemotional outcomes.⁴³ Pulling across strands, HCBE reconnects learners to tools for self-definition by (1) restoring ‘ōlelo Hawai‘i as a living medium of thought and belonging, (2) ensuring assessment and accountability validate Indigenous goals and ways of knowing, (3) cultivating cultural *kīpuka* that enact *pilina* and leadership, and (4) embedding ‘āina-based practice that ties identity to intergenerational responsibilities and futures.⁴⁴ Empirical work shows that high-implementation HCBE settings are associated with stronger identity and engagement, as well as community mindedness and college aspirations.⁴⁵ These are precisely the conditions under which students’ ontological self-efficacy—the capacity to act from one’s Indigenous being and relations—can take root, aligning present learning with future educational, career, and community ambitions.

HO‘OKANAKA: ONTOLOGICAL SELF-EFFICACY

“When a turtle is born, it knows to go to the ocean. It knows which way to go. Our children are also born with a natural sense of direction, but the dissonance of ‘Western’ education dismisses their innate intelligence. By design, its function is to *ho‘olaka* (tame) rather than *ho‘ona‘auao* (educate or enlighten). This colonial education system requires Hawaiians to act against their nature, and so they ignore their internal compass, which often leads them astray to be eaten by birds.”

—Kaleikoa Ka‘eo⁴⁶

Ho‘okanaka means “to make more human,” or “to become human,” and it is a term that Kaleikoa Ka‘eo uses to identify the ethical imperative for Hawaiian education today. *Ho‘okanaka* represents a critical process of rehumanizing an Indigenous population that has been systematically objectified and erased within the colonial and denationalizing education system in Hawai‘i. *Ho‘okanaka* actively reclaims and recenters the inseparable relationship between Indigenous ways of knowing and being, which is described by the ‘ōlelo *no‘eau* (Hawaiian proverb) *He ‘ike ana ia i ka pono*, which means “One has seen (or knows) the right thing to do and has done it.” *Ho‘okanaka* directly challenges the “cultural bomb” by reestablishing a people’s belief in their names, languages, and heritage, and combating the “colonial alienation” that divorces a child’s world of learning from their home and community.⁴⁷

HCBE does not merely concern language acquisition or the intellectual introduction to content within academic institutions; rather, it represents the articulation, elevation, and activation of Hawaiian language, values, and cultural knowledge in everyday lives. This deep engagement with *mo‘olelo*, oral traditions, and the principles

of *naʻauao* allows for a holistic understanding that counters the fragmented, Western view of knowledge. It concerns what Kukahiko et al. predict are the opening of closed ontological frameworks through *hoʻokanaka*, or the development of ontological self-efficacy.⁴⁸ This dynamic process is then employed to either maintain or transform contemporary circumstances, directly counteracting the historical and ongoing cultural dissonance embedded by colonial education. While indicators of *hoʻokanaka* include the potential evolution of students into agents of transformative change, assessments of ontological self-efficacy should look beyond activism for the sake of change itself, and include indicators that students are fulfilling *kuleana* (sense of responsibility) according to their ontological framework (axiology, methodology, epistemology).⁴⁹

Indicators of *hoʻokanaka* highlight the profound agency it bestows upon learners. This includes the capacity and confidence to learn directly from Indigenous repositories of knowledge, to produce adaptive and innovative knowledge grounded in Indigenous foundations, to conduct research framed within Indigenous methodologies, and to actively shape realities according to an Indigenous participatory praxis. This “quest for relevance,” which Ngūgĩ wa Thiong’o characterizes as “the search for a liberating perspective within which to see ourselves clearly in relationship to ourselves and to other selves in the universe,” extends beyond literature to the very teaching and critical approaches within education.⁵⁰ By empowering individuals with this deep connection to their own knowledge systems, *hoʻokanaka* becomes the necessary level of readiness for colonized people to break free from neoliberal fatalism. This colonial mindset, as described by scholar Paulo Freire, perceives inequity as a natural and inevitable consequence of a singular, Western-imposed “survival of the fittest” reality.⁵¹

By cultivating *hoʻokanaka* (ontological self-efficacy) not only as a desired learning outcome but as an ethical imperative, HCBE holds the profound potential to liberate participants of colonial education systems from the “moral and intellectual dependence” that a denationalizing education sought to instill in Hawai‘i. Taiaiake Alfred articulated the ethical imperative of *hoʻokanaka* perfectly in *Peace, Power, Righteousness: An Indigenous Manifesto*: “It is time for our people to live again. [This means] a living commitment to meaningful change in our lives and to transforming society by recreating our existences, regenerating our cultures, and surging against the forces that keep us bound to our colonial past.”⁵² This is a critical step in challenging both Indigenous and non-Indigenous peoples to transcend imposed realities and imagine alternative futurities of their own making. Through critical participatory praxis, *hoʻokanaka* empowers individuals to engage change with their rich historical past, to firmly position themselves in the present, and to actively move toward a future determined by their own self-definition.

THEORY AND METHODOLOGY

This study introduces community readiness as a theoretical framework that articulates, elevates, and activates a repetitive process of cultural and educational engagement, rooted in ancestral knowledge systems (e.g., *ʻike āina*, *moʻolelo*, etc.) and *pilina* (relational values). This model of community readiness (described in the introduction)

enables communities and individuals to adaptively navigate change and sustain collective well-being and resilience over generations. There are five main characteristics of this study's theoretical framework: (1) it is a generative model of community readiness; (2) it uses an Indigenous value-based framework that identifies desired educational outcomes, competencies, and relational states critical to Indigenous student identity and success; (3) it incorporates *makawalu* as an Indigenous methodology; (4) It uses a participatory action research (PAR) design; (5) each of its methods are aligned to one or more of the first four characteristics.

