

HAWAIIAN-FOCUSED CHARTER SCHOOL HŌ'IKE:
A DEMONSTRATION OF STUDENT ACHIEVEMENT
OF THE HAWAIIAN-FOCUSED CHARTER SCHOOL VISION OF THE GRADUATE

A DISSERTATION SUBMITTED TO THE GRADUATE DIVISION OF THE
UNIVERSITY OF HAWAI'I AT MĀNOA IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF

DOCTOR OF EDUCATION

IN

PROFESSIONAL EDUCATIONAL PRACTICE

JUNE 2017

By

Chelsea Nicole Kiele Keehne

Dissertation Committee:

Lori Ideta, Chairperson

Alice Kawakami

Walter Kahumoku III

DEDICATION

To my mother Yolanda Faith Martin Keehne, for teaching me the power of education.

ACKNOWLEDGEMENTS

I'd like to extend a heartfelt mahalo to the po'okula and po'okumu of the four Hawaiian-focused Charter Schools that participated in this study. Thank you Dr. Meahilahila Kelling, Ke Kula 'o Samuel M. Kamakau; Olani Lilly, Ka 'Umeke Kā'eo; Susie Osborne, Kua o ka Lā; Pilimai Traub, Kua o ka Lā, and Kamehaililani Waiiau, Ke Kula 'o Samuel M. Kamakau for sharing your school 'ohana with me. It is because of your faith in this research that the participants trusted me and I was able to elicit powerful interview responses from stakeholders. I wish there was a more effective way I could convey how much students and families truly appreciate all you do.

The four schools featured in this study represent a portion of the 17 Hawaiian-focused Charter Schools. I have the pleasure of working with a powerhouse of inspirational, dedicated leaders and when I grow up I hope to be just like them. Their tenacity, intelligence, and sense of humor continue to inspire me. I am always impressed by their ability to consistently make decisions that are in the best interests of Native Hawaiian children. Mahalo piha to the following po'okula and po'okumu for demonstrating true servant leadership: Brandon Bunag, Hālau Kū Māna; Dr. Denise Espania, Mālama Honua; Kamaka Gunderson, Ke Ana La'ahana; Kaleihōkū Kala'i, Ke Kula 'O Nāwahīokalani'ōpu'u; Kaleimakamae Ka'auwai, Kawaikini; Amy Kendziorski, Waimea Middle School; Tia Koerte, Ke Kula Ni'ihau O Kekaha; Mahina Paishon Duarte, Kanu o ka 'Āina; Alvin Parker, Ka Waihona o ka Na'auao; Michael Sarmiento, Ka Waihona o ka Na'auao; Hedy Sullivan, Kula Aupuni Ni'ihau a Kahelelani Aloha; Allyson Tamura, Kanu o ka 'Āina; Ipo Torio, Kanuikapono; Lydia Trinidad, Kualapu'u Elementary; 'Alohilani Rogers, Kawaikini; Anna Winslow, Kamaile Learning Academy.

I was blessed with the best dissertation committee a girl could ever ask for. Dr. Lori

Ideta, Dr. Alice Kawakami, and Dr. Walter Kahumoku III possess vast amounts of expertise individually; however their collective wisdom was invaluable to the successful completion of this dissertation. Thank you for helping me navigate my dissertation journey and for fostering my researcher debut. You value pilina and always knew the perfect time to either reassure me that things were going to work out, validate my research ideas, or nudge me to embrace a bolder writing stance. I am forever indebted to each of you and I hope our paths continue to cross both professionally and personally.

I have been blessed with many family and friends who supported me throughout the dissertation process. Mahalo nui loa Lauli'a Ah Wong for attending our weekly writing retreats and for helping me laugh when all I wanted to do was cry. Thank you Dr. Kimo Armitage, Dr. Konia Freitas, Paige Gabel, and Ulalia Woodside for reminding me to ignore the imposter syndrome that often accompanies first generation doctoral candidates and for helping me find the harmony in this process. The Ho'olako Like bullpen is comprised of three of the most supportive colleagues I have ever had the pleasure of working with. Thank you Nohea Len-Wai, Kelly Broadus, and Dr. Lisa Takatsugi for reminding me that when life gives us lemons, we play a tambourine and make lemonade. My sister Hilarie Alomar provided words of wisdom, encouragement, and a space for me to write. I would also like to thank my mother and editor Yolanda Faith Martin Keehne. Not only did she take the time to read my dissertation multiple times, she was my biggest cheerleader. She truly understood my experience never questioned my decisions. I have always respected her strength; however I have a deeper understanding of what may have been like for her to be the first in her family to graduate from college. I look forward to my niece Camryn and nephews Julian and Matteo following in our footsteps and pursuing their college education.

ABSTRACT

Native Hawaiians have always used hō‘ike to demonstrate understanding and readiness for the next level of training and education (Chun, 2011; Emerson, 1906; Kamakau, 1961; Kamakau, 1964; Kuykendall, 2017) and historians describe an array of hō‘ike used to communicate proficiency in leadership, hula, medicine, literacy, and international policy. Yet, it was not until the 1990s that mainstream education recognized the benefits of performance assessments. Hawaiian-focused Charter Schools (HFCS) value ‘ike kupuna and are grounded in Hawaiian history, language, and values. In 2013, leaders from all HFCS collaboratively crafted the HFCS Vision of the Graduate which articulates common goals grounded in cultural commitment, a variety of assessments that communicate student progress, and adequately preparing students for community, college, and careers. HFCS students demonstrate cultural and academic understanding through a variety of hō‘ike throughout the school year. This study explored how HFCS Senior Capstone Project Hō‘ike and Graduation Ceremony Hō‘ike encapsulate components of the HFCS Vision of the Graduate for students, families, and schools. Over 50 interviews were conducted with HFCS principals, teachers, families, students, hō‘ike coordinators, and alumni. System Vision and School Mission Data Analyses were conducted and data was organized into four themes, 1) Manifest Cultural Knowledge, 2) Synthesize Academic Knowledge, 3) Demonstrate College, Career, Community Readiness, and 4) HFCS Context: Fostering the attainment of the HFCS Vision of the Graduate. Research findings from this mixed method study focus on Hawaiian-focused Charter School hō‘ike as a demonstration of students’ cultural competence and readiness for college, career, and community.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	iii
ABSTRACT.....	v
LIST OF TABLES	x
LIST OF FIGURES	xii
HAWAIIAN GLOSSARY	xiv
CHAPTER 1: Introduction	1
Hawaiian-focused Charter Schools Vision of the Graduate	3
Hawaiian-focused Charter School Hō‘ike	4
CHAPTER 2: Literature Review	8
Hawaiian-focused Charter School Movement	13
Hawaiian Culture-based Education and Assessments	14
21 st Century Learning Skills and Assessments	18
Authentic Assessment.....	20
Hawaiian Hō‘ike	28
CHAPTER 3: Methodology.....	33
Research Design.....	33
Methodological Frameworks	34
Role of the Indigenous Researcher	38
Study Sites	42
Data Analysis Process.....	46
Instruments.....	52

CHAPTER 4: Qualitative Findings	55
Hawaiian-focused Charter School Senior Hō‘ike.....	55
Vision and Mission Driven Data Analyses.....	57
Qualitative Themes and Evidence	62
Theme 1: Manifest Cultural Knowledge Interview Data	62
Theme Definition and Key Quote	62
Theme Description and Vision of the Graduate Connections	63
Hō‘ike Interview Data	63
Theme 2: Synthesize Academic Knowledge Interview Data	69
Theme Definition and Key Quote	69
Theme Description and Vision of the Graduate Connections	69
Hō‘ike Interview Data	70
Theme 3: Demonstrate College, Career, Community Readiness Interview Data	79
Theme Definition and Key Quote	79
Theme Description and Vision of the Graduate Connections	79
Hō‘ike Interview Data	81
Theme 4: Hawaiian-focused Charter School Context Interview Data	87
Theme Definition and Key Quote	87
Theme Description and Vision of the Graduate Connections	87
Hō‘ike Interview Data	88
CHAPTER 5: Quantitative Findings	97
Kamehameha Schools Survey Links	98
Theme 1: Manifest Cultural Knowledge Survey Data	98

Survey Questions Linked to Interview Theme	99
Survey Data Summary	99
Theme 2: Synthesize Academic Knowledge Survey Data.....	102
Survey Questions Linked to Interview Theme.....	103
Survey Data Summary.....	103
Theme 3: Demonstrate College, Career, Community Readiness Survey Data....	104
Survey Questions Linked to Interview Theme.....	105
Survey Data Summary	105
Theme 4: Hawaiian-focused Charter School Context Survey Data	108
Survey Questions Linked to Interview Theme	108
Survey Data Summary	109
CHAPTER 6: Conclusion.....	115
Implications for Theory, Practice, and Policy	119
Limitations	121
Recommendations.....	122
Reflection.....	125
APPENDICES	130
Appendix A: Webb’s Depth of Knowledge Framework	130
Appendix B: Dedoose Demographic Profile Descriptors.....	131
Appendix C: Dedoose Code Application Report.....	132
Appendix D: Kamehameha Schools Keiki, ‘Ōpio, ‘Ohana, Graduate Surveys.....	133
Appendix E: Maui Oli.....	169
Appendix F: Hakipu‘u Learning Center Senior Hō‘ike Rubrics	170

Appendix G: Ka ‘Umeke Kā‘eo Senior Hō‘ike Rubrics 178

REFERENCES 186

LIST OF TABLES

1. Hō‘ike Data Collection Methods and Purpose.....	6
2. Key Components of Culture-based Education.....	15
3. Webb’s Depth of Knowledge Writing Descriptions.....	22
4. HFCS Phenomena Category Examples	37
5. Final Data Analysis Plan.....	40
6. HFCS Characteristics.....	43
7. HFCS Graduate Themes	46
8. Interview Questions	48
9. HFCS Hō‘ike Data Collection Process.....	50
10. Kamehameha Schools Survey Dimensions	53
11. Interview Stakeholder Groups	56
12. Senior Hō‘ike Purpose	56
13. HFCS Missions.....	59
14. Theme Four: HFCS Context.....	61
15. HFCS Hō‘ike Qualitative Data Themes	61
16. HFCS Hō‘ike Theme One Summary	63
17. Cultural Knowledge Definition and Hō‘ike Components	68
18. HFCS Hō‘ike Theme Two Summary	70
19. Ka ‘Umeke Kā‘eo Research Paper Requirements	74
20. Ka ‘Umeke Kā‘eo Hō‘ike Rubric Section One.....	75
21. HFCS Hō‘ike Academic Knowledge.....	78
22. HFCS Hō‘ike Theme Three Summary	81

23. Ke Kula ‘o Samuel M. Kamakau Graduation Hō‘ike Summary	83
24. HFCS Context, Conditions, Examples.....	88
25. Hakipu‘u Learning Center Hō‘ike Presentation Rubric.....	93
26. HFCS Hō‘ike Audience	94
27. Kamehameha Schools Survey Overview	98
28. Theme One Quantitative Data Analysis	99
29. Theme Two Quantitative Data Analysis.....	103
30. Theme Three Quantitative Data Analysis.....	105
31. 2016 HFCS Graduate Kuleana.....	106
32. Theme Four Quantitative Data Analysis.....	108
33. HFCS Vision of the Graduate and Hō‘ike Data.....	114
34. HFCS Hō‘ike Qualitative Data Themes	117

LIST OF FIGURES

1. Hawaiian-focused Charter School Vision of the Graduate.....	3
2. Strive HI Performance Index	11
3. Hawaiian-focused Charter Schools.....	13
4. Assessment Purpose Continuum.....	23
5. Hō‘ike Phenomena.....	37
6. Four Squares of Knowledge.....	38
7. Hawai‘i Island School Sites	44
8. O‘ahu School Sites.....	45
9. Qualitative Data Process	57
10. Vision and Mission Driven Analyses	58
11. Vision Driven Data Analysis	60
12. Hō‘ike Ceremony: ‘Ailolo Ceremony	64
13. Hō‘ike Cultural Artifacts: Leihulu and Lei Makau.....	66
14. Hakipu‘u Learning Center Alapi‘i Project	73
15. Hō‘ike Cultural Artifact: Kī‘oe.....	80
16. Quantitative Data Process	97
17. KS Graduate Survey Excerpt: Hawaiian Culture.....	100
18. KS ‘Ōpio Survey Excerpts: Performances.....	101
19. KS ‘Ōpio Survey Excerpts: Ceremonies.....	102
20. KS ‘Ohana Survey Excerpt: Preparation for next grade level	103
21. KS ‘Ohana, Keiki, ‘Ōpio Survey Excerpts: Student achievement.....	104
22. KS Graduate Survey Excerpt: Transition plan.....	107

23. KS Graduate Survey Excerpt: College attendance	107
24. KS ‘Ohana, Keiki, ‘Ōpio Survey Excerpts (Q 4b, 10, 10): Care about child/student	110
25. KS ‘Ohana Survey Excerpt (Q 3h, 13-14): Learner support	111
26. KS Keiki, ‘Ōpio Survey Excerpts (Q 56-59, 76-79): Care about child/student	112
27. Hawaiian-focused Charter School Community Readiness	124

HAWAIIAN GLOSSARY

Retrieved from Wehewehe.org

‘ai pono: To eat/nourish with ease, naturally, in perfect order and wholeness

‘ai: Food or food plant

‘ailolo: Ceremony usually marking the end of training, so called because the student ate (‘ai) a portion of the head, and especially the brains (lolo), (of a fish, dog, or hog offered to the gods; to partake of the ceremony.

‘āina: Land, earth

alapi‘i: Stairs, steps, ladder, stile, doorstep, ascent, scale

ali‘i: Chief, chiefess, officer, ruler, monarch, peer, headman, noble, aristocrat, king, queen, commander; royal, regal, aristocratic, kingly; to rule or act as a chief, govern, reign; to become a chief.

aloha: Aloha, love, affection, compassion, mercy, sympathy, pity, kindness, sentiment, grace, charity; greeting, salutation, regards; sweetheart, lover, loved one; beloved, loving, kind, compassionate, charitable, lovable; to love, be fond of; to show kindness, mercy, pity, charity, affection; to venerate

‘Au ‘Ōko‘a: Hawaiian newspaper

hāhā: To grope, feel, as with the hands. (For. 6:111.) Kahuna hāhā, an expert who diagnoses, as sickness or pain, by feeling the body.

ha‘i ‘ōlelo: Speech, address, lecture, sermon; to orate, preach, make a speech; speaker

Hakipu‘u Learning Center: Hawaiian-focused Charter School located in Kāne‘ohe, O‘ahu

hāli‘i: A covering, spread; to spread, as a sheet

hi‘uwai: Water purification festivities

hō‘ike: To show, exhibit. For the many important meanings see *‘ike*.

ho‘okupu: To give freely; to make a present to one.

‘ike kupuna: Knowledge/wisdom, ancestors

‘ike: Knowledge/wisdom

imu: Underground oven

kahuna: Priest, sorcerer, magician, wizard, minister, expert in any profession (whether male or female); in the 1845 laws doctors, surgeons, and dentists were called kahuna

kanaka: Human being, man, person, individual, party, mankind, population; subject, as of a chief; laborer, servant, helper; attendant or retainer in a family (often a term of affection or pride)

kāne: Male, husband, male sweetheart, man; brother-in-law of a woman; male, masculine; to be a husband or brother-in-law of a woman

Kanu ‘o ka Āina: Hawaiian-focused Charter School located in Waimea, Hawai‘i Island.

Ke Ana La‘ahana: Hawaiian-focused Charter School located in Keaukaha, Hawai‘i Island.

Ke Kula ‘o Samuel M. Kamakau: Hawaiian-focused Charter School located in Kāne‘ohe, O‘ahu

keiki: Child, offspring, descendant...

kīhei: Shawl, cape, afghan; cloak of makaloa matting; rectangular tapa garment worn over one shoulder and tied in a knot; bed covering

kilo: to watch closely, spy, examine, look around, observe, forecast

kī‘o‘e: Ladle, dipper, cup; scoop or spoon made of coconut shell; dip, as of poi; arm or wrist motion in paddling or dipping; net-mending instrument; to skim, as cream from milk; to dip, ladle, scoop;

Kua o ka Lā: Hawaiian-focused Charter School located in Puna, Hawai‘i Island

Kūkaniloko: Walk, Ka-lihi Kai, Honolulu, named for the stones near Wahiawā, O‘ahu, where royalty gave birth (Fornander believed that these birth stones were established in the twelfth century); also the name of an ancient chief

Kula Kaiapuni: Hawaiian-medium school

kula: School, academy; to teach school, go to school; to hold school or class sessions

kuleana: Right, privilege, concern, responsibility...

Kumu Hawai‘i: Hawaiian newspaper

kumu: teacher

Ku‘oko‘a: Hawaiian newspaper

kupuna: Grandparent, ancestor, relative

Lama Hawai‘i: Hawaiian newspaper

lei makau: fish hook necklace

lei: Lei, garland, wreath; necklace of flowers, leaves, shells, ivory, feathers, or paper, given as a symbol of affection

leihulu: Wreath made of feathers. A lei or wreath for the neck made of the feathers of the bird mamō; ka lei mamō no Laa

lepo: Dirt, earth, ground

loko i‘a: Hawaiian fishpond

makahiki: Ancient festival beginning about the middle of October and lasting about four months, with sports and religious festivities and taboo on war

mākaukau: Able, competent, capable, handy, efficient, proficient, versed, adept, skilled, expert, qualified; prepared, ready; competence, proficiency, efficiency, aptitude, preparation

makawalu: Numerous, many, much, in great quantities (sometimes used with implication of chiefly mana)

makua: Parent

Mālama Honua: Hawaiian-focused Charter School located in Waimānalo, O‘ahu.

malo: Male's loincloth

mana‘o: Thought, idea, belief, opinion, theory, thesis, intention, meaning, suggestion, mind

Maui: Name of one of the Hawaiian islands. Cf. *Māui*, the demigod.

mele: Song, anthem, or chant of any kind

mo‘okūauhau: Genealogy

mo‘olelo: Story, tale, myth, history, tradition, literature, legend, journal, log, yarn, fable, essay, chronicle, record, article

‘ohana: Family, relative, kin group; related.

‘ōlelo Hawai‘i: Hawaiian language

oli: chant

‘ōpio: Youth, juvenile; youngster; young, junior

pae ‘āina: Group of islands, archipelago

pae: Stage, level of development; level of difficulty, as intermediate or advanced; rank, as in an orderly arrangement.

pāhana: Project, as for a class

Papakū Makawalu: The ability of kupuna to categorize our natural world and all systems of existence within the universe. The foundation to understanding, knowing, acknowledging, becoming involved with, but most importantly becoming the experts of the systems of this natural world.

pehea ‘oe: How are you?

pī‘āpā: Alphabet; name of an early spelling book; this word is said to have derived from the method of teaching Hawaiians to begin the alphabet “b, a, ba.” The Hawaiians pronounced “b” like “p” and said “pī ‘ā pā.”

piko: Navel, navel string, umbilical cord

pōki‘i: Younger brother or sister or closely related younger cousin, often spoken affectionately

pono: Goodness, uprightness, morality, moral qualities, correct or proper procedure, excellence, well-being, prosperity, welfare, benefit, behalf, equity, sake, true condition or nature, duty; moral, fitting, proper, righteous, right, upright, just, virtuous, fair, beneficial, successful, in perfect order, accurate, correct, eased, relieved; should, ought, must, necessary

po‘okula: Head of school

po‘okumu: School principal

puka: To pass through, appear, emerge, come out, get out of, issue, come into sight

pule: Prayer, magic spell, incantation, blessing, grace, church service, church; to pray, worship, say grace, ask a blessing,

tutu man: Grandpa

uala: sweet potato

‘uhane: Soul, spirit, ghost; dirge or song of lamentation

uniki: Graduation exercises, as for hula, lua fighting, and other ancient arts (probably related to niki, to tie, as the knowledge was bound to the student).

wahi pana: Legendary place.

wai niu: Coconut water

CHAPTER I

INTRODUCTION

Hawaiian-focused Charter Schools (HFCS) were created in the early 2000s to offer families additional learning environments that emphasize Hawaiian language, culture, and values (Goodyear-Ka'opua, 2013). HFCS founders, leaders, teachers, and 'ohana recognize that culture-based education is a pathway to improve Native Hawaiian well-being. The United States charter school movement commenced in the 1990s, building on Hawai'i's sovereignty movement. These schools are public schools that receive a portion of their funding from the state of Hawai'i. Hawaiian educators sought to "reclaim public K-12 education as a form of Hawaiian self-determination and sovereignty practice" (Goodyear-Ka'opua, p.5). A HFCS parent reflected on her child's unique HFCS educational experience below:

If he was in a public school, he would have the sports and all that other fluff stuff, but nothing cultural. No taking off of the shoes, getting in the lepo, and being grounded to the 'āina. No putting on a malo, no makahiki games, and no Hawaiian language. My son has been quiet all these years and if you put him in a public school setting, he'd be one of those that would just get pushed off because he's not a behavior problem, he's a good kid. He's all good because he no make trouble and he'd probably fall through the cracks.

(HFCS parent, 2016).

The movement is not limited to education in a conventional school and classroom settings, but is intended to strengthen and grow indigenous communities, acknowledging that this broader social agenda requires transformation in the hierarchies of knowledge and power beyond schools (Goodyear-Ka'opua, p. 29). In contrast to the majority of Hawai'i's statewide public school system, HFCS' pedagogy is grounded in Hawaiian cultural traditions, values, and history,

and the schools' context promotes Hawaiian identity and sovereignty (Kawakami, Au, & Carroll, 2013). HFCS curricula focus on reclaiming Hawaiian rights and practices directly tied to traditional and ancestral knowledge (Goodyear-Kaopua, 2013). Sadly, much of that knowledge and learning process has been lost over years of colonization. Place and land-based education, self-determination and advocacy, spiritual and genealogical connections, protocol and ceremony and non-instrument wayfinding navigation are critical components of HFCS (Kawakami, Au, & Carroll, 2013). Currently, the Hawai'i public school system includes a total of 17 HFCS located on four islands. Collectively, HFCS serve over 4,000 students, 81% of whom are part Native Hawaiian (Hawai'i Charter School Commission, 2016).

Hawaiian-focused Charter School founders, leaders, teachers, and 'ohana recognize that culture-based education is a pathway to native well-being (Goodyear-Ka'opua, 2013). In the early 2000s; Hawaiian-focused Charter Schools were created to provide teaching and learning environments grounded in Hawaiian language and values (Kamehameha Schools, 2008). Research has been conducted to identify elements of culture-based education and define curriculum content and pedagogy that supports a Hawaiian worldview. Kawakami and Aton (2001) determined two critical elements for Hawaiian learning through interviews with individuals nominated by their community as successful Hawaiian educators. Those critical factors are authentic environments and experience-based learning and are also recurring themes in Hawaiian culture-based education: Hawaiian ways of knowing, relevant ways of learning, community-based program design, cultural knowledge, and authentic learning environments (Kawakami, 2004).

Each HFCS is unique, and its identity, environment, infrastructure, programs, and student outcomes are developed to serve its own community. However, HFCS collectively exist to

perpetuate Hawaiian perspectives, culture, and practices in the 21st century and have built their identities on some shared resources and values. In 2013, all HFCS po‘okumu collaboratively crafted the HFCS Vision of the Graduate (Hawaiian-focused Charter Schools, 2013) which articulates these common goals grounded in cultural commitment, a variety of assessments that communicate student progress, and adequately preparing students for community, college and careers (Kawakami, Au, & Carroll, 2013).

Figure 1 Hawaiian-focused Charter School Vision of the Graduate

Cultural Knowledge, Responsibility to ‘Ohana, Community and Environment:

Demonstrate, understand, apply Hawaiian values, respect and honor genealogy, recognize and accept leadership roles to manifest cultural knowledge, know a place (history, resources) as a piko and a foundation for making larger connections, understand importance of reciprocal relationships and responsibilities in a cultural context

College, Career, and Community Readiness:

Communicate effectively (verbal, oral, technologies), a lifelong learner for future competence, able to plan to attain current and future goals, provide adequately for self and family

Although research regarding culture-based assessments exists, this study focuses on gathering data surrounding hō‘ike, as a Hawaiian culture-based assessment for Hawaiian-focused Charter Schools. HFCS po‘okumu are committed to contributing to the ability of all public schools to tell a richer story of student and school success. They are also interested in sharing HFCS individual and collective stories through student focused evidence and communicating learner growth and school success holistically (Goodyear-Kaopua, 2013). The primary research question guiding this study is, “How do hō‘ike encapsulate components of the Hawaiian-focused Charter School Vision of the graduate for students, families, and schools?” Gathering information from HFCS leadership and family about perceptions of hō‘ike is valuable data for HFCS and could support the schools in communicating students’ cultural competency, college/career/community readiness, and interim growth progress to a variety of stakeholders. In

addition to po‘okumu, family perceptions of HFCS hō‘ike are important to communicate assessment validity.

All HFCS use hō‘ike as a form of communicating student progress or as a graduation requirement. The English definition of hō‘ike is, “show and exhibit knowledge, awareness, understanding, recognition, comprehension, and hence learning.” (Wehewehe, 2016). Malcolm Chun’s *No Nā Mamo* (2011) includes primary resources that describe a variety of traditional hō‘ike for kahuna, hula, and ali‘i. A hula dancer’s ‘uniki occurs when he/she demonstrates proficiency in a variety of dances that reflect their kumu hula philosophy and teaching. ‘Uniki is one example of an hō‘ike that is commonly used in present day and requires a range of hula expertise. Kahuna were also expected to learn a vast amount of spiritual and medical information. Only after successfully completing tedious training were they permitted to diagnose human subjects (Chun, 2011).

Native Hawaiian ali‘i preparation began at a young age and included a range of leadership skills including empathy, reflection, strategy, and effective counseling strategies:

During the youth of the ali‘i ‘aimoku, they were sent out to live with wise and skilled people, and to listen first to the words of experts and to the important things that would benefit their rule. They would initially live with another ali‘i in a state of poverty, starvation, and famine so they would remember what these conditions of life were like. (Chun, p. 173).

Hawaiian ali‘i were proponents of hō‘ike and created opportunities to showcase Hawai‘i to a worldwide audience. The previous examples represent only a fraction of resources that illustrate how Hawaiian people valued demonstrating their understanding of a variety of topics.

Hawaiians used an array of presentation styles to communicate expertise that included song, dance, oratory, written products, demonstrations, and presentations. The Contemporary

Assessment for Educators (1999) outlines a definition of performance assessment as requiring “students to demonstrate a skill of proficiency by asking them to create, produce, or do something, often in a setting that involves real world applications.” Performance based assessments include paintings, speeches, musical presentations, demonstrations, research papers, investigations, athletic performance, projects, exhibitions, and other products that require students to construct a unique response to a task” (p. 51).

Traditional examples of hō‘ike reflect the components of performance assessment including identifying target skills, identifying activities that display target skills, knowing what features to observe and report as evidence of skills acquisition, and comparing with performance standards (McMillan, 1999). Performance assessment proponents Linda Darling-Hammond and Frank Adamson (2010) explain that these assessments “allow students to construct or perform an original response rather than just recognizing a potentially right answer out of a list provided and can measure students’ cognitive thinking, reasoning skills and their ability to apply knowledge to solve realistic, meaningful problems” (p.7). School level studies reveal increases in performance on both traditional standardized tests and more complex measures for students in classrooms that offer a problem-oriented curriculum that regularly features performance assessments.

A mixed methodology was utilized to collect quantitative and qualitative data about Hawaiian-focused Charter School hō‘ike. Hō‘ike is an exhibition of learning shared by Native Hawaiians; therefore the theoretical framework is primarily Phenomenology. The focus of phenomenological inquiry is what people experience in regard to some phenomenon or other and how they interpret those experiences (Merriam, 2009). The experiences of different people are analyzed to determine the essence of a shared experience (Merriam, 2009).

Four Hawaiian-focused Charter Schools in the State of Hawai‘i were selected to participate in the research based on the school language, diversity of student body, hō‘ike design, and family involvement. HFCS stakeholders were interviewed to determine themes of their perceptions of the hō‘ike as a demonstration of haumāna achievement of the HFCS Vision of the Graduate.

The goal of the study is to address a specific problem within a specific setting and will involve participants throughout the research process; therefore the type of study will be Action Research (Merriam, 2009). The table below summarizes data collection methods and purposes.

Table 1

Hō‘ike Data Collection Methods and Purposes

Participants	Qualitative or Quantitative	Purpose
Students 18 years or older	Qualitative: 1-1 interviews Quantitative: KS Keiki/‘Ōpio, HFCS Graduate Surveys	Hō‘ike background and effectiveness in communicating HFCS Vision of the Graduate
Alumni	Qualitative 1-1 interviews	Hō‘ike background and effectiveness in communicating HFCS Vision of the Graduate
Families	Qualitative: 1-1 interviews Quantitative: KS Ohana Surveys	Effectiveness of hō‘ike in communicating HFCS Vision of the Graduate
Hō‘ike Coordinators	Qualitative: 1-1 interviews	Hō‘ike background and effectiveness in communicating HFCS Vision of the Graduate

The National educational system remains reliant on archaic, standardized, mandated assessments that convey an incomplete story of student growth and success (Parsi, Darling-Hammond, 2015). It is critical that HFCS Senior Hō‘ike data collection and analysis explore the validity of assessments that honor students, families, communities, and schools with unique missions and visions. Hawaiian-focused Charter Schools were created to provide educational environments that champion Hawaiian ways of knowing, therefore it is only fitting that HFCS assessments also reflect Hawaiian methods of demonstrating understanding. Ua lehulehu a manomano ka ‘ikena a ka Hawai‘i. Great and numerous is the knowledge of the Hawaiians (Pūku‘i, 1983).

CHAPTER II

LITERATURE REVIEW

Introduction

There is a large body of research supporting American measures of learning; however this review is designed to also showcase research about Native Hawaiian epistemology and Hawaiian culture-based education. Hawaiian-focused Charter Schools comprise approximately half of all charter schools in the state of Hawai‘i; therefore the charter school context is also described.

Native Hawaiian Epistemology

Manu Meyer’s (1998) work on Native Hawaiian epistemology describes a perspective for understanding the difference between Western and indigenous Hawaiian notions of education and learning, knowledge, and identity. In her dissertation, she interviewed 20 Hawaiian educational leaders and analyzed their perspective as the basis for a Hawaiian epistemology. She identified seven epistemological themes that explain many of the ways that learning, knowledge, and being, in a Hawaiian sense diverge from Western-based institutions established to deliver education to the public in the state of Hawai‘i.

- Spirituality and knowing - the cultural contexts of knowledge
- That which feeds – physical place and knowing
- The cultural nature of Senses – expanding the idea of empiricism
- Relationship and knowledge – self through others
- Utility and Knowledge – causality in language and thought
- The Body-Mind Question – illusions of separation.

Meyer (2001) concludes the article with encouragement to the community to take advantage of the opportunities placed by the passage of Senate bill 62 in 1999, which allows for the 25 charter schools in Hawai'i in addition to existing 14 Hawaiian language and cultural charter schools. She wrote that "we are beginning to understand that Hawaiian education is not something in relation to a Western norm, but something we must define in relation to our own understanding of ourselves, our past, and our potential. It is something more organic, more real, and more tied to place" (p. 146).

Hawai'i Charter Schools

Hawai'i's charter school movement commenced in 1995 and in 2016 provided innovative alternatives and serve over 10,000 general and special education students in grades preschool-12 (State Public Charter School Commission, 2016). Hawai'i's public charter schools are operated and managed by independent governing boards and operate under a performance contract with the State Public Charter School Commission. They are public schools funded through the state and governed by a local school board.

In 2004 Hawai'i's State Board of Education approved a Weighted Student Formula (WSF) that included a baseline amount for each student and additional funding for students with: special needs, economically disadvantaged, English Language Learners, gifted and talented, and transience due to movements of students and their families, geographic isolation, small schools, and grade-level adjustments for elementary, middle, and high schools (ECS, 2011). Hawai'i is the only state in the nation with a single, statewide school district and property taxes are not utilized to fund public education. Instead, school funding is determined by the Hawai'i State Legislature on a biannual budget basis, and is disbursed by the Governor. Hawai'i ranks 19 in the nation for per-pupil revenue and public schools receive \$36.74 for every \$1,000 of income

earned in the state (ECS, 2011). A 2014 national inequity study revealed that Hawai'i Charter Schools receive 33.9% less than traditional public schools (Levin, 2013). Although Hawai'i law allows the Hawai'i Charter School Commission to request facilities funding as part of its annual budget request to the director of finance, the legislature does not provide funding for facilities costs. Data showed that Hawai'i Charter Schools received \$8,986 per pupil while district schools received \$13,601 per pupil (Levin, 2013).

Hawai'i Charter Schools are exempt from many state policies that apply to other Hawai'i Department of Education schools, but they are held accountable to federal policies and statutes, health and safety regulations, collective bargaining, and discriminatory practices as they relate to civil rights. In Hawai'i the sole authorizer of charter schools is the Hawai'i Charter School Commission. Characteristics that are typical of charter schools in Hawai'i listed as maintain smaller learning environments, emphasize project based learning, enroll high percentages of native Hawaiian children, offer Hawaiian culture based curriculum, exist in rural areas, engage in public, private, and community partnerships, provide alternative curriculum and assessment, and/or incorporate active parent involvement (Hawai'i Public Charter School Commission, 2016).