GENERATIVE MODEL OF COMMUNITY READINESS

Academic discussions on community readiness have traditionally been held from a deficit perspective that positions Indigenous communities as the recipients of help from outsiders to successfully address health, sociocultural, and/or economic issues. Even when community readiness research engages in participatory processes that are inclusive of Indigenous perspectives, community readiness research can still operate from a deficit perspective that positions university scholars, industrial representatives, and policymakers as the advisers, consultants, and “experts” from whom communities require “expertise” to develop response-readiness.⁵³ This deficit perspective often fails to recognize existing Indigenous ways of knowing and being that are already familiar, adaptive, innovative, resilient, sustainable, and even optimal given the cultural and environmental contexts of Indigenous communities. This more traditional discussion of community readiness is also a reactionary strategy that reduces the role of Indigenous communities to the mitigation of colonial outcomes (i.e., symptoms of anomie and cultural dissonance). This deficit perspective of community readiness does not enable communities to increase their capacity for community sustainability or resilience, and it is neither an iterative nor a generative process.

Generative knowledge, which emerges from indigenous knowledge and other contemporary streams of knowing, should guide institutional thought and action to result in social and cultural vibrancy, strengthened relations with ‘ohana and others, well-being of ‘āina, economic vitality, and innovative learning and inquiry in the teaching environment.

—Ah Nee-Benham⁵⁴

When Ah Nee-Benham opened Hawai‘inuiākea, the School of Hawaiian Knowledge, she reflected on the processes of making and mending nets, identifying three key elements of practice that expanded the institutional vision and mission of the University of Hawai‘i at Mānoa to include Native Hawaiians: (1) *articulate* the vision and mission of the work; (2) *elevate* understanding of the historical, internal, and external contexts, so that stakeholders can hold value and participate in the journey of work; and (3) *activate* future leadership to strengthen and sustain the work through the continuous reassessment of the work.⁵⁵ These three concepts represent the progressive stages of growth for participants to develop community readiness, participatory praxis, and ontological self-efficacy.

“Cross-generational transmission of skills, knowledge, and relationships with particular natural resources is crucial to the longevity of community-based caretaking and governance systems. Young people must learn not just particular steps of cultural practices but the full process. . . . True perpetuation of knowledge and skill takes sustained practice, far more than can be provided through experiences at an occasional camp or engagement in a single meeting.”

— Malia B. Vaughan⁵⁶

The design and implementation of a generative community-readiness framework that guides the development of *ho’okanaka* is a liberating countercolonial education rooted in a philosophy that prioritizes the holistic development of learners within a vibrant Hawaiian language and cultural context. This approach aims to foster deep engagement in language and knowledge, operationalizing relationships to “people, place, and purpose” through various cultural forms. Drawing from Paulo Freire’s *Pedagogy of the Oppressed*—the concept of literacy as a liberating educational process to develop critical praxis—HCBE can be designed to achieve the desired success indicators of *ho’okanaka* through six interconnected stages or competencies:⁵⁷

1. **Introduce relational values and vocabulary.** Initial exposure of learners to Hawaiian relational values and language vocabulary within a meaningful cultural context.
2. **Meaning-making.** Students construct understanding and personal relevance to relational values, language acquisition, and cultural concepts.
3. **Disrupt circles of certainty.** Learners critically examine existing assumptions and colonial narratives, recognizing alternative Indigenous perspectives.
4. **Reconceptualization or development of worldview.** Students integrate new knowledge into a broadened understanding of the world, informed by Hawaiian axiology, methodology, and epistemology.
5. **Envisioning a world of their own making.** Learners develop the capacity to imagine and articulate future realities grounded in Indigenous self-definition.
6. **Development of *ho’okanaka* (critical praxis, or ontological self-efficacy).** Students actively apply their knowledge and relational values (worldview) to transform their circumstances and contribute to collective flourishing.

INDIGENOUS VALUE-BASED FRAMEWORK

“Power is created by the values we invest in. We give or take power according to how we align our actions to those values. When we act against our values, we give power to those who hold them. The opposite creates an alternative reality . . . one of our own making.”

—Auntie Hokulani Holt-Padilla⁵⁸

The contemporary reemergence of a community readiness framework in Hawai‘i serves as a critical countercolonial lens. This is particularly evident through *Nā Hopena A’o*, officially known as Policy E-3 of the Hawai‘i Department of Education (HIDOE), explained here: “The purpose of this policy is to provide a comprehensive outcomes framework to be used by those who are developing the academic achievement, character,

[and] physical and social-emotional well-being of all our students to the fullest potential. . . . *Nā Hopena A'o* ("HĀ") is a framework of outcomes that reflects HIDOE's core values and beliefs in action throughout the public educational system of Hawai'i. The Department of Education works . . . as a system that includes everyone in the broader community to develop the competencies that strengthen a sense of belonging, responsibility, excellence, *aloha*, total-well-being, and Hawai'i (the BREATH framework) in ourselves, students, and others."⁵⁹ Each of these values provides a direct counterpoint to the values embedded within US colonial education systems.

Belonging directly challenges the objectification and alienation fostered by colonial education, which sought to reduce Indigenous individuals to impersonal objects and sever their connections to their culture and community.⁶⁰ By emphasizing a sense of relatedness to family, teachers, and peers and promoting school connectedness, *belonging* counters the isolation and liminal identities that are symptoms of colonial education's success.⁶¹

Responsibility (*kuleana*) stands in opposition to the imposed passivity and state dependency cultivated by colonial systems.⁶² While colonial education sought to create a populace reliant on the colonizer, the value of *responsibility* emphasizes self-discipline, integrity, and community-mindedness, fostering active stewardship and self-sufficiency that directly challenges the "complexes of behavior and mental attitudes that reflect their colonial situation."⁶³

Excellence provides a counternarrative to the colonial assertion of Indigenous "non-achievement" and the "brain drain" phenomenon. By promoting a growth mindset, purpose, self-efficacy, curiosity, and resilience, *excellence* directly challenges the notion that Indigenous knowledge is deficient or that success must be defined by external, Western standards. It supports the production of new knowledge based on Indigenous foundations, as part of *ho'okanaka*.⁶⁴

Aloha directly contrasts the individualism and competitive ethos inherent in market capitalist education. Emphasizing generosity, gratitude, and a collective orientation, *aloha* fosters the relationality and interdependence (*nā pilina*) that characterize Hawaiian epistemology, providing a powerful antidote to the fragmented social relations promoted by colonial values.⁶⁵

Total well-being offers a holistic response to the psychophysical harms, cultural dissonance, and anomie resulting from colonial disruption.⁶⁶ By focusing on physical activity, mindfulness, and positive school climate, *total well-being* seeks to restore the balance and harmony that were systematically undermined by colonial education, moving beyond merely addressing academic outcomes to encompass the comprehensive flourishing of students.⁶⁷

Hawai'i directly confronts the deculturalization, epistemicide, and erasure of Hawaiian language and history. By emphasizing culturally based education, sense of place, and bilingualism, the value of *Hawai'i* recenters Indigenous epistemology and worldview, ensuring that education is rooted in the unique cultural and linguistic context of the Hawaiian islands.⁶⁸

While the Hawai'i Department of Education's mission statement currently focuses on general academic achievement, character, and social-emotional well-being without

explicitly reflecting the Supreme Court's decision regarding Hawaiian language learners, the BREATH framework offers a pathway for aligning institutional practices with constitutional responsibilities. This framework, as a liberatory education, guides constituents through a process that operationalizes HCBE as an ethical imperative. It calls for the articulation, elevation, and activation of Indigenous values within the inputs, outputs, and outcomes of an iterative and countercolonial change process of community readiness. This intentional approach ensures that Hawaiian language and cultural knowledge are not merely introduced as intellectual content but deeply internalized and applied in everyday lives, fostering *ho'okanaka* and moving toward a future of self-determination and flourishing for all learners.

INDIGENOUS METHODOLOGIES

Indigenous methodologies address the politics and strategic goals of the researcher, while the methods become the “means and procedures through which the central problems of the research are addressed.”⁶⁹ In this way, the specific challenges and nuances that have become the collective experiences of colonized peoples can be used as a predictive framework in the research design of studies that involve Indigenous populations.⁷⁰ What Linda Tuhiwai Smith makes clear in her “Twenty-Five Indigenous Projects” is that the application of Indigenous methodologies should be intentional and purposeful, grounded in cultural knowledge and practices but also implemented through its specific methods, and therefore replicable.⁷¹ This study is guided by a participatory action research design framed within Indigenous values that prepare individuals to fully contribute to the sustainability—continuous adaptation, innovation, and cultivation—of *kaiāulu* (community) and its responses to perpetual change.

MAKAWALU METHODOLOGY

Politics and Strategic Goals

Makawalu literally translates to mean “eight eyes”; therefore, the application of this concept is not only meant to disrupt singular and hegemonic narratives that ignore, reject, and/or actively erase Indigenous identities, it is meant to dismantle colonial isomorphism.⁷² Colonial isomorphism includes the polarization of bipartisan perspectives that inhibit adaptation, innovation, and the iteration of the change process itself.⁷³ The dominant narrative of the United States empire is maintained by the mass production of false dichotomies within its dual-party system, or the oversimplification of social, political, and economic issues that assume all citizens and their perspectives are represented on either side of its bipartisan debates. Thus, the politics of *makawalu* broadens research beyond the binary, and its strategic goals activate repeated participatory processes in the navigation of desired futurities.

Methods

Makawalu is the critical praxis of researchers who intentionally incorporate data collection and analysis methods that are inclusive, diverse, and implement personal,

individual meaning-making. This Indigenous methodology intentionally seeks the myriad of perspectives from the participants who experience a particular phenomenon and who not only provide qualitative and quantitative information for data collection but also become the “meaning-makers” for the data analysis. *Makawalu* is the foundation for participatory action research that allows various perspectives to occupy the same space, to have both a seat and a voice at the proverbial table to discuss, navigate, and negotiate equitable and reciprocal ways for communities to move forward. For this reason, it is important to recognize *makawalu* as an orientation that prioritizes relationships as the “ends,” not the means.

PARTICIPATORY ACTION RESEARCH (PAR) DESIGN

Authentic participatory action research and pedagogical practices grounded in Indigenous methodologies (such as *makawalu*) foster empowerment by flattening traditional power hierarchies and centering the voices and agency of Indigenous learners themselves. PAR recognizes that schools and communities function within unique contexts, and therefore relevant and useful meaning-making must happen from the participant perspectives of that particular place. PAR is used in the design of this study as a quasi-mixed-methods, sequential explanatory design, which conducts the quantitative analysis first, followed by the qualitative.⁷⁴ The quantitative results identify possible relationships between variables while the qualitative analysis can assess the predictive quality between *inputs* and *outputs* by identifying “common experiences” or intersections in the data.⁷⁵ In other words, the qualitative data is prioritized as the “meaning-making” data that can explain connections between quantitative variables and data sets (i.e., cultural dissonance formula), which allows researchers to understand the extent to which the initial quantitative findings generalize to the various stakeholder groups. PAR “is predicated on the collaborative relations of knowledge production with members of that group”; it “explicitly aims to contest existing relations of power and to envision and live new relations.”⁷⁶ PAR is transformative because it is an iterative process that normalizes the Office of Hawaiian Education’s four standards of PAR:

1. **Collective participation** advocates for the authentic participation of the *researched*, who not only have a seat at the table but also a voice to maintain or change their circumstances according to their participatory praxis.
2. **Pono and reciprocal relationships** focuses on relationships as the ends, *not* the means, because the ability to build, strengthen, and prioritize relationships is essential to community sustainability and resilience outcomes.
3. **Commitment to an iterative process of collective, self-reflective inquiry** requires a participatory process in which communities (1) *review* information and data, (2) *reflect* and create meaning, and (3) *renew* and repeat based on informed community decisions.
4. **Shift of power as researched become the researchers** operationally flattens the hierarchy, a process that advocates for power to intentionally be shared between the *researcher* and the *researched*, blurring the line between them until the researched become the researchers.