The Hawai'i Department of Education annually evaluates the performance of all public schools, including charters, through the Strive HI Performance System. Strive HI reports provide a snapshot of key school progress indicators such as assessment scores, achievement growth and gap reduction, student readiness, and more. Schools earn points across these indicators for a possible point total of 400 in the Strive HI Index based on standardized assessments (Hawai'i DOE Charter Schools, 2016).

Figure 2 Hawai‘i High Schools Strive HI Index



The Hawai‘i Charter School Commission allows schools to apply for a School Specific Measure (SSM) that could contribute toward 25% of their school’s rating. The Hawai‘i Charter School Commission contract (2016) also outlines the following requirements for reporting student academic outcomes. The Student Academic Outcomes section will contain four to five indicators: four of these indicators will be required state accountability system related indicators and the fifth, optional measure, can be selected or developed by the school. The four required indicators will include:

- 1) Achievement in English Language Arts or Hawaiian Language Arts, math as measured by the statewide assessments in English and Hawaiian

- 2) Growth as determined by the DOE under the ESSA state plan for federal reporting and accountability, or revised Strive HI state accountability plan
- 3) College and Career Readiness high school measure must include three indicators: the 11th grade ACT or SAT; four or five-year graduation rates; and college-going rates as determined by the DOE under the ESSA state plan for federal reporting and accountability
- 4) Achievement Gap difference between high-needs student proficiency and non-high needs student proficiency as defined and reported by the DOE under the ESSA state plan or revised Strive Hi state accountability plan
- 5) Optional other measure could be a school specific measure, or other indicator that is used for state or ESSA federal and accountability reporting purposes. Within the Student Academic Outcomes section, schools must work with the Commission to set an annual target range for each year of the contract with a range no smaller than 5% and no larger than 10%

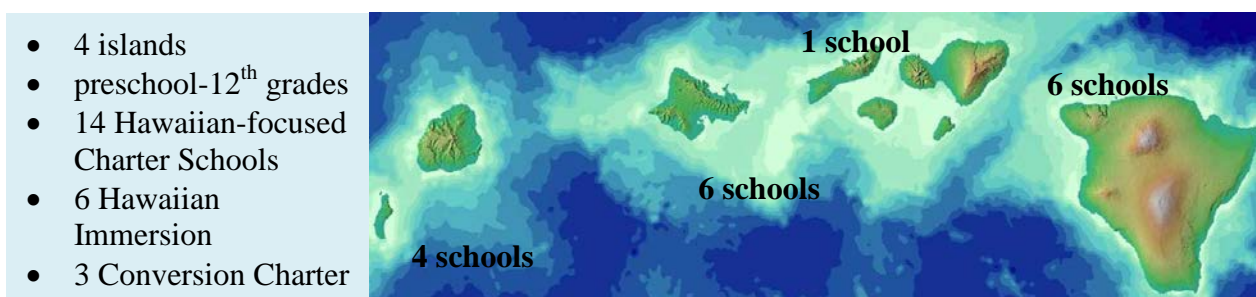
The Value Added (to the community or state public education system) is the second section of the Academic Performance Framework. The Value Added section shall include at least two measures that reflect a school's goals for improving the delivery of its educational program. These goals may focus on the mission, vision or culture of the school; continuous school improvement goals, or specific goals related to improvement program delivery or innovative practices. Schools may use existing program improvement goals from a WASC plan, Title One plan, or other strategic plan grounded in a comprehensive needs assessment. Each goal must have annual, measurable targets for each year of the contract. Supporting documents for each

Value Added goal, such as baseline data or rubrics, will be attached to the contract (Hawai'i Charter School Commission, 2016).

Hawaiian-focused Charter Schools

Hawaiian-focused Charter Schools were created to provide teaching and learning environments grounded in Hawaiian language and values (Goodyear Kaopua, 2013). In 2016, HFCS serve over 4,000 students, 81% of whom were part Native Hawaiian (Kamehameha Schools, 2016).

Figure 3 Hawaiian-focused Charter Schools



Hawaiian-focused Charter Schools' pedagogy is grounded in Hawaiian cultural traditions, values, and history. The development of Hawaiian-focused Charter Schools, is described in Goodyear-Ka'opua's book entitled *The Seeds We Planted: Portraits of a Native Hawaiian Charter School* (2013). The movement is articulated as more than an educational program or approach. It is positioned between two streams of innovations that coincided to provide a context for the promotion of Hawaiian identity and sovereignty. She describes the political, historical, and economic setting of the 1990s when the national charter school initiatives occurred at the same time as Hawai'i's sovereignty movement. She writes of the efforts for Hawaiian educators to "reclaim public K-12 education as a form of Hawaiian self-determination and sovereignty practice" (Goodyear-Ka'opua, p.5). The movement is not limited to education in a school setting, but is intended to strengthen and grow indigenous communities,

acknowledging that this broader social agenda requires transformation in the hierarchies of knowledge and power beyond schools. (Goodyear-Ka'opua, p. 29). Goodyear-Ka'opua (2013) clearly and sequentially described issues that triggered activism of those times. Those landmark incidents influenced the curriculum of Hawaiian-focused Charter Schools to reclaim Hawaiian rights and aspects of lifestyle that had been lost over years of colonization. Her description recounts the critical role of place and land-based education, self-determination and advocacy, spiritual and genealogical connections, protocol and ceremony, and navigation and wa'a culture.

Hawaiian Culture-based Education

Research has been conducted to identify elements of culture-based education and define curriculum content and pedagogy that supports a Hawaiian worldview. The Hawaiian Indigenous Education Teaching Framework resulted from the work of a community based education research project led by Kamehameha Schools (2008). The research advisory group was comprised of a Kamehameha Schools curriculum coordinator, professors of teacher education from in-state university campuses, Kamehameha Schools Research & Evaluation Division, 'Aha Pūnana Leo, and the Hawai'i State Department of Education's (HIDOE) testing and evaluation offices. The group completed an extensive literature review and determined five research based components of culture based education (Kana'iaupuni, Kawai'ae'a, p. 74).

Table 2

Key components of culture-based education

Component	Definition
Language	Recognizing and using native or heritage language.
Family and Community	Actively involving family and community in the development of curricula, everyday learning and leadership.
Content	Making learning meaningful and relevant through culturally grounded content and assessment.
Context	Structuring school, classroom, and other learning interactions in culturally appropriate ways
Assessment and Accountability	Gathering and maintaining data using various methods to ensure student progress in culturally responsible ways.

A Hawaiian Indigenous Educator Rubric was created, using the aforementioned five components of culture-based education as the five strands of the rubric. Criteria were created to describe examples of emerging, developing, and enacting. “Note that the objective of the tool is not to devalue non-Hawaiian indigenous approaches to teaching and learning but to define and articulate teaching behaviors and philosophies specifically from a Hawaiian indigenous education perspective.” (Kana‘iaupuni, Kawai‘ae‘a, p. 77).

Kawakami and Aton (2001) determined two critical elements for Hawaiian learning through interviews with individuals nominated by their community as successful Hawaiian educators. Those critical factors are authentic environments and experience-based learning and are also recurring themes in Hawaiian culture-based education: Hawaiian ways of knowing,

relevant ways of learning, community-based program design, cultural knowledge, and authentic learning environments (Kawakami, 2004).

Decolonizing evaluation framework provides evaluation strategies within a context of indigenous communities in Hawai'i and Aotearoa (Kawakami, Aton, Cram, Lai, Porima, 2008). The authors represent Maori and Kanaka Maoli heritage as well as Western academic training. This article provides a view of possibilities and opportunities for evaluation in indigenous communities that focuses on strengths related to the values of specific cultural communities. It also discussed the need to cultivate the next generation of researchers to conduct their work as proponents of their cultures. The following assumptions are stated as a foundation for this work (Kawakami, Aton, Cram, Lai, Porima, 2008). First, evaluation must be viewed and implemented as a holistic and contextualized experience with respect to a specific place, time, community, and history. The evaluation of projects in indigenous communities must promote and practice an indigenous worldview, including, but not limited to, consideration of indigenous identity, epistemology, values, and spirituality. Colleagues who have complementary knowledge and skill sets must collaborate to embrace both the cultural and academic perspectives during this time of emerging methodology (Kawakami, Aton, Cram, Lai, Porima, 2008).

Kamehameha Schools conducted a comprehensive quantitative study on Hawaiian Cultural Influences in Education (HCIE) as it related to student outcomes, (Kanaiaupuni, Ledward, and Jensen, 2012). The study collected survey data from teachers, students, their parents or guardians and gathered test scores from schools on math and reading achievement. The study included participants from public and private schools, charter schools and Hawaiian Immersion schools on Hawai'i island, Maui, O'ahu, Moloka'i, and Kaua'i.

The study used hierarchical linear models to conduct multilevel statistical analyses. Results are consistent with prior qualitative studies, indicating that culture-based educational strategies positively impact student outcomes, particularly Native Hawaiian student outcomes. This study began by looking at teachers' reported practices to determine the degree to which culture-based instruction was provided to students and the relationship with various student outcome measures. This study is important in understanding the impact of culture-based education on student outcomes because in addition to academic outcomes, the study reported on the impact of culture-based instruction on positive self-concept, school engagement, community attachment and giveback to community, and cultural knowledge and practice.

The authors report the results in a summary as follows. Culture-based education (CBE) positively impacts student social-emotional well-being (e.g. identity, self-efficacy, social relationships). Enhanced socio-emotional well-being in turn, positively affects math and reading test scores. CBE is positively related to math and science scores for all students, and particularly for those with low-socio-emotional development, most notably when supported by overall CBE use within the school. Students of teachers using culture-based education strategies reported greater Hawaiian affiliation, civic engagement, and school motivation than do students of other teachers. These students are more likely to put cultural skills to use in their communities and report higher levels of trusting relationships with teachers and staff. CBE was not prevalent in all of the schools included in this study. This study clarified how teachers' reported use of CBE instructional strategies affects classroom behavior and student educational outcomes across a variety of school contexts in the state of Hawai'i. "The data supports the hypothesis that cultural approaches strongly enhance relevance and relationships at school, while also supporting positive academic outcomes." (P.17).

21st Century Skills

The International Society for *Technology in Education (ISTE) Standards for Students* (2007) were designed to empower student voice and ensure that learning is student-driven. It is ISTE's belief that the following six Standards for Students prepare students for the evolving technological landscape (2007):

1. **Creativity and Innovation:** students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology
2. **Communication and Collaboration:** students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.
3. **Research and Information Fluency:** students apply digital tools to gather, evaluate, and use information.
4. **Critical Thinking, Problem Solving, and Decision Making:** students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.
5. **Digital Citizenship:** students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.
6. **Technology Operations and Concepts:** students demonstrate a sound understanding of technology concepts, systems and operations.

In addition to ISTE's Standards for Students (2007), Pacific Policy Research compiled a literature review to synthesize publications and research surrounding *21st Century Learning Skills* (2010). Partnership for 21st Century Learning, National Science Foundation, Educational Testing Services, North Central Regional Educational Laboratory (NCREL), Metiri Group were

amongst the research featured in the literature review. The literature review was organized within the four sections of the NCREL and Metiri Group Framework for 21st Century Skills: 1) digital age literacies, 2) inventive thinking, 3) effective communication, and 4) high productivity (p. 2). The resource also summarized that the core themes of 21st century learning integrate conventional core school subjects with civic literacy, global awareness, and financial/health/and environmental literacies (p. 6). Twenty first century critical learning and innovation skills include effective communication, collaboration, critical thinking, problem solving , and creativity (p. 7). Students post-secondary success will require effective cultural skills, as well as productivity, responsibility and leaderships capabilities (p. 8).

Project-based, problem-based, and design based learning were presented as best practices for implementing 21st century skills and are featured below (p. 13):

1. Project-based Learning components include tying project outcomes to curriculum and goals, employing questions or posing questions to introduce students to central concepts and principles, student responsibility for designing and managing much of their learning, and basing projects on authentic, real-world problems and questions that students care about (Thomas, 2007). An additional research finding was that students who have difficulties with traditional classroom/ textbook/lecture learning benefit significantly from a project-based learning experience which more closely aligns with their learning style and preference (Darling-Hammond et. al., 2008).
2. Problem-based Learning is a form of project-based learning, allows teachers to develop, and students to focus, on complex, real-world problems using a case study approach. When students work in small groups to research and pose solutions to problems, both a collaborative and multifaceted environment is created. Within this environment, students

can explore multiple solutions and best practices for tackling projects (Darling-Hammond et. al., 2008)...

3. Design-based Learning has been shown to have the most impact in the areas of math and science (Darling-Hammond et. al., 2008). Students who participate in learning by design projects have a more systematic understanding of a system's parts and functions that control groups (Hmelo, Holton, & Kolodner, 2000).

In regards to developing 21st century assessments, research recommended the following guidelines (Pacific Policy Research, 2010). Assessment systems must be based on multiple measures of students' abilities that include 21st century skills. Assessment of 21st century skills should be listed as an integral part of the academic assessments in math, reading and science. Reporting requirements should be expanded to include information on whether the student is achieving 21st century skills and funds should be made available for pilot projects that examine the use of assessments that measure 21st century skill competencies in high school students (Pacific Policy Research, 2010). Assessments that incorporate 21st century skills will ensure that students are equipped with necessary skills to be successful in college, career, and community.

Authentic Assessments

The Contemporary Assessment for Educators (1999) outlines a definition of performance assessment as requiring:

...students to demonstrate a skill of proficiency by asking them to create, produce, or do something, often in a setting that involves real world applications. Performance based assessments include paintings, speeches, musical presentations, demonstrations, research papers, investigations, athletic performance, projects, exhibitions, and other products that require students to construct a unique response to a task (p. 51).

Student learning and development is assessed through real-life tasks and activities which place a high-value on fidelity to real-world situations and context (Gulikers, Bastiaens, & Kirschner, 2004). Every act of authentic assessment is performance assessment but not vice versa as performance assessment is less concerned with ensuring the task adheres to the conditions under which the act would normally occur in real practice (Gulikers, Bastiaens, & Kirschner, 2004).

Performance assessment allows for evaluation of students' acquisition of higher-order knowledge, skills, and competencies, i.e. critical thinking, logic, reflection, creative thinking, etc. (Gulikers, Bastiaens, & Kirschner, 2004; Jones, Jones, & Hargrove, 2003). Externally-oriented accountability, i.e. standardized tests, may be an impediment to promoting higher-order learning competencies (Marion & Leather, 2015). An analysis by RAND Education revealed that merely 2% of mathematics and 20% of language arts state test items measure higher order thinking skills. Due to state tests relying on large numbers of multiple choice (MC) questions (78% math, 86% reading, 85% writing) the analysis focused on critical thinking skills, problem solving skills, and written communication skills required. Webb's Depth of Knowledge (DOK) Framework (Webb, 2002) subject-specific descriptions listed were used to determine the cognitive rigor of 14 state assessments (Yuan & Le, 2012). An example of writing specific DOK levels is included below, however Appendix A features Webb's DOK Framework in its entirety.

Table 3

Webb's Depth of Knowledge Writing Descriptions

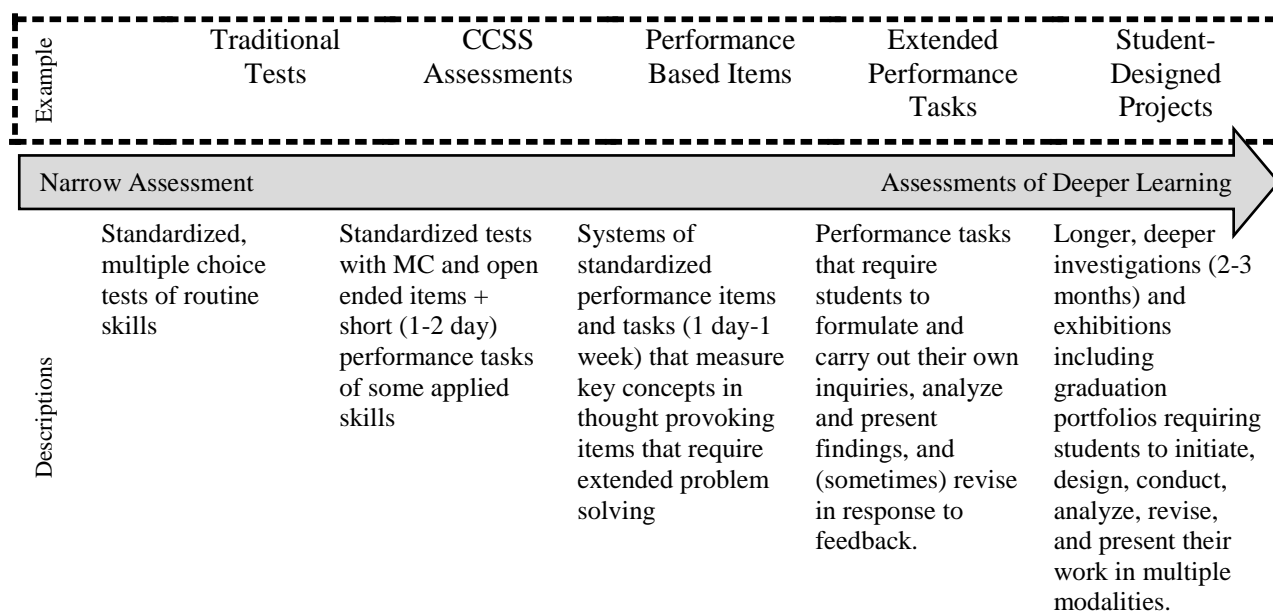
Depths of Knowledge (DOK) in Writing			
DOK 1	DOK 2	DOK 3	DOK 4
Write simple facts, use punctuation marks correctly, and identify standard English grammatical structures.	Engagement of some mental processing, such as constructing compound sentences, using simple organizational strategies, or writing summaries.	Requires higher-level processing, including supporting ideas with details and examples, using an appropriate voice for the intended audience, and producing a logical progression of ideas.	Requires an extended activity in which students produce multi paragraph compositions that demonstrate synthesis and analysis of complex ideas.