METHODS ALIGNMENT

As stated in the PAR design section, this study uses a quasi-mixed-methods, sequential explanatory design. The quantitative descriptive analysis that used the cultural dissonance formula in HIDEOE student competency data across four core subjects (math, language, social studies, and science) provided evidence that cultural dissonance was a higher predictive indicator of competency than economic advantage.⁷⁷ These results encouraged the design of the BREATH survey, which asked participants to rate their BREATH experiences individually, within relationships, groups, and the school and community as a whole. An open-ended question asked students to share experiences that strengthened each component of BREATH for them. This survey has been distributed to students, teachers, administration, staff members, and community partners over the last five years (2020–25) to understand the conditions, P4 (practices, projects, programs, policies), and experiences that promote community readiness and preemptively shift environments suffering from cultural dissonance. Participants included the student researchers who have conducted this study, students who were 75 percent Native Hawaiian and 25 percent non-Native Hawaiian. The gathering of this holistic perspective aligns to the tenets of the *makawalu* methodology and the PAR design of this study. The qualitative data analysis used three stages of a constant comparative analysis. During the open coding, student researchers used the BREATH framework to identify how participants experienced community readiness. During the axial coding stage, student researchers coded the qualitative data to find narratives that described experiences with HCBE, and what experiences might be reconnecting students to tools for self-definition.⁷⁸ During the selective coding stage, student researchers sought to understand whether predictive relationships existed among the variables, categories, and subcategories of participant data.

FINDINGS

1. How can HCBE strengthen community readiness values as desired student outcomes?

The student researchers looked at the BREATH survey data from a non-*kaiapuni* (non-immersion) high school in Hawai‘i that had 843 participants. The student researchers wanted to understand what the impact of HCBE might have on students’ sense of BREATH within the same environmental contexts and circumstances, therefore limiting the data sample to the singular school. The student researchers found that at this particular high school, the students who engaged in HCBE as part of their school learning activities responded with higher average scores across all BREATH categories than those students who did not engage school-provided HCBE experiences (see table 1). This quantitative descriptive analysis also encouraged student researchers to understand how their exposure to HCBE through their participatory action research might be strengthening their own BREATH, and they provided sample narratives alongside the descriptive analysis in table 1 below.

TABLE 1. IMPACT OF HCBE ON STUDENT BREATH

BREATH	Students Who Did Not Engage in School-Provided HCBE (499)	Students Who Engaged in HCBE as Part of Their School Experiences (344)	Impact (Percent) of HCBE on BREATH	How HCBE strengthened BREATH for student researchers
Belonging	2.58	2.75	+7 percent	"I was drawn to this work out of a desire to become more educated about Hawai'i and how I can participate in my community in meaningful ways. My initial <i>why</i> was my deep sense of <i>kuleana</i> as a settler on stolen Native land, to be a good steward by gaining an understanding of the values and needs of <i>Kānaka Maoli</i> . Living on this land is a privilege and a responsibility."
Responsibility	2.21	2.43	+10%	"During my time at the Office of Hawaiian Education (OHE), we looked to ' <i>ōlelo no'eau</i> for wisdom and guidance on the respective projects I've been involved with, one of which being ' <i>he 'ike 'ana ia i ka pono</i> '—one has seen the right thing and does it. I feel this applies to the knowledge I have gained through my experience at OHE, to have <i>pilina</i> with the research I engaged in, the communities it may affect, and with the people who have given me <i>kākōo</i> to do so. I feel that it will be a <i>kuleana</i> that lasts a lifetime."
Excellence	2.49	2.77	+11%	"The <i>why</i> that prompted me to engage in this work is the Hawaiian system of learning and how it is unique to Hawai'i, to our <i>kūpuna</i> , but still beneficial for people around the world. . . . It is about applying these practices now so that all students and people can better understand who they are, where they come from, and how to move forward."
Aloha	2.40	2.69	+12%	"The moment I felt like I had the responsibility to act was when the research team before me welcomed me with open arms to the data they'd been working on. They treated me with such <i>aloha</i> , and we were able to use our differences to advantage when working together. What I admire about working with OHE over the years has been meeting all the people who are pursuing different life paths unified by the love for Hawai'i and its people."
Total Well-Being	2.43	2.65	+9%	"My OHE internship experiences have equipped me to overcome any current or potential challenges because it has aided in liberating and healing me. Growing up never feeling connected to being <i>Kānaka Maoli</i> and never seeing the importance of it until I came to college, I never thought I would be here—filled with ' <i>ike</i> , <i>kuleana</i> , <i>pilina</i> , and <i>aloha</i> that, honestly, saved me. Learning about the historical and contemporary issues that occur throughout Hawai'i, Pasifika, and the diaspora, I feel that my experiences have equipped me with skills to address those issues, simply by perpetuating and practicing Hawaiian ways of knowing and being. Much of my challenges growing up were with cultural dissonance, especially in college, as I navigated different intersecting identities that took a toll on my mental and physical health. This internship experience has allowed me to really recognize the importance of taking care of myself in order to be able to fulfill my <i>kuleana</i> ."

BREATH	Students Who Did Not Engage in School-Provided HCBE (499)	Students Who Engaged in HCBE as Part of Their School Experiences (344)	Impact (Percent) of HCBE on BREATH	How HCBE strengthened BREATH for student researchers
Hawai'i	2.43	2.65	+15%	"My first 'āha' moments with OHE started with the literature reviews we did at the beginning of my internship. Our <i>mōolelo</i> provides deep and complex understandings of the world that surrounds us, but it also can guide us in the work we do in the present and future. To know where we are going, we must know where we have been. A great example of this would be through the <i>mōolelo</i> of Kekūhaupi'o, and his journey as a student and as a <i>kumu</i> ."

How can Hawaiian culture-based education (HCBE) develop community readiness by reconnecting students to tools for self-definition that reestablish positive perceptions of identity, and reciprocal relationships to community and environment?