Traditional examples of hō'ike reflect the components of performance assessment including identifying target skills, identifying activities that display target skills, knowing what features to observe and report as evidence of skills acquisition, and comparing with performance standards (McMillan, 1999). Parsi and Darling-Hammond (2015) explained the relationship between standardized, multiple choice tests and more robust performance assessments with an Assessment Continuum (Figure 4):

In order to evaluate skills essential to college, career, and civic success, some of the assessments should fall toward the right side of the continuum and be used as periodic common measures, elements of end-of-course examinations, assessments for competency determinations in competency-based systems, or elements of graduation portfolios.

There can be fewer, higher quality state tests if they are used as a barometer to validate the results of richer assessments administered locally rather than to serve all purposes (p. 9).

Figure 4 Assessment Continuum (Parsi and Darling-Hammond, p. 9)



Linda Darling-Hammond and Frank Adamson (2010) explain that these assessments “allow students to construct or perform an original response rather than just recognizing a potentially right answer out of a list provided and can measure students’ cognitive thinking, reasoning skills and their ability to apply knowledge to solve realistic, meaningful problems” (Darling-Hammond, Adamson, p.7). School level studies reveal increases in performance on both traditional standardized tests and more complex measures for students in classrooms that offer a problem-oriented curriculum that regularly features performance assessments (p. 9).

Knuth and Adams (2011) summarize data analysis about the Air Toxics Under the Big Sky program developed at the University of Montana to connect university staff/resources with rural schools. The primary goal is to support students’ applying science process skills inquiry based projects conducted within their communities. Research findings are shared with authentic

audiences and are used to “educate others on the importance of good air quality and the steps they themselves can take to improve air quality within their homes, schools, and communities” (Knuth, R. & Adams, E., p. 32, 2011). The survey also contained questions about the Air Toxics Under the Big Sky program in general. Responses to two of those questions are particularly important. Students were asked whether the program changed their interest in (1) science and (2) in pursuing a science career. Thirty-six percent of students, after having just given their presentations, reported that they were more interested in science as a content area, and 24% reported an increased interest in a science career. This is notable, since a large number of these students were in elective science classes in which students may be expected to have high levels of science and science career interest. Any reported career interest increases by these students suggest that the Air Toxics Under the Big Sky program, with its culminating symposium, is a powerful way to have an impact on those who already have a high level of science interest (Knuth, R. & Adams, E., 2011).

The study entitled *Redefining High Performance in Northern Ireland: Deeper Learning and Twenty-First Century Skills Meet High Stakes Accountability* examined four secondary schools in Northern Ireland serving a significant percentage of low income families: two schools from the ‘Maintained’ (de-facto Catholic) sector, one school from the ‘Controlled’ (de-facto Protestant) sector, and one school from the ‘Integrated’ (mixed faith) sector. The objective was to identify when and how the schools fostered higher level cognitive skills, interpersonal skills and intrapersonal skills, known collectively in the literature as twenty-first century learning. This paper focuses on the integrated school as representative of many of the attributes encountered in all four schools and as a particular exemplar of high performance. The selected school served 28% low income families, consistently outperformed demographic peers on required exams for

the General Certificate of Secondary Education, and revealed through inspection reports and professional reputation a school wide commitment to instruction of twenty-first century skills. Analysis of classroom observations and focus group interviews with students, teachers, and administrators revealed that (1) Twenty-first century task demand is relatively higher when student learning is assessed with portfolios, performances, and local assessment practices, and 21st century task demand is relatively lower when learning is assessed with external exams. (2) Pastoral care, thoughtfully deployed, is a powerful lever for 21st century learning. (3) Cross-community contact, developed in meaningful ways, is a potentially powerful lever not only for peace-building in the province, but high level learning for the province's youth. (4) The School fostered twenty-first century skills by advancing a vision for learning that extends well beyond the low level demand of state accountability metrics (Nehring, Szczesiul, 2015). Nehring, J. H. & Szczesiul, S. (2015) recommendations for policy and practice are listed below.

1. Extended projects with clearly articulated products, portfolios and other locally based assessments to foster the development of 21st century skills
2. Greater policy level emphasis should be placed on efforts to leverage pastoral care and prioritize intersectorian integration as a means of fostering 21st century skills.
3. If school leaders should focus on 21st century learning while paying strategic attention to exam performance they will be rewarded with deeper learning and improved test results.
4. School level practitioners should also study the ways in which integrated schooling may be able to leverage intersectorian contact for the teaching of 21st century skills. Such opportunities should be expanded and more systematically mined for their 21st century learning potential.

5. Colleges of education should counter policy initiatives that advance traditional testing as a dominant force in state education. They should infuse their teacher training and leadership training with the theoretical foundation and practical skills associated with 21st century learning and by prepare teachers candidates to advocate for the infusion of 21st century skills into instruction even when the culture of their schools is driven by external assessment practices that discourage instruction in 21st century skills.
6. Academics need to advocate for learning that brings together domain specific knowledge and twenty-first century skills.

Gifted Child Today (2004) outlines the findings of a field study of eight North Carolina schools; four senior project schools and four control schools. Researchers identified four treatment schools that had institutionalized Senior Projects for at least 4 years, with all seniors participating in senior projects and with a research paper, product, portfolio, and oral presentation components. Students who responded to surveys about senior project sites indicated a more positive association with the following specific skills than did their counterparts at the control schools: writing a research paper, preparing and presenting a speech, carrying out a plan, and conducting interviews. Similar findings indicated that students at senior project schools perceived the following skills to have been reinforced more in their classes than the students at control schools: preparing and presenting a speech, conducting research, and locating appropriate references. “The senior project model presents a defensible, credible educational model that incorporates many of the elements of exemplary models in gifted education” (Shaunessy, p. 39, 2004)

A Harvard report *Turning the Tide: Inspiring Concern for Others and the Common Good through College Admissions* (2016) was published to improve the role of the college admissions

process in promoting and assessing ethical and intellectual engagement. College admissions officers, university administrators, school guidance counselors and principals, character education experts, individuals representing national organizations of school guidance counselors, admission professionals, and independent schools developed recommendations that address three challenges; 1) motivating high school students to contribute to others and their communities in more authentic and meaningful ways, 2) assessing young people's contributions to others and their communities, and 3) redefining achievement in ways that create greater equity and access for economically diverse students (Weissbourd et al., 2016).

The report outlined that colleges admissions processes must honor students meaningful, sustained community service. It recommended students complete in a minimum of one year of sustained service and “engage in forms of service that are authentically chosen—that emerge from a student's particular passions and interests—that are consistent and well-structure, and that provide opportunity for reflection both individually and with peers and adults.” (Weissbourd et al., p. 3). Students who engage in meaningful, sustained community engagement develop an emotional and ethical awareness (Weissbourd et al., 2016). The Harvard report also outlined the importance of collective action that takes on community challenges and “young people collaboratively addressing community issues to develop problem solving skills, group awareness, and greater understanding of and investment in the common good.” (Weissbourd et al., p. 4) College admissions processes should assess student experiences with authentic, meaningful experiences with diversity (Weissbourd et al., p. 4). The report recommends college admissions processes measure student service that develops gratitude and a sense of responsibility for the future (Weissbourd et al.,2016). “Community engagement opportunities help young people appreciate the contributions of the generations before them—how their lives are built on the

services of others—and their responsibility to their descendants.” (Weissbourd et al., p. 5).

Turning the Tide: Inspiring Concern for Others and the Common Good through College Admissions presents revised college admission processes to assess student contributions to community through letters of recommendation, personal essay and application questions (Weissbourd et al., 2016). Over the next two years Harvard will work with college admissions officers, parents, high school guidance counselors, and high school and college administrators to implement the report recommendations.

Hō‘ike

All HFCS use hō‘ike to assess student progress and as a graduation requirement. A variety of primary resources describe examples of traditional hō‘ike for kahuna, hula, and ali‘i.

Hula. A hula dancer’s ‘uniki occurs when he/she is able to demonstrate proficiency in a variety of hula dances that reflect the kumu hula philosophy and teaching. Dancers are also responsible for sharing their repertoire of Hawaiian instruments (Chun, 2011). “Each one must eat all that is set before him. It is a mystical rite, a sacrament; [...] The kumu lifts the tabu by uttering a prayer—always a song—and declares the place and the feast free, [...] The pupils have been graduated from the school of the hālau; they are now members of the great guild of hula dancers.” (Unwritten Literature of Hawai‘i, 34-35).

Kahuna. ‘Uniki is one example of an hō‘ike that is commonly used in present day and requires a range of hula expertise. Kahuna were also expected to learn a vast amount of spiritual and medical information. Samuel Kamakau described the range of expertise required of kahuna (Chun, 2011). “In some countries of the world, medicinal practitioners are not like the Hawaiian ones. Some are medical experts, not through the mana of God, but through their being guided by visual proof in their search for knowledge. In the Hawaiian school of medical kahunas, the god

was the foundation, and secondly came prayers. Third came schooling in the kinds of diseases; fourth in the kinds of remedies; fifth, in the art of killing; and sixth in the art of saving.” (p 90). Only after successfully completing tedious training in the aforementioned areas, were kahuna permitted to demonstrate their understanding by diagnosing human subjects (Chun, 2011). “Then the teacher would bring in a man who had many disorders and would call the pupils one by one to go and ‘feel,’ hāhā, for the diseases. If the diagnosis (‘ike hāhā) was the same as that of the teacher, then the teacher knew that the pupil had knowledge of the hāhā.” (Ka Po‘e Kahiko, 108).

Ali‘i. Prior to an hō‘ike, Hawaiian students received extensive, small group and individual instruction designed to scaffold understanding. No Nā Mamo (2011) provides insight about leadership preparation for ali‘i that began at a young age. It included a range of leadership skills including empathy, reflection, strategy, and effective counseling strategies:

During the youth of the ali‘i ‘aimoku, they were sent out to live with wise and skilled people, and to listen first to the words of experts and to the important things that would benefit their rule. They were the first to show bravery in combat and in wisdom and to do these things without any hesitation. Furthermore, [these young people] would initially live with another ali‘i in a state of poverty, starvation, and famine so they would remember what these conditions of life were like. Some were taught to take care of the people using great patience and they were even belittled below the position of the maka‘ainana (p. 173).

Formal Education. Although the arrival of the missionaries ushered in a deluge of changes and hō‘ike morphed to include Western content knowledge, hō‘ike continued to be a

primary mode of showcasing understanding. Kamakau's writing reveals that teaching strategies were often based on how kanaka learned oli, pule, and ha'i 'ōlelo (p 107):

Schools were established all over Oahu and conducted like the schools of the hula in old days. After the second or third week they would hold all night and all day sessions, and as April 19 of each year approached, when all gathered for the yearly exhibition (hō'ike), from Kepukaki you could see the lights burning all the way from Nu'uaniu Pali to Kaimuki. Each school vied with the others to make the best showing on the day of the exhibition, and the winner would receive acclaim from the public (Ruling Chiefs, p. 270).

The following excerpt from Kuykendall (1938) shares a missionary perspective about hō'ike from the year 1831. Rev. Reuben Tinker "remarked that it 'answers for them in place of New England commencements and cattle shows and election', and he gives a description of an examination (p 108):

The shell horn blowing early for examination of the schools, in the meeting house. About 2,000 scholars present, some wrapped in large quantity of native cloth, with wreaths of evergreen about their heads and hanging toward their feet—others dressed in calico and silk with large necklaces of braided hair and wreaths of red and yellow and green feathers very beautiful and expensive. It was a pleasant occasion, in which they seemed interested in happy.... The King and chiefs were present, and examined among the rest. They read in various books, and 450 in four rows wrote the same sentence at the same time on slates. They perform with home ceremony. In this exercise, one of the teachers cried out with as much importance as an orderly sergeant...and immediately the whole company began to sit up straight. At the next order, they stood on their feet. At the next they 'handled' slates or 'presented'—i.e. they held them resting on the left arm

as a musician would play his fiddle. At the next order, they brought their pencils to bear upon the broadsides of their slates ready for action. Mr. Bingham then put into the crier's ear the sentence to be written, which he proclaimed with all his might and a movement of the 450 pencils commenced which from their creaking was like the music of machinery lacking oil. Their sentences were then examined and found generally correct.... Eight of the Islanders delivered orations which they had written and committed to memory. Gov Adams [Kuakini] was among the speakers (Kuykendall, p 109).

International Policy. In addition to attending hō'ike to celebrate teaching and learning, Hawaiian leaders also integrated learning exhibitions into their global leadership efforts. In the 1860s, the Kingdom of Hawai'i was the only Pacific government represented at the World Exhibition in Paris and the following excerpt from *Ruling Chiefs* (Chun, 2010) describes the reaction of other countries:

The European governments are astonished to see the sign outside the Hawaiian room at the exposition. They cannot believe it. A race of man eaters are the Hawaiian people, are they not? And do they really have a government? And they have a room here? Then they examine the exhibit and see a cloak made out of bird feathers, a wreath of bird feathers, and a number of other objects from ancient times. They see the products of the country—sugar, molasses, rice, coffee. At the office of the Hawaiian government they find books from the first pi-a-pa primer to books large and small, the Bible, and newspaper files beginning with the *Lama Hawai'i* and the *Kumu Hawai'i* and ending with the *Au 'Ōko'a* and the *Ku'oko'a*. Books for education, books of laws from the beginning to the present time. The office has a quantity of Hawaiian manuscripts. The

men interested in education look at each other and say, 'This cannibal island is ahead in literacy; and the enlightened countries of Europe are behind it!' (p 420).

Hawaiian ali'i were proponents of hō'ike and created opportunities to showcase Hawai'i to a worldwide audience. The previous examples represent only a fraction of resources that illustrate how Native Hawaiians valued demonstrating their understanding of a variety of topics. Hawaiians used an array of presentation styles to communicate expertise that included song, dance, oratory, written products, demonstrations, and presentations.

Conclusion

Historical accounts present a variety of evidence of Hawaiians utilizing hō'ike to demonstrate proficiency and readiness for the next level of education, training, and career, however it was not until the 1990s that American education identified the benefits of authentic assessments including a the creation of variety of learning artifacts and the construction or performance of original responses. Proponents of Authentic Assessment contend that these assessments communicate greater depth of knowledge about student learning. HFCS hō'ike also reflect the values of culture based assessments and student data is gathered and analyzed using methods to ensure student progress is determined in culturally responsible ways. Existing research validates the use of authentic assessments that include 21st century skills; however there is no research about hō'ike as a valid form of authentic, culture-based assessment.

CHAPTER III

METHODS

Research Design

A qualitative study with correlational quantitative data was utilized to collect quantitative and qualitative data about the research question: “How do hō‘ike encapsulate components of the Hawaiian-focused Charter School Vision of the Graduate for students, families, and schools?” Four HFCS were selected and interviews were conducted with HFCS po‘okumu, po‘okula, alumni, and hō‘ike coordinators. Gathering information from HFCS leadership and family about perceptions of hō‘ike is valuable data that supports HFCS in communicating students’ Cultural Competency, College/College/Community Readiness, and Interim Growth progress to a variety of stakeholders. In addition to school staff, student and family perceptions of HFCS hō‘ike are important to communicate assessment validity. Individual interviews were conducted with HFCS Seniors graduating in 2016 as well as their parents. Pre hō‘ike interviews were conducted with students and parents in February 2016 to build relationships with stakeholders in preparation for post hō‘ike interviews in June 2016. Although teacher focus groups and po‘okumu interviews were conducted to gather additional information about HFCS hō‘ike connections to the HFCS Vision of the Graduate, they were not utilized for this study. All interviews were conducted in person, on site at schools or at family homes. In addition to interviews and focus groups, Kamehameha Schools Keiki, ‘Ōpio, ‘Ohana and HFCS Graduate Surveys were analyzed to gather additional information about the relationship between HFCS senior hō‘ike and the HFCS Vision of the Graduate.