Using our literature review as a guide to how HCBE might be developing community readiness among our student researchers over the last five years, student researchers investigated how HCBE might be (1) restoring *‘ōlelo Hawai‘i* as a living medium of thought and belonging; (2) ensuring assessment and accountability validate Indigenous goals and ways of knowing; (3) cultivating cultural *kipuka* that enact *pilina* and leadership; and (4) embedding *‘āina*-based practice that ties identity to intergenerational responsibilities and futures.⁷⁹ Their analysis provided the following findings regarding how HCBE helps students reestablish positive perceptions of identity and reciprocal relationships to community and environment.

Restores ‘Ōlelo Hawai‘i as a Living Medium of Thought and Belonging

Across data sets, interns describe normalizing everyday use of *‘ōlelo Hawai‘i* (greetings, key terms, *oli* and *mele* context) and thinking with Hawaiian concepts rather than just translating them. Excerpts explicitly link language use to belonging and confidence (“I used *‘ōlelo Hawai‘i* in work every day, and it made me feel part of the team”) and to conceptual framing (“BREATH terms helped me name what I value”). Language appears as both practice (daily usage, pronunciation, honoring *‘okina* and *kahakō*) and epistemic lens (shaping how interns narrate identity). *Readiness mechanism*: Language normalizes collective identity and shared vocabulary for action, lowering barriers to participation in community projects and signaling cultural safety. *Patterning*: *‘Ōlelo* frequently occurs with number 3 above, cultivating cultural *kipuka* that enact *pilina* and leadership, underscoring how language facilitates relational leadership and cohesion.

Ensures Assessment and Accountability Validate Indigenous Goals and Ways of Knowing

Participants frequently reference rubrics, surveys, deliverables, and reporting, but they describe them in ways that center community-defined outcomes (e.g., *pilina* growth, *kuleana* enactment, service to *‘āina*) rather than only conventional metrics.

Interns discuss data use for reflection (not surveillance), iterative cycles of inquiry, and alignment to Indigenous values (“measure what matters to our *kūpuna* and community”). *Readiness mechanism*: Assessment becomes a learning scaffold that legitimizes Indigenous aims (relationship quality, reciprocity, cultural safety) and creates transparent accountability to community partners. This fosters readiness by clarifying what *good* looks like for Indigenous success, making progress legible to both students and partners. *Patterning*: Strong occurrence with number 3 above, cultivating cultural *kīpuka* that enact *pilina* and leadership, indicates that evaluation tools are embedded in relational spaces (*hui*, mentoring), not isolated compliance tasks. Occurrence with number 4 above, embedding ‘āina-based practice that ties identity to intergenerational responsibilities and futures, shows that evidence is often grounded in ‘āina-based outcomes (restoration tasks, stewardship goals).

Cultivates Cultural Kīpuka That Enact Pilina and Leadership

This was the dominant theme. Interns repeatedly name *pilina*, *hui*/teamwork, mentoring, ‘ohana-like environments, and leadership through *kuleana*. They describe *kīpuka* (protective cultural “islands”) at multiple scales: program cohorts, work sites, and networks spanning school, community, and ‘āina. Leadership is relational and reciprocal (listening, serving, colearning) rather than positional. Students narrate identity affirmation through shouldering responsibility and through intergenerational exchange with *kūpuna* and community experts. *Readiness mechanism*: *Kīpuka* act as microinstitutions that rehearse the capacities communities need (coordination, trust, mutual aid, distributed leadership). They translate identity into action via *kuleana*, making readiness tangible and repeatable.

Embeds ‘Āina-Based Practice Tying Identity to Intergenerational Responsibilities and Futures

Excerpts frequently situate learning on and with ‘āina (*mālama ‘āina* workdays, *lo‘i, loko i‘a*, restoration tasks). Students connect self-definition to *mo‘okū‘auhau* (genealogy), *kupuna* guidance, and future generations, often naming responsibility to place as a core outcome (“doing my part to make Hawai‘i better for future generations”). Field experiences evoke embodied knowledge (skills, protocols) and ethical orientation (reciprocity, stewardship). *Readiness mechanism*: ‘Āina-based practice ties identity to roles in ecological and cultural continuity, cultivating forward-looking commitments and practical know-how that communities can mobilize in environmental stewardship, food systems, and cultural revitalization. *Patterning*: The strongest occurrence in the corpus is numbers 3 and 4 above, suggesting that *pilina-rich kīpuka* are most potent when anchored to ‘āina tasks and sites.

Reconnects Participants to Tools for Self-Definition

Hawaiian culture-based education (HCBE) reconnects participants to tools for self-definition by weaving language, evidence, relationships, and place into a coherent

foundation for identity and action. Restoring ‘ōlelo Hawai‘i provides a shared lexicon of belonging, allowing students to articulate values and make decisions in culturally resonant terms. When assessment and accountability foreground Indigenous aims, students recognize their growth in *pilina*, *kuleana*, and stewardship as legitimate and measurable, which fuels both motivation and institutional credibility. At the same time, *kipuka* serve as relational spaces that implement reciprocity and care, transforming individual identity into collective capacity through coordination, mentoring, and mutual accountability. Finally, ‘āina-based practice anchors identity in responsibilities to ancestors and descendants, linking self-definition to intergenerational futures and sustaining long-term commitments to community and ecological well-being. Together, these mechanisms develop community readiness by aligning who students understand themselves to be with what their communities need them to do, and by providing structures (*kipuka*), evidence (assessment), language (‘ōlelo), and practice (‘āina) that make that alignment durable.

2. What Types of P4 Strategies (Practices, Projects, Programs, and Policies) Help Students to Articulate, Elevate, and Activate Ontological Self-Efficacy?

This study examined how P4 strategies help students articulate, elevate, and activate ontological self-efficacy across six developmental stages. Analysis of 429 student reflections yielded 248 excerpts coded into at least one stage. The progression illustrates how students move from initial exposure to relational values and language toward critical praxis and collective flourishing, with different types of P4s scaffolding growth at each stage of ontological self-efficacy development.