Methodological Frameworks

Action Research. HFCS po‘okumu are committed to contributing to the ability of all public schools to tell a richer story of student and school success. Although 100% of HFCS created the common HFCS Vision of the Graduate, schools continued to be mandated to complete high stakes, standardized assessments that do not reflect values represented in the HFCS Vision of the Graduate. During the 2014-2015 school year, the HFCS Culturally Relevant Assessment project pilot commenced. The goals of the HFCS Culturally Relevant Assessment pilot project are 1) to share HFCS individual and collective stories through student focused evidence and 2) communicate learner growth and school success (Hawaiian-focused Charter Schools, 2013). Three working groups are in the process of developing assessments designed to document progress toward achieving the HFCS Vision of graduate based on the 3 themes that emerged from the Vision of the Graduate (Hawaiian-focused Charter Schools, 2013):

- **Readiness:** HFCS prepare students to be proactive contributors to their ‘ohana, community, and to be prepared for success at the next level of formal schooling, training, and career.
- **Interim Growth:** HFCS developed measures that are rigorous, relevant, vision/mission driven, and provide a unique portrait of each school’s work with the communities they serve.
- **Cultural Competency** HFCS haumāna build knowledge, skills, and perspectives that are aligned to ancestral learning and assessment.

Collaborating with four HFCS who were actively engaged in the HFCS Culturally Relevant Assessment project fostered po‘okumu interest in research findings because the data was relevant to a problem of practice they were all committed to. HFCS were also interested in gathering and

analyzing data from students, families and alumni to effectively reflect on the range of data about hō‘ike and the HFCS Vision of the Graduate.

Traditional forms of research believe that knowledge exists in books and artifacts, people are not needed to generate new knowledge. Practice based forms of research believe that knowledge is always being created and exists in people and the stories they tell. Shared stories represent the present best thinking of a community of independent thinkers each wishing to test the validity of their provisional claims (McNiff, p. 217).

HFCS were interested in resources to communicate the effectiveness of hō‘ike as a valid and authentic assessment of student learning.

Action research takes place in settings that reflect a society characterized by conflicting values and an unequal distribution of resources and power. Action researchers must interrogate received notions of improvement or solutions in terms of who ultimately benefits from the actions undertaken (Herr, Anderson, p. 4).

Schools were interested in building a research body that supported the effectiveness of hō‘ike in demonstrating components of the HFCS Vision of the Graduate. “Organizational learning happens through encouraging people to share their tacit knowledge about their work and find ways to make it increasingly explicit so that all may benefit” (McNiff, p. 217).

Phenomenology. Hō‘ike is an exhibition of learning shared by Native Hawaiians; therefore interview and focus group data was analyzed through the lens of Phenomenology. A person's perception of the meaning of an event, in this case hō‘ike, as opposed to the event as it exists externally to (outside of) that person. The focus of phenomenological inquiry is what people experience in regard to some phenomenon or other and how they interpret those experiences. The experiences of different people are analyzed to determine the essence of a

shared experience (Merriam, 2009). The process of conducting a phenomenological study (Spielberg, 1965) impacted the data collection design process:

1. Researcher must have an intuitive grasp of the phenomenon
2. Investigate several instances or examples of the phenomenon to gain a sense of general essence
3. Apprehend relationships among several essences
4. Systematically explore the phenomena (what and how it appears)
5. Determine how phenomena have come into consciousness
6. Bracket phenomena beliefs
7. Interpret phenomena meaning

Hawaiian-focused Charter School students demonstrate understanding through a variety of hō'ike throughout the school year. For the purpose of this study, two hō'ike were selected to investigate as phenomena, 1) Senior Capstone Project Hō'ike and 2) Senior Graduation Hō'ike. Both of the aforementioned phenomena occurred at the end of the school year and close to graduation, the relationship between the HFCS Vision of the Graduate themes and two phenomena could be ascertained. Figure five outlines two school examples of Senior Capstone Project Hō'ike and Senior Graduation Hō'ike. A Hakipu'u Learning Center Senior shares a ha'i 'ōlelo about his Senior Capstone Project Hō'ike (Hakipu'u Learning Center 2016). During Kua o ka Lā Senior Graduation Hō'ike, students are presented with kī'o'e that represent the transition from students receiving knowledge to graduates imparting knowledge to their communities (Kua o ka Lā, 2016). Interviews with HFCS stakeholders about the HFCS hō'ike phenomena were categorized into four categories; 1) Cultural Knowledge, 2) Academic Knowledge, 3) Post-

secondary Readiness, 4) HFCS Context. Table three outlines the categories identified two school examples.

Figure 5 HFCS Hō‘ike Phenomena

Senior Capstone Project Hō‘ike



Graduation Ceremony Hō‘ike



Table 4:

HFCS Phenomena Category Examples

HFCS	Cultural Knowledge	Academic Knowledge	HFCS Context
Kua o ka Lā	kī‘o‘e, kīhei,	‘ike kupuna, ha‘i ‘ōlelo	Audience: alumni,
Graduation	mo‘okū‘auhau, cultural		community,
Hō‘ike	protocol, hula, food preparation, mele		‘ohana
Hakipu‘u	‘ai pono, ha‘i ‘ōlelo,	inquiry process, core	Process and
Learning Center	traditional, food	content area knowledge,	audience: alumni,
Senior Capstone	preparation,	ha‘i ‘ōlelo, research paper,	community,
Project Hō‘ike	community service	community service	‘ohana, teachers, administration

Role of Indigenous Researcher

3 Rs: Respect, Reciprocity, and Relationality. As Kamehameha Schools Ho‘olako Like School Improvement Specialist, I work with all 17 HFCS. Facilitating a multi-year HFCS Culturally Relevant Assessment pilot project developed a greater understanding of HFCS Senior Capstone Project Hō‘ike and increased the intuitive grasp of the phenomena as a researcher. “The goal of collaborative research is to reduce the tendencies of quadrants II and III and to expand quadrant I” (Herr, Anderson, p. 50).

Figure 6 Four Squares of Knowledge

I. We know , They know	II. We don't know , They know
III. We know, They don't know	IV. We don't know , They don't know

The original data collection plan included interviews with three HFCS stakeholder groups: po‘okumu, kumu, and ‘ohana. Interview questions were designed to gather information about stakeholder perceptions of hō‘ike as a demonstration of student achievement of the three themes of the HFCS Vision of the Graduate; College/Career/Community Readiness, Interim Growth Measures, and Cultural Competence. The following Guiding Principles for Indigenous Research (Atkinson, 2001) informed data collection planning:

- Aboriginal people themselves approve the research and research methods
- A knowledge and consideration of community and the diversity and unique nature that each individual brings to the community
- Research participants must feel safe and be safe, including respecting issues of confidentiality
- Acknowledgement that the researcher brings to the research his or her subjective self

HFCS po‘okumu serve dual roles as school and community leaders and are gatekeepers to key individuals who possess an abundance of knowledge about hō‘ike. The pre-existing researcher and po‘okumu relationship opened a floodgate of information and stakeholder groups expanded to include three additional groups; HFCS alumni, HFCS Seniors 18 years or older, and HFCS Hō‘ike Coordinators. Interviews with ‘ohana and seniors were scheduled prior to the end of the year hō‘ike to build relationships and post hō‘ike interviews were scheduled to reflect on the depth of the hō‘ike experience and connections to the HFCS Vision of the Graduate. The aforementioned relationship between researcher and schools resulted in an increased scope of the data set. The total number of interviews nearly doubled from 27 to 51 interviewees and created an overwhelming sense of researcher kuleana to participating schools. “Trust is crucial to this method, and the researcher must have a deep sense of responsibility to uphold that trust in every way” (Weber-Pillwax, p. 77). Weber Pillwax (2001) explains “Indigenous researchers ground their research knowingly in the lives of real persons and individuals and social beings, not on the world of ideas” (p.80). The 3R’s, Respect, Reciprocity, and Relationality are critical guideposts throughout an indigenous research process. The following questions assisted in the thoughtful expansion of data collection and the table summarizes the plan:

- How do my methods help to build respectful relationships between myself and the other research participants?
- How can I relate respectfully to the other participants involved in this research so that together we can forge a stronger relationship with the idea that we will share?
- What is my role as researcher in this relationship, and what are my responsibilities?
- What am I contributing or giving back to the relationship? Is the sharing, growth, and learning that is taking place reciprocal?

Table 5

Final Data Analysis Plan, March 2016

HFCS Stakeholder	Selection Process	Method	Purpose
Parents Pre Hō'ike*	Teachers inform selection process based on: willingness, diversity of student achievement of the Vision of the Graduate	Qualitative: 1-1 interviews	Build relationship, reasons for selecting HFCS, thoughts about HFCS Vision of the Graduate
Parents Post Hō'ike	Same families that completed pre hō'ike interview	Qualitative: 1-1 interviews Quantitative: surveys	Effectiveness of hō'ike in communicating HFCS Vision of the Graduate
Hō'ike Coordinator*	Designated by po'okumu	Qualitative: 1-1 interviews	Background hō'ike & effectiveness communicating HFCS Vision of the Graduate
Seniors, Pre Hō'ike*	18 years or older	Qualitative: 1-1 interviews or focus groups	Build relationship, reasons for selecting HFCS, thoughts about HFCS Vision of the Graduate
Seniors, Post Hō'ike*	18 years or older	Qualitative: 1-1 interviews Quantitative: surveys	Effectiveness of hō'ike in communicating HFCS Vision of the Graduate
Alumni*	Po'okumu selection process based on: willingness, diversity of student achievement	Qualitative: 1-1 interviews	Effectiveness of hō'ike in communicating HFCS Vision of the Graduate

Data Collection and Relationships. Weber-Pillwax (2001) expounds on the importance of relationality in the interview process:

Interviewing, however, is to be seen as a process of total involvement. I connected with people that I had known for years, not in terms of knowing their personalities, but knowing their connections. They also knew my connections. We were part of a network that was safe, trusted and established. The trust in some cases was not necessarily vested in me as an individual, but in me as a part of my family (p. 42).

The 3R's of indigenous research Respect, Reciprocity, and Relationality (Weber-Pillwax, 2001) were prevalent throughout the data collection process. "While most people will recognize the importance of families, all forms of interpersonal relationships take on special significance within indigenous communities" (Wilson, p. 12). The following are several examples discovered during the talk story immediately preceding or following interviews with HFCS stakeholders:

- One HFCS Senior's mother was raised in a small town adjacent to my paternal grandmother's home town
- One HFCS alumni grandmother inquired "Who you and what's your Hawaiian last name?" She was raised in my grandmother's hometown.
- Four HFCS Seniors accepted to the University of Hawai'i at Hilo inquired about my college experience.
- One HFCS Senior's response when she discovered I was from her hometown "Thank God you're from Hilo, that's cool! I thought you were going to be someone from the mainland."
- Two HFCS po'okumu requested I serve on panel to assess HFCS Hō'ike.
- One teacher focus group response "Aunty was right, you're super easy to talk to."

- One HFCS Senior invited me to her graduation party.

Data Analysis and Relationships. The following data analysis process was developed to effectively analyze research participant interview data and honor schools' participation.

1. Crosswalk interview questions with research question. Focus on interview questions that directly correlate with research question.
2. Identify HFCS stakeholder groups that have high correlation between interview questions and research question
 - a. 'ohana pre and post hō'ike interviews, senior pre and post hō'ike interviews, alumni, hō'ike coordinator
3. Conduct targeted data analysis on a random sampling of one through three interviewees from stakeholder groups
 - a. Two 'ohana pre and post hō'ike interviews, three seniors pre and post hō'ike interviews, one alumni, two hō'ike coordinators
4. Identify preliminary data analysis themes based on targeted data analysis.
5. Transcribe teacher and po'okumu interviews and save for future research
6. Transcribe and analyze interview data from key stakeholder groups:
 - a. 'ohana pre and post hō'ike interviews, seniors pre and post hō'ike interviews, alumni, hō'ike coordinator

Study Sites

Seventeen Hawaiian-focused Charter Schools share a common HFCS Vision of the Graduate; however each school is located in a community that serves a unique student body reflective of the individual school missions and visions. It was important to research schools from an array of communities with a variety of experience implementing Senior Capstone

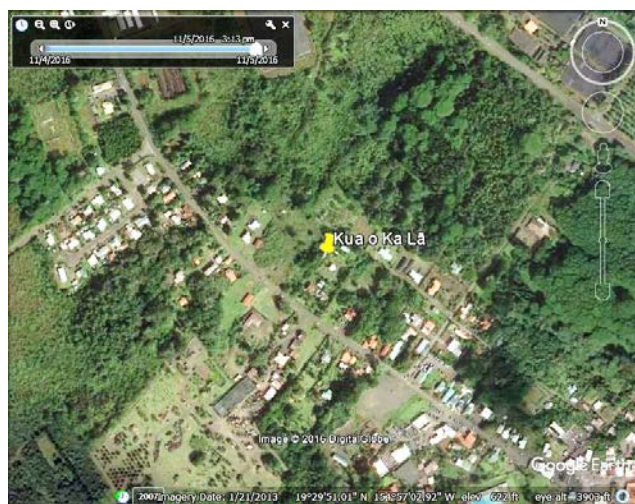
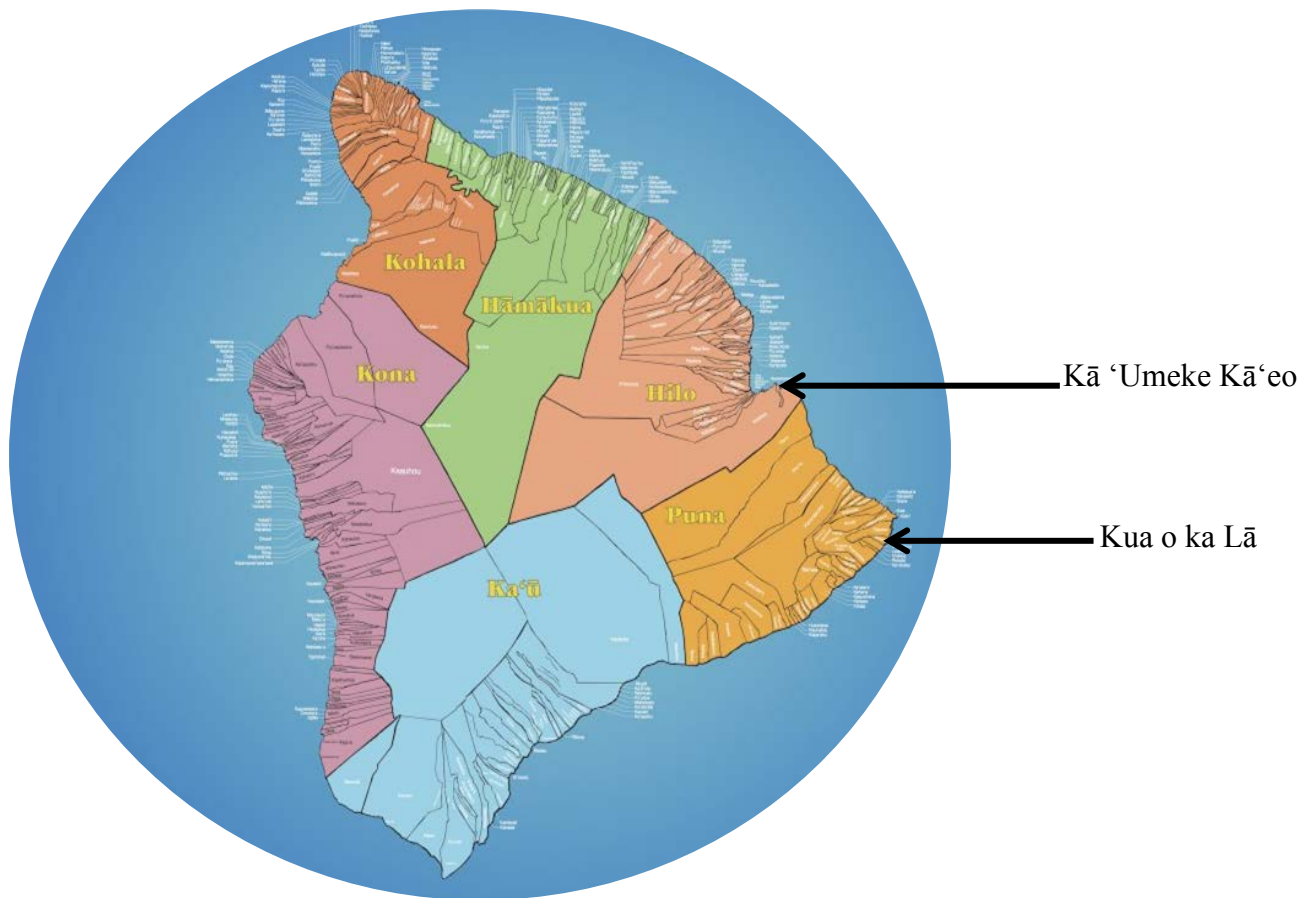
Project Hō‘ike and Graduation Hō‘ike. Four HFCS in the State of Hawai‘i were selected for this study based on the diversity of student body, range in student enrollment, hō‘ike design, and English and Hawaiian language immersion schools. Table 6 summarizes key information about the four schools and Figures 7-8 outline the geographic location of participating schools.