TABLE 2. P4 THAT SUPPORT DEVELOPMENT OF ONTOLOGICAL SELF-EFFICACY

Stage of Development	Finding	Sample Narrative	Significance
Stage 1. Introduce Relational Values and Vocabulary	Students described first encounters with ‘ōlelo Hawai‘i, relational values (<i>aloha</i> , <i>kuleana</i> , <i>pilina</i>), and cultural protocols as pivotal entry points.	“Growing up away from Hawai‘i, my access to any Hawaiian education was virtually nonexistent. . . . I felt called to apply for a research position with OHE.”	These practices (daily greetings, use of cultural terms, <i>oli</i> and <i>mele</i>) and programs (internships offering language exposure) establish a lexicon of belonging that signals cultural safety and provides shared vocabulary for identity formation.
Stage 2. Meaning-Making	As exposure deepened, students began to connect cultural concepts to personal meaning.	“Initially, I did not have a deep understanding of why I wanted to engage in this work. . . . However, this changed when I was introduced to the schools, people, and stories behind the data we were collecting.”	Here, projects (e.g., research tasks tied to Hawaiian education data) and practices (structured reflection, journaling, mentoring) facilitated comprehension, helping students align relational values with their own trajectories.

Stage of Development	Finding	Sample Narrative	Significance
Stage 3. Disrupt Circles of Certainty	Some students explicitly <i>challenged colonial assumptions</i> and questioned dominant narratives.	"My reasons for engaging in the work with OHE . . . expanded with my <i>kuleana</i> . I want to align myself with work that challenges colonial norms in our public schools."	This stage was less frequent but critical, supported by policies (e.g., rethinking assessment standards) and projects (e.g., curriculum analyses) that exposed students to alternative Indigenous epistemologies and encouraged critical interrogation.
Stage 4. Reconceptualization and Development of Worldview	Students integrated Hawaiian epistemologies into a broader worldview.	" <i>Āina</i> and <i>kaiiūlu</i> have become so central to my experiences. . . . The research we pursued integrates decolonizing and Indigenous frameworks that change my worldview."	Programs (such as research internships) and projects (<i>āina</i> -based inquiry, constellation methodology) enabled students to see Hawaiian frameworks as legitimate epistemologies, catalyzing a reorientation of identity and knowledge systems.
Stage 5. Envisioning a World of Their Own Making	Students articulated future visions grounded in <i>kuleana</i> .	"When I'm asked the question, 'Why do you want to become a doctor?' I can now give an answer that I'm proud of. . . . it awakened my sense of <i>kuleana</i> for Hawai'i's future."	This future-oriented stage was supported by programs (internship pathways into medicine, education, and community leadership) and policies that prioritize Indigenous futurities. P4s at this stage help students see themselves as agents of collective futures.
Stage 6. Development of Ho'okanaka (Critical Praxis and Ontological Self-Efficacy)	Finally, students described applying values and knowledge to transform circumstances.	"Being both a proud Native Hawaiian and a science enthusiast, . . . I learned how to create my own space where I could celebrate both of my backgrounds and begin to rebuild the bridge between them."	This praxis was most visible when practices (daily use of <i>ōlelo</i> , leadership roles), projects (<i>āina</i> restoration initiatives), and programs (mentorship and research teams) converged to empower students to act. These experiences cultivate <i>ho'okanaka</i> —active, relational leadership in service of a flourishing community.

Across the six stages, P4s collectively scaffold a trajectory of ontological self-efficacy. Practices provide daily enactments of relational values; projects engage students in collective inquiry and *āina*-grounded work; programs offer sustained mentoring and structured pathways for identity development; policies legitimize Indigenous frameworks, ensuring critical disruptions and envisioning futurities are institutionally supported. Together, these P4 strategies cultivate readiness for *ho'okanaka*, where students not only articulate and elevate Indigenous self-definition but also activate it in service of collective flourishing. It is important to restate that the student

researchers’ journey through these six stages of ontological self-efficacy happened in direct response to their participatory action research, and that their commitment to the Office of Hawaiian Education’s four standards of PAR and pedagogical practices grounded in Indigenous methodologies (such as *makawalu*) provided opportunities for empowerment by flattening traditional power hierarchies, centering participant narratives, and activating the agency of the student researchers themselves.

TABLE 3. P4 STRATEGIES STIMULATING ONTOLOGICAL SELF-EFFICACY PROCESSES

Stage	Ontological Self-Efficacy Process	Supporting P4s
1. Introduce Relational Values and Vocabulary	Exposure to ‘ōlelo, cultural terms, and relational values.	Practices (‘ōlelo use, oli, greetings); programs (internships with cultural grounding)
2. Meaning-Making	Connecting values to personal relevance and goals.	Projects (Hawaiian education research, data analysis); practices (reflection, mentoring)
3. Disrupt Circles of Certainty	Questioning colonial narratives and assumptions.	Policies (alternative metrics, Indigenous assessments); projects (curriculum critique)
4. Reconceptualization of Worldview	Integrating Hawaiian epistemologies and methodologies.	Programs (research internships, training in methodology); projects (‘āina-based inquiry, constellation method)
5. Envisioning Futures	Imagining Indigenous futures rooted in <i>kuleana</i> .	Programs (career pathways, mentorship); policies (Indigenous futurity frameworks)
6. <i>Ho‘okanaka</i> and Critical Praxis	Applying knowledge to transform community circumstances.	Practices (daily enactment of ‘ōlelo, <i>kuleana</i>); projects (‘āina restoration, service); programs (leadership roles, team mentoring)

DISCUSSION

The findings of this study affirm and extend a growing body of research demonstrating that Hawaiian culture-based education (HCBE) strengthens student identity, community readiness, and ontological self-efficacy by centering Indigenous epistemologies and practices. Previous studies have shown that high-implementation HCBE settings are associated with stronger socioemotional development, engagement, and aspirations for Indigenous students.⁸⁰ Our results corroborate these outcomes, but also highlight the specific mechanisms—‘ōlelo *Hawai‘i*, *kipuka*, culturally valid assessment, and ‘āina-based practice—that transform identity development into capacities for leadership and the flourishing of communities.