Table 6

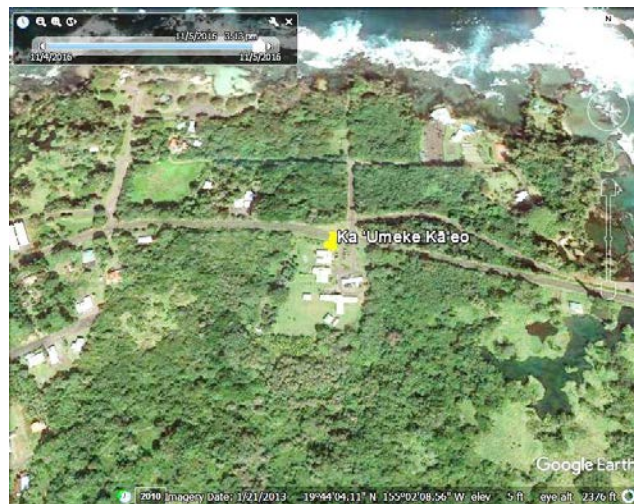
HFCS characteristics

Information	Hakipu‘u Learning Center	Ka ‘Umeke Kā‘eo	Ke Kula ‘o Samuel M. Kamakau	Kua o ka Lā
Year Founded	2001	2001	2000	2002
Island	O‘ahu	Hawai‘i	O‘ahu	Hawai‘i
Ahupua‘a ili	He‘eia, Ko‘olaupoko	Honohononui, Hilo	He‘eia, Ko‘olaupoko	Pū‘āla‘a, Puna
Site	Adjacent to Windward Community College	Utilizes Keaukaha’s shoreline, Honokea fish pond, and native habitat	Utilizes community sites including Papahana Kuaola and Kānehūnāmoku Voyaging	Utilizes ancient Hawaiian village (Pū‘āla‘a) historical sites, fishponds, and native habitat
Language	English	Hawaiian immersion	Hawaiian immersion	English
% Hawaiian Students	80%	99%	93%	53%
% Free/Reduced Lunch	67%	77%	58%	59%
Grade Levels	4-12	K-8	Preschool-12	K-12
2015-2016 Enrollment	66	242	143	162

Figure 7 Hawai'i island HFCS School Sites

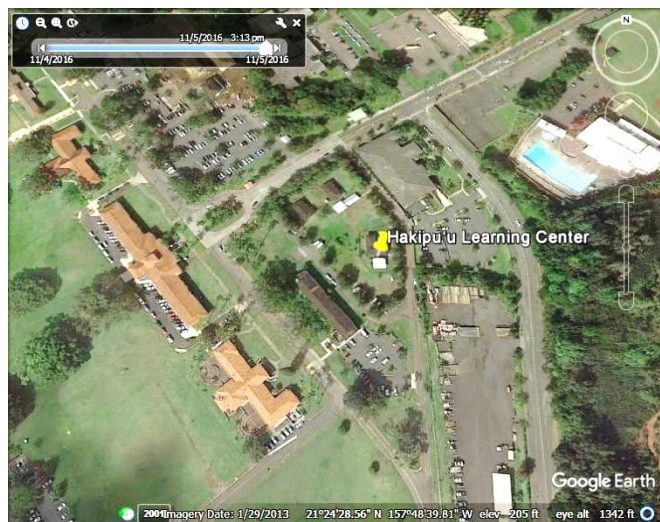
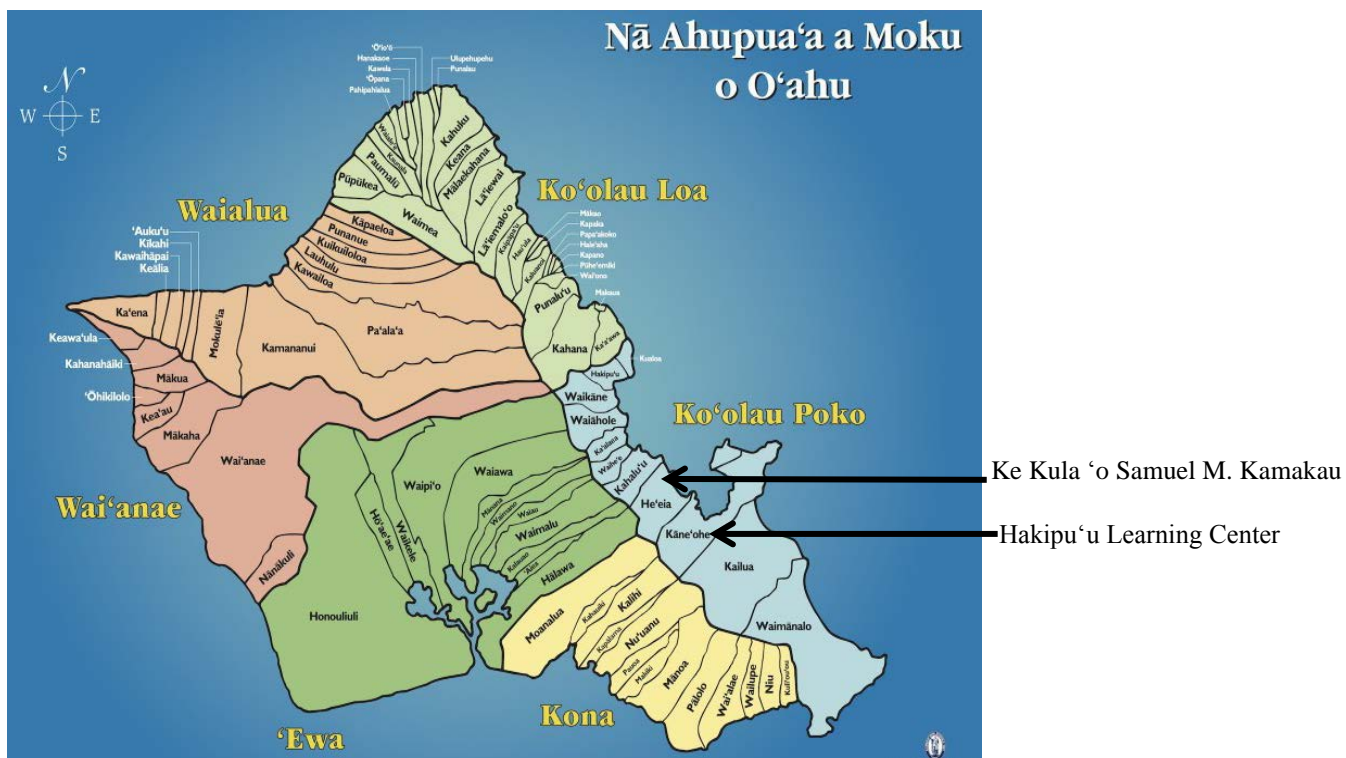


Kua o ka Lā

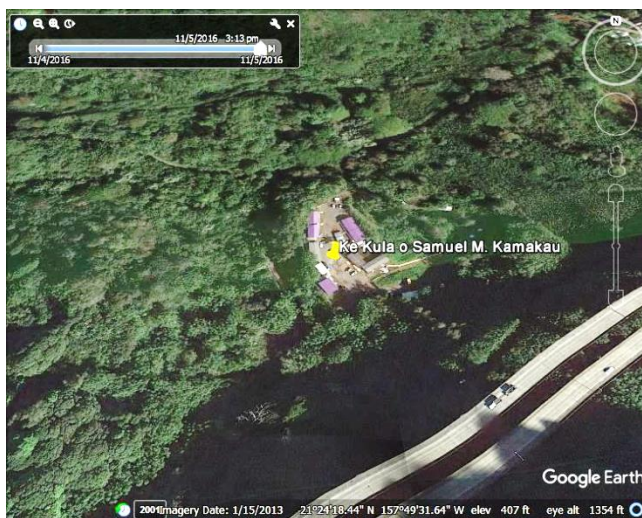


Ka 'Umeke Kā'eo

Figure 8 O‘ahu Island HFCS School Sites



Hakipu‘u Learning Center



Ke Kula ‘o Samuel M. Kamakau

In Spring 2016, interviews and focus groups were conducted with a sample of HFCS head of schools, principals, hō‘ike coordinators, teachers, students (18 years of age or older), and alumni. Interview questions were designed to gather information about stakeholder perceptions of hō‘ike as a demonstration of student achievement of the HFCS Vision of the Graduate. The following table outlines the themes of the Hawaiian-focused Charter School that were evident in HFCS Senior hō‘ike.

Table 7

HFCS graduate themes present in HFCS hō‘ike

HFCS Hō‘ike	Cultural Knowledge	Responsibility to Family	Responsibility to Community	Responsibility to Environment	College, Career, Community Readiness
Hakipu‘u Learning Center	✓	✓	✓	✓	✓
Ke Kula ‘o Samuel M. Kamakau	✓	✓	✓	✓	✓
Ka ‘Umeke Kā‘eo	✓	✓	✓	✓	✓
Kua o ka Lā	✓	✓	✓	✓	✓

Data Analysis Process

The data analysis process was refined to focus on key stakeholder groups and interview questions (Table 7) with the strongest correlation to the research question: “How do HFCS

hō‘ike encapsulate components of the HFCS Vision of the Graduate for students, families, and schools?” The following plan was implemented in the summer of 2016:

1. Select two schools (Ka ‘Umeke Ka‘eo and Kua o ka Lā) to begin data analysis (n=9)
 - a. Rationale for selection
 - i. Both schools have interviews completed for all key stakeholders
 - ii. Geographical to explore Hawai‘i island themes
2. Complete data analysis and cross case analysis
 - a. Complete data analysis by individual school
 - b. Complete cross case data analysis (compare schools)
3. Key Stakeholders
 - i. Rationale for selection
 1. Interviewees who provided insightful interview responses
 2. Completed both pre and post interviews
 - ii. ‘Ohana 1 pre & 1 post hō‘ike
 - iii. Seniors 1 pre & 1 post hō‘ike
 - iv. 1 Alumni
 - v. 1 Hō‘ike Coordinator
4. Share data analysis findings with committee during September 30, 2015 meeting and determine if analysis for other two schools is possible.
 - a. If data analysis is broadened to include other schools, n=21
5. Transcribe teacher and principal stakeholder group interviews for post dissertation research

Table 8

Interview questions that correlate to research question

‘Ohana Pre Hō‘ike	‘Ohana Post Hō‘ike	Senior Pre Hō‘ike	Senior Post Hō‘ike	Hō‘ike Coordinator	Alumni
Are themes of HFCS Vision of the Graduate (culture, family, community, environment, college readiness, career readiness and community readiness) important goals for your child? Which are most important? Which are challenging? What would your child’s life be like if he/she didn’t attend this HFCS?	What part of the senior hō‘ike had the biggest impact on you? What did you get out of hō‘ike? How was your hō‘ike evaluated? How did your child do What support systems were in place? What suggestions for improvement?	How does the school help you learn more about culture and identity? How is the school preparing you to contribute to your community? Which of the themes of the HFCS Vision of the Graduate are meaningful to you?	What part of the senior hō‘ike had the biggest impact on you? What did you get out of hō‘ike? How are you described as a HFCS student?	What is your role/purpose in graduation hō‘ike? How did you become the coordinator? How does the graduation hō‘ike relate to the themes of HFCS Vision of the Graduate?	How did the graduation hō‘ike share your learning during your years at HFCS? How are you manifesting the themes of the HFCS Vision of the graduate?

Table 8 continued

'Ohana Post Hō'ike	Senior Pre Hō'ike	Senior Post Hō'ike	Hō'ike Coordinator	Alumni
SAT is a	How did HFCS	SAT is a	How does the	How did HFCS
standardized	prepare you for	standardized	graduation hō'ike	prepare you for
assessment that	College/ Career?	assessment that	communicate	College/ Career?
shares student	(Readiness)	shares student	student learning	(Readiness)
understanding in 3	How do you	understanding in 3	more effectively	How did HFCS
areas: reading,	communicate your	areas: reading,	than standardized	prepare you to
math, and written	learning in ways	math, and written	assessments?	contribute to your
communication	other than	communication	How does the	community?
skills. What	standardized tests?	skills. What	graduation hō'ike	(Readiness)
would your child's	What would your	would your HS	demonstrate	How did HFCS
HS experience	life be like if you	experience have	culture and	help you
have been like	didn't attend	been like with no	identity?	understand more
with no hō'ike and	HFCS?	hō'ike and only	How does the	about culture and
only SAT scores?		SAT scores?	graduation hō'ike	identity?
How did your		In order to	connect to family	What would your
Senior hō'ike		graduate you have	and community?	life be like if you
reflect the HFCS		to pass 1 more test.	How does the	didn't attend
Vision of the		Select an item that	graduation hō'ike	HFCS?
Graduate?		represents your	reflect college and	
Fast forward to the		career and life	career readiness?	
future. How will		goals. Explain the		
your child bring		connection.		
the HFCS Vision				
of the Graduate to				
life next year? 10				
years?				

The revised data analysis process ensured an adequate amount of qualitative data would be effectively analyzed in the allotted timeline. The following table summarizes the revised interviews that are included in the data analysis process.

Table 9

HFCS Hō'ike Data Collection Process

Data				
Collection Process	Ka 'Umeke Ka'eo	Kua o ka Lā	Hakipu'u Learning Center	Ke Kula 'o Samuel M. Kamakau
Completed	n=8	n=15	n=12	n=16
Interviews	<ul style="list-style-type: none"> • 1 principal • 1 hō'ike coordinator • 1 student (pre and post hō'ike) • 1 alumni • 1 parent (pre and post hō'ike) • 3 teachers 	<ul style="list-style-type: none"> • 1 head of school • 1 principal • 1 hō'ike coordinator • 4 students (pre and post hō'ike) • 1 alumni • 4 parents (pre and post hō'ike) • 3 teachers 	<ul style="list-style-type: none"> • 1 head of school • 3 administrators • 1 hō'ike coordinator • 3 students (pre and post hō'ike) • 1 alumni • 1 parent (pre and post hō'ike) • 2 teachers 	<ul style="list-style-type: none"> • 1 head of school • 1 hō'ike coordinator • 6 students (pre and post hō'ike) • 3 alumni • 3 parents (pre and post hō'ike) • 2 teachers
n=51				

Table 9 continued

HFCS Hō‘ike Data Collection Process

Data Collection Process	Ka ‘Umeke Ka‘eo	Kua o ka Lā	Hakipu‘u Learning Center	Ke Kula ‘o Samuel M. Kamakau
Included in	n=4	n=5	n=6	n=12
Data	• 1 hō‘ike	• 1 hō‘ike	• 1 hō‘ike	• 1 hō‘ike
Analysis	coordinator	coordinator	coordinator	coordinator
n=27	• 1 student (pre and post hō‘ike)	• 2 students (pre and post hō‘ike)	• 3 students (pre and post hō‘ike)	• 6 students (pre and post hō‘ike)
	• 1 alumni	• 1 alumni	• 1 alumni	• 2 alumni
	• 1 parent (pre and post hō‘ike)	• 1 parent (pre and post hō‘ike)	• 1 parent (pre and post hō‘ike)	• 3 parents (pre and post hō‘ike)

Data Analysis Utilizing Dedoose

Interview data was analyzed using two primary methods outlined in the next section of chapter four, Vision and Mission Drive Data Analyses. It is important to preface that section with an explanation about how the Dedoose web application for research data facilitated the process of analyzing a large qualitative data set. A demographic profile was created for each interview participant and included the following researcher selected descriptors: interviewee name, identification number, stakeholder group, school name, interview number (i.e. pre hō‘ike, post hō‘ike, single), school language (‘ōlelo Hawai‘i for Hawaiian language immersion schools or English), gender, college experience (acceptance, completion, none), and island.