Language revitalization emerged as a central readiness mechanism in our data, echoing Seto’s argument that restoring ‘ōlelo *Hawai‘i* is inseparable from cultural

identity and future self-definition.⁸¹ Similarly, our findings on culturally valid assessment align with Kūkea Schultz and Englert's work showing that Indigenous goals must shape evaluative practices in order to legitimize growth in *pilina*, *kuleana*, and stewardship.⁸² This convergence suggests that institutional accountability can only be achieved when grounded in Hawaiian cultural values, challenging dominant educational frameworks that privilege external benchmarks.

The significance of relational spaces also resonates with Kēhaulani Vaughan et al.'s work on cultural *kipuka*, which described intentional spaces that nourish belonging, leadership, and *kuleana* through reciprocal practices.⁸³ Our data similarly demonstrate that students experience *kipuka* as microinstitutions of readiness, in which identity translates into distributed leadership, mentoring, and collective accountability. This strengthens the argument that Indigenous educational spaces not only preserve cultural identity but also serve as incubators for future leadership.

Finally, the prominence of 'āina-based practice in our findings reflects broader research linking place-based learning to ecological knowledge, intergenerational responsibility, and future-oriented self-concepts.⁸⁴ These studies illustrate how commitment to 'āina fosters both identity in place and readiness to act as caretakers of community and ecosystem health. Our results reinforce this view, showing that stewardship and genealogical ties to 'āina deepen student commitments to intergenerational futures.

Taken together, this study advances the literature by explicitly connecting HCBE's contributions to community readiness and ontological self-efficacy, moving beyond identity affirmation toward actionable praxis. While earlier research has documented positive outcomes of HCBE, our findings clarify how BREATH values and readiness mechanisms provide the scaffolding through which Indigenous learners not only reclaim identity but also cultivate the skills and commitments necessary to lead collective transformation.

CONCLUSION

This study demonstrates that Hawaiian culture-based education (HCBE) provides a generative pathway for developing community readiness by reconnecting students to tools of self-definition rooted in 'ōlelo Hawai'i, 'āina, *pilina*, and *kuleana*. Through participatory action research, student researchers documented how HCBE strengthens BREATH values—belonging, responsibility, excellence, *aloha*, total well-being, and Hawai'i—while scaffolding the development of ontological self-efficacy across six stages, from the introduction of relational values to the activation of *ho'okanaka* (critical praxis). The findings highlight that HCBE is not only a culturally sustaining pedagogy but also a countercolonial change process that equips students to critically engage in authentic participatory research and pedagogical practices grounded in Indigenous methodologies (such as *makawalu*) to interrogate colonial legacies, envision Indigenous futures, and act collectively toward the fostering of thriving communities by flattening traditional power hierarchies and centering the voices and agency of Indigenous learners themselves. By centering Indigenous epistemologies and methodologies, HCBE reframes assessment, leadership, and accountability as relational

practices aligned with ancestral knowledge and intergenerational responsibility. This positions HCBE as a critical alternative to colonial educational systems that have historically produced cultural dissonance and negative outcomes for Native Hawaiian and Pacific Islander students. Ultimately, the evidence underscores that cultivating community readiness through HCBE is not only a preemptive strategy that reimagines the inputs and outputs of colonial education systems (rather than reactive ones that focus on cultural dissonance and anomie as outcomes), it is both an educational imperative and an ethical one. It restores intellectual sovereignty, heals cultural dislocation, and prepares learners to sustain vibrant, resilient communities in Hawai'i and beyond.

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Mahalo to Kaleikoa Ka'eo, for his years of scholarship and for sharing so much of his time and *mana'o* on *ho'okanaka* with us. *Mahalo* to Antie Hokulani Holt-Padilla for sitting down to talk-story and for sharing her wisdom. *Mahalo* to Kamuela Yim for months of ideating what community readiness meant to our *kūpuna*, what it means currently, and what it offers the future. This manuscript and the development of *ho'okanaka* in Hawai'i is a multigenerational effort in and with *āina*, and always in collaboration with our past, present, and future. *Ho'okanaka* manifests in the *a'o* (teaching and learning) between our students and their *kumu*, or learners and our cultural practitioners, who guide us in strengthening our *pilina* to people, place, and purpose. Through them we learn to articulate our collective values as a people, elevate those values as community pillars that protect and sustain our place(s), and activate purpose by applying those cultural values in practice as unique contributions to the survivance of our *kaiāulu* (community) or *lāhui* (nation).