Demographic profile descriptors served as filters through which the Dedoose application could

efficiently analyze data by stakeholder, island, or any of the aforementioned descriptors (Appendix B).

After demographic profiles were created for each participant, interview recordings and transcripts were uploaded to the Dedoose application. Transcripts were reviewed by the researcher and excerpts were coded into researcher selected categories. The next section will explain in greater detail the process used to identify interview codes. The Dedoose application Analyze feature creates a variety reports. Appendix C features an example of the Dedoose Code Application Report that summarized and color coded interview data code frequency. Interviewee names comprise the Y axis and interview code categories are featured on the X axis of the Code Application Report. The Dedoose application was an effective tool used to design a repository for qualitative hō‘ike research data that could then be efficiently analyzed using HFCS Vision Driven and Mission Driven criterion

Instruments

In May 2008 Kamehameha Schools piloted the Keiki, ‘Ōpio and ‘Ohana Surveys (Appendix D) at 10 Hawaiian-focused Charter Schools, with students fifth through twelfth grades. Students in third through fifth grades completed the KS Keiki Survey and students in grades six through twelve completed the KS ‘Ōpio Survey. The aggregate sample of the pilot totaled 411 students. The assets portion of survey (Profiles of Student Life: Attitudes and Behaviors) was designed by the Search Institute to measure 40 assets identified as having a positive influence on youth development. Assets were refined to better reflect traditional Native Hawaiian values to examine the relationships between the broader constructs of youth developmental assets and Hawaiian cultural connectedness. The ‘Ohana survey included 10 dimensions for families to share feedback. Table 9 features Keiki/‘Ōpi‘o and ‘Ohana survey

dimensions. For all assets, constructs were scored using a binary method. For many of the scales, students had to "agree" or "strongly agree" with most statements in a given construct to be considered as having an asset. A similar binary method of scoring was used for other scales included in this survey. KS surveys have been administered annually to all HFCS since 2009, however for the purpose of this study, the 2016 Keiki, ‘Ōpio, ‘Ohana, and Graduate surveys were analyzed to review connections between HFCS hō‘ike and the HFCS Vision of the Graduate.

Table 10

Kamehameha Schools Keiki, ‘Ōpio, Ohana Survey Dimensions

Keiki/‘Ōpio Survey Dimensions		‘Ohana Survey Dimensions
15 Search Institute Assets	6 Hawaiian Cultural Connectedness Scale	
Prosocial values	Cultural attachment	Standards Based Learning (A)
Achievement motivation	Hawaiian language	Quality Student Support (B)
Youth programs	Connection to ‘āina	Coordinated Team Work (D)
High expectations	Connection to ‘ohana	Responsiveness of the System (E)
Environmental stewardship	Cultural practices	Focused and Sustained Action (F)
Service to others	Cultural issues	Involvement (G)
Prosocial orientation		Satisfaction (H)
Parent involvement in schooling		Student Safety (I)
Active learning		Student Well Being (J)
Spiritual development		
Youth program quality		
Caring school climate		
Bonding to school		
School engagement		
Positive orientation to schoolwork		

Conclusion

Four Hawaiian-focused Charter Schools located on Hawai‘i Island and O‘ahu participated in a study grounded in Action Research and Phenomenology. Qualitative data was first gathered through interviews with HFCS students, alumni, staff, and parents. Interview questions were designed to elicit specific details about hō‘ike phenomena occurring at Hakipu‘u Learning Center, Ke Kula ‘o Samuel M. Kamakau, Kā ‘Umeke Kā‘eo, and Kua o ka Lā. Kamehameha Schools Keiki, ‘Ōpio, ‘Ohana, and HFCS Graduate surveys were analyzed to determine if the themes identified through interview data were present in larger data sample sets. Chapters four and five will present research findings from interview and survey data analysis.

CHAPTER IV

QUALITATIVE FINDINGS

Introduction

Stakeholders from four Hawaiian-focused Charter Schools on two islands were interviewed to gather information about the research question: “How do hō‘ike encapsulate components of the Hawaiian-focused Charter School Vision of the Graduate for students, families, and schools?” Chapter four begins with background information about the two HFCS hō‘ike that are the focus of the study. An overview presents data collection and analysis strategies used to determine research findings. Two analyses, the Vision and Mission Driven Data Analyses are outlined to describe how the HFCS Vision of the Graduate and individual school missions were utilized to identify four HFCS hō‘ike themes. Each of the four HFCS hō‘ike themes are described and supported with qualitative data supporting evidence.

HFCS Senior Hō‘ike

HFCS principals, teachers, hō‘ike coordinators, students 18 years or older, parents and alumni were interviewed about HFCS hō‘ike. HFCS seniors 18 years of age or older and HFCS parents from four Hawaiian-focused Charter Schools participated in interviews prior to and following the completion of the HFCS Senior Capstone Project Hō‘ike and Graduation Ceremony Hō‘ike. Pre hō‘ike questions addressed the process of learning and preparing for the two hō‘ike and post hō‘ike interview questions were about how student proficiency for the next level of college, career, and community was demonstrated and assessed at each hō‘ike. Hō‘ike coordinators and alumni were interviewed once prior to end of the year hō‘ike implementation at their schools.

Table 11

Interview stakeholder groups

	HFCS Seniors	HFCS Parents	HFCS Alumni	Hō'ike Coordinators
Hawai'i HFCS	3	3	3	2
O'ahu HFCS	9	3	2	2
Total n=27	12	6	5	4

HFCS students demonstrate cultural and academic understanding through a variety of hō'ike that occur in all grade levels throughout the school year. For the purpose of this study, interview data about two specific hō'ike, 1) Senior Capstone Project Hō'ike and 2) Graduation Ceremony Hō'ike, were collected and analyzed. The hō'ike outlined in Table 12 occur at the end of the twelfth grade and are designed for HFCS students to demonstrate readiness for proactive contribution in 'ohana, community, and the next level of formal schooling, training, and career. The aforementioned hō'ike occur before high school graduation and were used to measure to what degree students achieve the HFCS Vision of the Graduate expectations. Table 12 provides additional information about grade level, purpose, and components of the two hō'ike that are the focus of this study.

Table 12

HFCS Senior Hō'ike Purpose

Hō'ike	Grade	Purpose	Components
Senior	12	Demonstrate interdisciplinary academic and cultural	Written paper, oral
Capstone Project		knowledge about a student selected topic.	presentation, cultural and community connections
HFCS Graduation	12	Honor successful acquisition of cultural and academic expectations and transition to post-secondary phase of life.	Ceremony, Performance, Artifacts

Qualitative Data Analysis Process

Interview data (n=27) was analyzed to determine if and how HFCS hō‘ike encapsulate components of the Hawaiian-focused Charter School Vision of the Graduate (Hawaiian-focused Charter Schools, 2013) from the perspectives of students, families, and schools. Qualitative data was collected and analyzed first to ensure that HFCS students, alumni, parents and staff determined the hō‘ike themes.

Figure 9 Qualitative Data Process



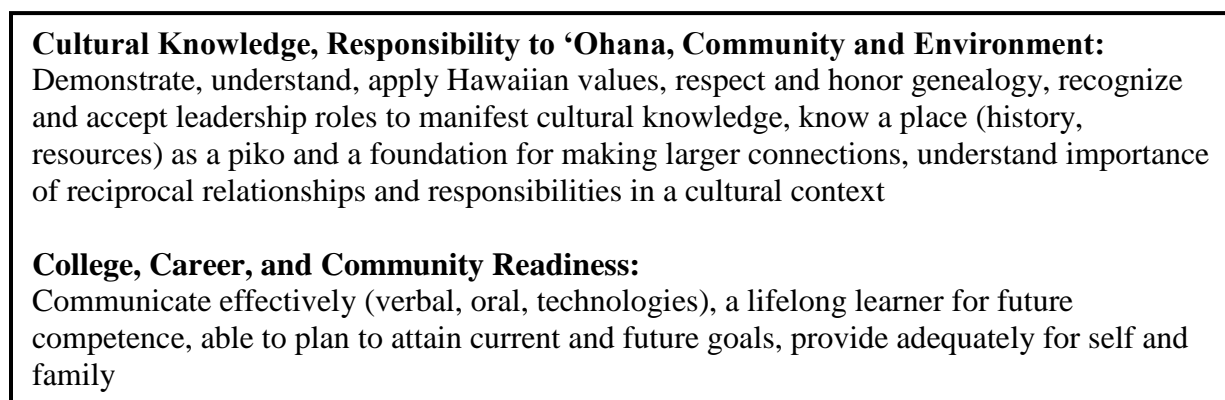
Data was collected via interviews with HFCS seniors, alumni, parents, po‘okumu, and hō‘ike coordinators. As previously discussed, the interview sample size quickly grew (n=51) and stakeholder groups were refined, decreasing the number of interviews used for data analysis. Four key stakeholders were identified and became the primary focus of data analysis: HFCS parents, seniors 18 years or older, alumni, and hō‘ike coordinators. Interview transcripts with key stakeholders were analyzed (n=27) and responses that described elements of the HFCS hō‘ike phenomena, connections to HFCS Vision of the Graduate, and evidence of individual school missions were coded.

Interview Data Correlation with HFCS Mission and Vision

HFCS collectively exist in part to perpetuate Hawaiian perspectives, culture, and practices in the 21st century and have built their identities on some shared outcomes for student learning (Hawaiian-focused Charter Schools, 2013). The HFCS Vision of the Graduate articulates these common goals grounded in cultural commitment, a variety of assessments that communicate student progress, and adequately preparing students for college, career, and

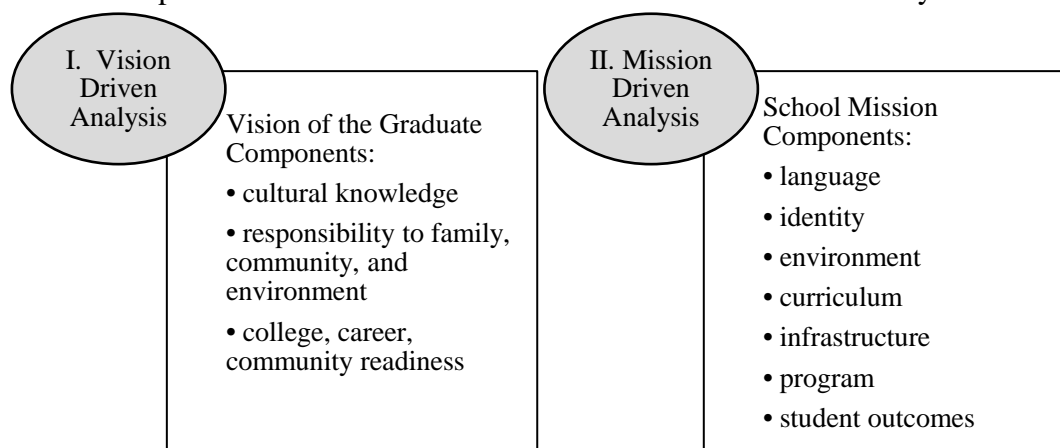
community (Hawaiian-focused Charter Schools, 2013). A Dedoose Demographic Descriptors and Code Application Report were created to ensure both the collective perspectives of HFCS and specific perspectives of individual schools were considered when reviewing interview data. The HFCS Vision of the Graduate (Hawaiian-focused Charter Schools, 2013) is featured in its entirety below.

Figure 1 Hawaiian-focused Charter School Vision of the Graduate



A Vision Driven Data Analysis was conducted using three critical components of the HFCS Vision of the Graduate; 1) Cultural Knowledge, 2) Responsibility to Family, Community, Environment, and 3) College, Career, Community Readiness (Figure 10).

Figure 10: Components of Vision and Mission Driven Interview Data Analyses



The HFCS Vision of the Graduate celebrates the values that are common across all 17 HFCS, however each school is unique and its identity, environment, infrastructure, programs, and student outcomes are developed to serve its own community (Hawaiian-focused Charter Schools, 2013). A second, Mission Driven Data Analysis was conducted to honor each participating school's values, voice, community, and mission. Table 13 features the school missions of the HFCS participating in this study.

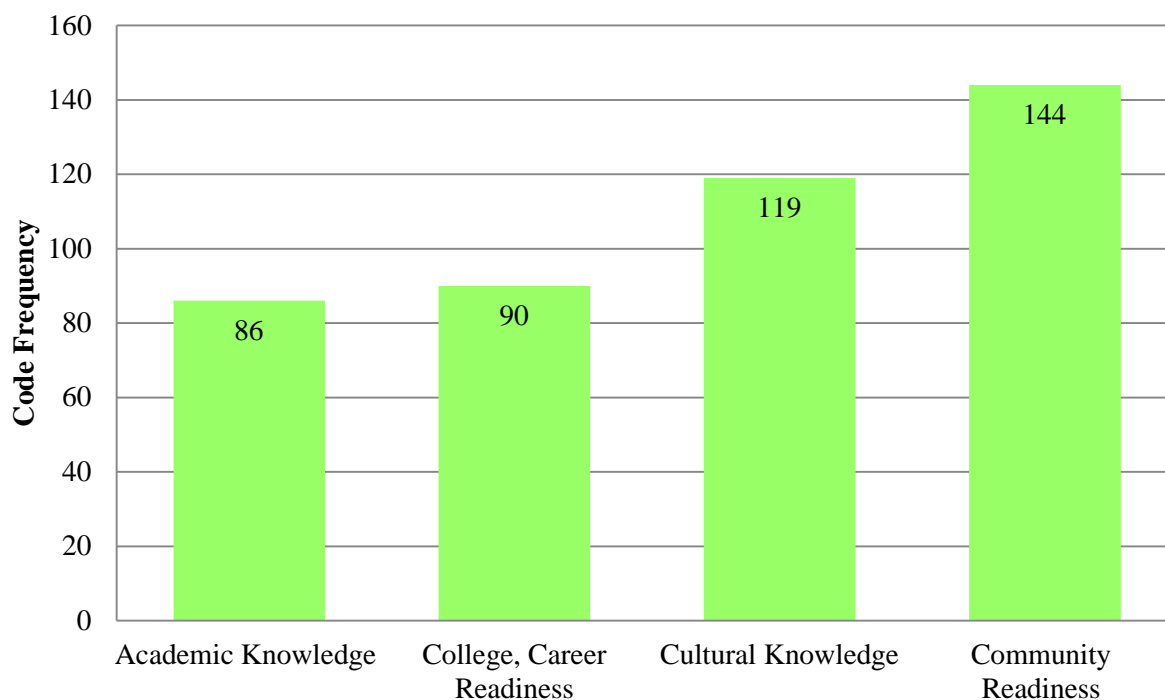
Table 13

HFCS School Missions

Hakipu'u Learning Center	Ke Kula 'o Samuel M. Kamakau	Ka 'Umeke Kā'eo	Kua o ka Lā
Hakipu'u Learning Center (HLC) - an innovative, community-based school rooted in the traditional wisdom of Hawai'i - utilizes a student-centered, place and project based approach to build an 'ohana of life-long learners who apply critical thinking, creativity, and problem solving skills to achieve success now and into the future.	'O ko mākou ala nu'ukia ka mālama 'ana i Honua mauli ola i waiwai i ka 'ike a me ka lawena aloha o nā kūpuna i mea e lei ai kākou i ka lei o ka lanakila. <i>Our mission is to foster success for all members of our learning community by providing a culturally healthy and responsive learning environment.</i>	I Ulu i ke Kuamo'o. I Mana I ka 'Ōiwi. I Kā'eo no ka Hanauna Hou! <i>Inspired by our past. Empowered by our identity. Prepared for our future!</i>	To provide Ka Pae 'Āina 'o Hawai'i with the knowledge and skills, through Hawaiian values and place-based educational opportunities, that prepare receptive, responsive, and self-sustaining individuals that live ke ala pono.

The interview data yielded 439 examples of cultural knowledge, responsibility to family/community/environment, and college/career/community readiness. Surprisingly, the analysis linked with the themes of the HFCS Vision of the Graduate. Interview transcripts were analyzed and coded each time an example of cultural knowledge and college/career/community preparation was described by an interviewee. Figure 11 features the four modes of interview data calculated by Dedoose. Community readiness examples were cited the most from interviewees across all stakeholder groups and were coded 144 times. Cultural knowledge was coded 119 times, followed by college/career preparation (90 codes) and academic knowledge (86 codes).

Figure 11 Vision Driven Data Analysis



Interview data yielded 359 connections to each school's unique mission. Unlike the Vision Driven results, the Mission Driven Analysis findings were specific to stakeholder groups (Table 14).