APPENDIX

FIGURE 1. “My Journey of A’o” Poem with English Translation

“My Journey of A’o”	
<p><i>I don't remember when I got lost, on my journey of áo. When did my wa'a become wa'awa'a, or my kumulipo ho'onalo? I failed to read the compass given to me, a shame to my mookū'auhau.</i></p> <p><i>No waypoints in sight, from stern to bow . . . an empty waihona for my mo'o lau.</i></p> <p><i>When makani ikaika found me nāwaliwali, my eyes closed to hiamoe.</i></p> <p><i>As I drifted off, I dropped my hoe, and 'uhane whispered, “Aloha au iā 'oe.”</i></p> <p><i>And when alaula paved the eastern sky, the tides below began to ku'e.</i></p> <p><i>The new sun wrested me from malu make, and kūpuna yelled, “e ala ē!”</i></p> <p><i>As I opened my maka and huli alo ia Kahiki, my wa'a was with 'au moku.</i></p> <p><i>I straightened my kua, and my ihu raised too, now I ho'okele by ulu hōkū.</i></p> <p><i>Once a captive of circumstance, a castaway with no mo'olelo.</i></p> <p><i>I've since grasped my hoe as knowledge in action . . . He 'ike 'ana ia i ka pono.</i></p>	<p>A'o: teaching and learning</p> <p>Wa'a: canoe</p> <p>Wa'awa'a: Big and/or stupid</p> <p>Kumulipo: origin or genesis story</p> <p>Ho'onalo: forgotten</p> <p>Mo'okū'auhau: a story, history or genealogy of ancestors</p> <p>Waihona: as in <i>waihona o ka na' auao</i>, a repository of learning; as in <i>waihona hali'a</i>, a container that holds memories</p> <p>Mo'o lau: descendants</p> <p>Makani ikaika: storm</p> <p>Nāwaliwali: weak</p> <p>Hiamoe: sleep</p> <p>Hoe: paddle</p> <p>'Uhane: ghost or spirit of a deceased person</p> <p>Aloha au iā 'oe: I love you</p> <p>Alaula: early dawn, or first gleam of red light on the horizon; referred to the flaming path of <i>Kāne</i></p> <p>Ku'e: the back and forth motion of the tide; also, <i>kū'ē</i> that means to oppose, protest, or resist</p> <p>Malu make: shadow of death</p> <p>Kūpuna: ancestors</p> <p>E ala ē: to wake up; when used with <i>kū'ē</i> means to rise up and revolt; also, refers to a chant used to greet the rising sun during early dawn</p> <p>Maka: eyes</p> <p>Huli alo iā Kahiki: turn to face <i>Kahiki</i> (destination, horizon); to turn and face one's future</p> <p>'Au moku: a fleet of ships</p> <p>Kua: back or main beam; to <i>ho'okua</i> means to persevere even when interest and pleasure have gone from the task; also refers to the connection to past and present generations</p> <p>Ihu: the nose, or the bow of the boat; an elevated nose indicates pride</p> <p>Ho'okele: to sail as a master of a ship or canoe; to navigate</p> <p>Ulu hōkū: constellations of stars used to <i>ho'okele</i> (navigate)</p> <p>Mo'olelo: story, narrative, history or tradition</p> <p>He 'ike 'ana ia i ka pono: Hawaiian proverb that says one has seen the right thing to do and has done it</p>

NOTES

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3. Description of the *kaubale* system adapted from traditional Hawaiian community structure. The *kaubale* was a familial community design that placed various roles and responsibilities upon different *hale* (houses) within the homestead—such as the *hale noa* (house free from *kapu*), *hale mua* (men's meeting house), *hale kuke* (cooking house), and *hale pe'a* (menstruation house). This design reflects the *mana'o* (idea) that knowledge is never kept in one house, disrupting US colonial politics of knowledge that prioritize market-based education systems.
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13. Henry S. Townsend, "The Edict Has Gone Forth," *The Progressive Educator* 1, no. 4 (1895); Derek Taira, "Imua, Me Ka Hopo 'Ole—'Forward, without Fear': Native Hawaiians and American Schooling in Territorial Hawai'i, 1900–1941" (PhD diss., University of Wisconsin, Madison, 2016), 4–6.
14. *Report of the Minister of Public Instruction to the Legislative Assembly of 1886* (Honolulu, 1886), 6; Taira, *Imua, Me Ka Hopo 'Ole*, 110–11.
15. Meyer, *Ho'oulu*, 144–45.
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17. Alexander James Inglis, *Principles of Secondary Education* (Boston: Houghton Mifflin, 1907), 226–28; Taira, *Imua, Me Ka Hopo 'Ole*, 4–6.
18. Meyer, *Ho'oulu*, 128.
19. Wa Thiong'o, *Decolonising the Mind*, 16–17, 135.

20. Taiaiake Alfred, *Peace, Power, Righteousness: An Indigenous Manifesto* (Don Mills: Oxford University Press, 2009), 41-49.
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76. Charles R. Hale, *Engaging Contradictions: Theory, Politics, and Methods of Activist Scholarship* (Berkeley: University of California Press, 2008), 20; Noelani Goodyear-Kaʻōpua, *The Seeds We Planted: Portraits of a Native Hawaiian Charter School* (Minneapolis: University of Minnesota Press, 2013), 40.

77. The cultural dissonance formula provides quantitative evidence that the achievement gap cannot be attributed to economic advantage alone. By subtracting the proficiency rate (the percentage of students who “met” or “exceeded” proficiency standards) of low-SES NHPI students from high-SES NHPI students, OHE was able to isolate and calculate economic advantage in proficiency rates, while minimizing cultural differences. When subtracting the proficiency rate of high-SES NHPI students from high-SES non-NHPI students, OHE was able to isolate and calculate the impact of cultural dissonance and minimize economic advantage. The largest gap in proficiency was found between low-SES NHPI students and high-SES non-NHPI students, or the total advantage, where that advantage was equal to the sum of economic advantage and cultural dissonance. The Kukahiko et al. “Cultural Dissonance” study reported that cultural dissonance was a stronger predictive indicator of academic proficiency—in math, language arts, social studies and science—than economic advantage throughout its five year analysis of proficiency data (2015–19) in HIDOE. See Kukahiko et al., “Pūpūkahi i Holomua,” 191–96.

78. Seto, “He Au Puni Palapala,” 12–14, 42–43; Shultz and Englert, “Cultural Validity as Foundational to Assessment Development,” 1–3; Vaughan, Saelua, and Taione-Fililia, “Cultivating a Cultural Kīpuka,” 30–35; Kamelamela et al., “Kōkua Aku, Kōkua Mai,” 2–4, 12–14.

79. Ibid.

80. Kanaʻiaupuni, Ledward, and Jensen, *Culture-Based Education*, 1–2, 14–15; Kanaʻiaupuni, Ledward, and Malone, “*Mohala i ka wai*,” 311–339.

81. Seto, “He Au Puni Palapala,” 12–14, 42–43.

82. Shultz and Englert, “Cultural Validity as Foundational to Assessment Development,” 1–3.

83. Vaughan, Saelua, and Taione-Fililia, “Cultivating a Cultural Kīpuka,” 30–35.

84. Kamelamela et al., “Kōkua Aku, Kōkua Mai,” 2–4, 12–14; Vaughan, *Kaiāulu*, 176.