Table 14

Theme 4 HFCS Context

Stakeholder Group	Subthemes
Students and Alumni	‘Āina and Project-based Learning
Parents	Learner Support
Hō‘ike Coordinators	Authentic Assessment

The subthemes reflect the context of Hawaiian-focused Charter Schools that foster the attainment of the HFCS Vision of the Graduate. Table 15 summarizes three themes that resulted from the qualitative data analyses and aligns them with the HFCS Vision of the Graduate components. HFCS Vision Driven Analysis themes one through three represent findings that were present across all stakeholder groups. HFCS Mission Driven data analysis theme four is organized by groups of stakeholders. Each section will include the following components; interview quote that illustrates the theme, theme description, supporting data, and data summary reflective of unique HFCS missions, visions and communities.

Table 15

HFCS Hō‘ike Qualitative Data Themes

3 HFCS Vision of the Graduate Components	4 Data Themes			
	1. Manifest Cultural Knowledge	2. Synthesize Academic Knowledge	3. Demonstrate College, Career, Community Readiness	4. HFCS Context
Cultural Knowledge	✓		✓	✓
Responsibility to Family, Community, Environment	✓	✓	✓	✓
College, Career, Community Readiness	✓	✓	✓	✓

HFCS HŌ'IKE THEME 1: MANIFEST CULTURAL KNOWLEDGE

DEFINITION:

HFCS hō'ike require students to manifest cultural knowledge in three areas; ceremonies, artifacts, and performances.

KEY QUOTE:

For my (graduation hō'ike) I had to choose an oli that represents my showcase of knowledge. I have a lot of family that do a lot of chants so I asked my aunty "Is there a chant that explains going from one pae to the next pae to show that progress and how many steps it took for me to get to my (graduation hō'ike) ceremony?" We found one and we went over it and it totally related to the pae and that progression. That was the Maui chant and it was talking about how he killed his uncle, then he went to another pae. Then he killed this bat that had eight eyes, and then he went to another pae. Then he caught the sun, and that was his biggest pae, and that represented my big ceremony to puka into being another person (HFCS Senior, 2016).

Theme Description and HFCS Vision of the Graduate Connections

This HFCS student quote is one example of the manifestation of cultural knowledge during HFCS hō'ike. The student explained the process used to select an oli (Appendix D) that was shared during Graduation Ceremony Hō'ike. The student sought guidance from the hō'ike coordinator, family, and 'ike kupuna captured in the Kumulipo. This quote is one example of "understand and apply Hawaiian values, respect and honor genealogy, and engage in cultural protocol and performances...." (HFCS, 2013). Data revealed that all four HFCS hō'ike required students to manifest cultural knowledge in three areas of cultural knowledge; ceremonies, artifacts, and performances. The student quote also illustrates a subtheme of manifesting cultural knowledge, performance. "Our seniors should be able to think about everything that happened, from kindergarten up to graduation and be able to use all of their cultural experiences to build (Graduation Ceremony Hō'ike)." (HFCS Hō'ike Coordinator, 2016). Table 16 summarizes theme one connections to the HFCS Vision of the Graduate.

Table 16

HFCS Hō‘ike Theme One Summary: Manifesting Cultural Knowledge

Subthemes	HFCS Vision of the Graduate	HFCS Hō‘ike Example
1a. Ceremony	✓accept leadership roles	1a. Build a traditional imu
	✓apply Hawaiian values	(Hō‘ike Coordinator, 2016)
	✓attain goals	
1b. Artifact	✓communicate effectively	1b. Create a traditional lei hulu
	✓honor genealogy	(Senior, 2016)
	✓know a place as a piko	
1c. Performance	✓lifelong learner	1c. Recite an oli from the
	provide for self and family	Kumulipo (Senior, 2016)
	✓understand reciprocal relationships	
	✓understand responsibilities	

Hō‘ike Interview Data

The HFCS Vision of the Graduate states that students will “know a place inclusive of history, natural resources, natural and community resources, as a piko and a foundation for making larger connections.” (HFCS, 2013). An HFCS alumnus shared details about HFCS hō‘ike preparation that honored genealogy while engaging in cultural ceremony:

We learned the history of the area and how it was used anciently. One of the kumu, she’s amazing, she’s super spiritual and she asked us “Hey, do you guys want to go and ho‘okupe this area?” So we went down to the banana patch and I remember us all doing the chant we learned and she could see things that we couldn’t see and she was telling us everything. I’ve never felt closer to my kūpuna than I did at that moment. Even when

we were telling our mo‘olelo and practicing our ha‘i ‘ōlelo she was like, “Guys, if you could see what I could see”. All of our kupuna were there and they were so proud of us and that was just super amazing (HFCS Alumnus, 2016).

A parent interviewee described the ‘ailolo ceremony that was a portion of her child’s Graduation Ceremony Hō‘ike. Each food item’s significance was explained by secondary teachers, then the fed students. “All of her kumu helped her along and it was really nice when I the kumu fed her during the ‘ailolo portion of the Graduation Ceremony Hō‘ike. That was awesome because the majority those kumu taught all of my kids and they are still there today. They helped her grow to become this woman that she is today and that is really, really nice to see.” (HFCS Parent, 2016). ‘Ailolo ceremonies were traditionally practiced to mark the end of training and a student’s proficiency and food items had deep meaning (Wehewehe, 2016).

Figure 12 Hō‘ike Ceremony: ‘Ailolo



A HFCS alumnus reflected on a portion of her Graduation Ceremony Hō‘ike. “At sunrise on the morning of graduation we went into the ocean, did our hi‘uwai, came out, and

stood in a circle. We all gave our mana‘o about either mahalo or mihi for things that happened. We thanked our kumu and our mākua who were in that circle for dealing with us, pushing us, and for never giving up on us, and that set the precedence for that day and allowed us to be really be mākaukau.” (HFCS alumni, 2016). A HFCS Hō‘ike Coordinator (2016) shared another example of manifesting cultural knowledge and described cultural ceremony students engaged in while preparing for hō‘ike:

The seniors understand that we’re going to wahi pana that are sacred. We’re also going to cemeteries where ‘uhane are present, so we are going to protect ourselves. The first few years when the school opened, I was passing out salt and the kids said, “What do I do with this?” When I offered to our seniors this year, now they say, ‘Oh nah kumu, I get.’ I’m so happy when that happens because that shows their understanding of protocol.

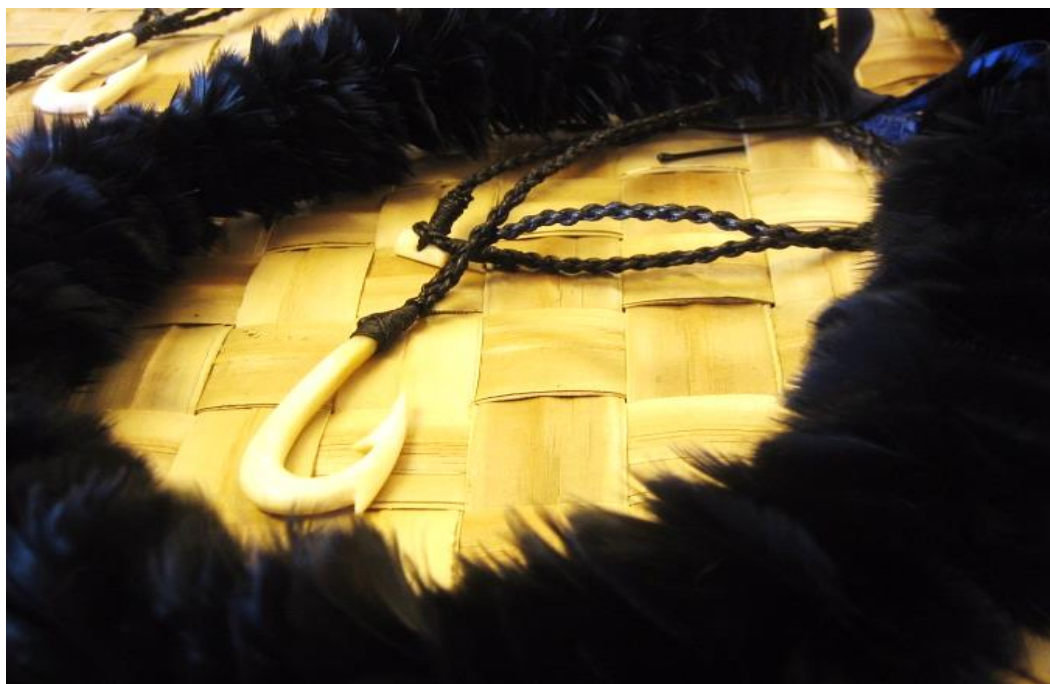
Traditional Hawaiian food preparation was another example of ceremony described by a HFCS Parent (2016):

She learned how to make an imu for her (Graduation Ceremony Hō‘ike). It was her turn to learn how to prepare Hawaiian food so she can pass it down. That was good she learned how to do it by herself. Her brother, cousins, hō‘ike coordinator, classmates, teachers, and I helped the night before graduation. It was 220 pounds of meat because we fed the whole school. She learned how to keep things nice and neat. How to wash the rocks. How you set up the imu when you make the hāli‘i and how you put the hāli‘i down and tuck it in with the dirt that folds over. She learned tricks from other people. She was in charge of it after her and she understood the details and how involved the process is. Making an imu is kind of stressful, but you just got to go with it. Somebody

forgets to bring stuff and you just go and get it. So that was a good learning experience for her.

In addition to cultural protocol, ceremony, and performances, HFCS Seniors also create traditional Hawaiian cultural artifacts that reflect their school mission and vision. “Building a canoe was a good experience and I realized how long it must have taken Hawaiians to build it with old fashioned tools.” (HFCS Senior, 2016). Another HFCS senior reflected on the year long process of creating a leihulu and lei makau that were presented to them during the Graduation Hō‘ike ceremony. “As you are progressing through the year you’re also progressing through the lei, and it’s the perfect metaphor. As we are getting closer to finishing the lei you realize that high school is almost done for you. No matter how you went about the lei, whether you did it gradually or pushed it out, it still relates to your journey through the year.” (HFCS Senior, 2016).

Figure 13: Hō‘ike Cultural Artifacts: Ke Kula ‘o Samuel M. Kamakau leihulu and lei makau



Parents from one of the HFCS featured in this study also described the process of creating a cultural artifact to present at their child's Graduation Ceremony Hō'ike. "Making the kīhei for the graduation ceremony had the most impact on us as parents. We had to design the stamp and we did a fishing net with the fish on it. The fish represented my son and the net is my dad who is a fisherman from Miloli'i fishing village." (HFCS parents, 2016).

Interviewees also described a variety of performances that occurred during Senior Capstone Project Hō'ike and Graduation Ceremony Hō'ike. "The Maui chant she performed at (Graduation Ceremony Hō'ike) had a big impact on me. I sat there and listened to her chant about him and the changes that happened with him. How he changed from a person to a powerful man. That is what she is going through in her stages of going through school. Now that she puka kula she is at a higher elevation. She elevated herself because she learned all these things at school." (HFCS Parent, 2016).

Data Summary

Interview data from all participants in all stakeholder groups at all four HFCS confirmed an assortment of cultural artifacts, protocols, and performances present in each school's Graduation Hō'ike and Senior Capstone Project Hō'ike. Table 17 on the following page summarizes manifestation of cultural knowledge data described during interviews with students, alumni, parents, and hō'ike coordinators. It features examples of manifesting cultural knowledge through cultural artifacts, ceremonies, and performances described during interviews.

Table 17

Cultural Knowledge Definition and Hō'ike Components

Manifestation of Knowledge	Definition	Cultural Knowledge: HFCS Senior Capstone Project	Cultural Knowledge: HFCS Graduation Hō'ike	Stakeholder Interview Data	
Ceremony	A formal act	‘ōlelo Hawai‘i	‘ōlelo Hawai‘i	HFCS	
	or series of	oli	oli	parents,	
	acts prescribed by ritual, protocol, or convention	‘āina based project community service	mo‘okū‘auhau food preparation hi‘uwai	seniors, alumni, hō‘ike coordinators	
Artifact	Something characteristic of or resulting from a particular human institution, period, trend, or individual	‘ōlelo Hawai‘i ‘ike kupuna student identified cultural connection	‘ōlelo Hawai‘i ‘ike kupuna mo‘okū‘auhau kīhei kī‘o‘e	leihulu lei makau hula food preparation mele	HFCS parents, seniors, alumni, hō‘ike coordinators
	Performance	A public presentation or exhibition	oli ha‘i ‘ōlelo	mo‘okū‘auhau food preparation mele hula ha‘i ‘ōlelo	HFCS parents, seniors, alumni, hō‘ike coordinators

HFCS HŌ‘IKE THEME 2: SYNTHESIZE ACADEMIC KNOWLEDGE

DEFINITION:

HFCS hō‘ike require students to demonstrate proficiency in synthesizing academic knowledge by engaging in the inquiry process, critiquing multiple texts, creating a written product and oral presentation.

KEY QUOTE:

The (Senior Capstone Project) hō‘ike is the final culminating event, but there is a lot working up towards that. For example, her essential question is “What is financial stability and how can becoming financially literate help me plan my future?” To answer that essential question, she has 18 driving questions, “What colleges do I want to attend? How much do they cost? What types of loans and scholarships are available? Which colleges are best? What type of statistics are available regarding who attends college? How can I represent this data in a scatterplot map? How have college costs risen in America, between post-World War II and now?”. There is so much embedded in this. The questions are guided by standards. She has personal math, fluency with data, statistics, technology, language arts writing, social studies, national history, and colonization around the world. So you have all of this embedded in the project (HFCS Hō‘ike Coordinator, 2016).

Theme Description and HFCS Vision of the Graduate Connections

As the HFCS Hō‘ike Coordinator explains in the quote, Senior Capstone Project Hō‘ike are grounded in the inquiry process. Students develop essential questions that guide learning concepts in multiple content areas including, but not limited to ‘ōlelo Hawai‘i, English, Science, Social Studies, Mathematics, Art, and Music. The quote is one example of students using the inquiry process to synthesize academic knowledge and become “lifelong learners for future competence...to provide adequately for self and family” (HFCS Vision of the Graduate, 2013). All HFCS hō‘ike required students to demonstrate proficiency in synthesizing academic knowledge by engaging in the inquiry process, critiquing multiple texts, creating and presenting a written product. Table 18 summarizes theme two connections to the HFCS Vision of the Graduate.

Table 18

HFCS Hō‘ike Theme Two Summary: Synthesize Academic Knowledge

Subthemes	HFCS Vision of the Graduate	HFCS Hō‘ike Example	Stakeholder Interview Data
2a. Inquiry Process	<ul style="list-style-type: none"> ✓accept leadership roles ✓apply Hawaiian values ✓attain goals ✓communicate effectively ✓honor genealogy 	2a. Student selected research topics (HFCS Hō‘ike Coordinator, 2016)	HFCS parents, seniors, alumni, hō‘ike coordinators
2b. Critique Multiple Texts	<ul style="list-style-type: none"> ✓know a place as a piko ✓lifelong learner ✓provide for self and family 	2b. Interviews, research, and oli (HFCS student, 2016).	HFCS parents, seniors, alumni, hō‘ike coordinators
2c. Written Product and Presentation	<ul style="list-style-type: none"> ✓understand reciprocal relationships ✓understand responsibilities 	2c. Ten page research paper (HFCS Hō‘ike Coordinator, 2016)	HFCS parents, seniors, alumni, hō‘ike coordinators

Hō‘ike Interview Data

Interview data revealed that HFCS Hō‘ike foster student interest and commitment to learning. A HFCS Senior shared, “I can honestly say that I don’t do my best on the (standardized) test and some questions I’m just circling it because I want to go to lunch or I want to be done with it. It’s a really long test so you do get bored with it fast. But for a Senior (Capstone Project Hō‘ike), you work with that project the whole year so you put all your energy and all your vibes into that project.” (HFCS Senior, 2016). HFCS students at all schools engaged in the inquiry process and selected their Senior Capstone Project Hō‘ike research topic. “We had a lot of predictions and a lot of them didn’t work. We had to keep on going back to the planning and go back to the question to figure out how to get it done.” (HFCS Senior, 2016).

Interviews with seniors revealed project topics including fresh fish farming, loko i'a mapping, college financial planning, ai pono restaurant business, shoreline fishing and reflected students passions and future career interests. "A year from now are you going to remember what you took on a standardized test? Probably not. Are students going to remember this? Absolutely, they will remember! They spend so much time in it, I don't think they're going to forget this stuff too easily because they're living, sleeping, and breathing their topic. I don't know too many other seniors who have to do a project of this level." (HFCS Hō'ike Coordinator, 2016).

Following topic selection, students worked closely with teachers and staff to develop research questions and gather a variety of resources to explore answers to research question. Subject matter experts were often engaged in the inquiry process to provide additional information.

In addition to engaging in the inquiry process, interviewees shared the variety of texts they analyzed and critiqued during the Senior Capstone Project Hō'ike process. "If SAT was the only way to demonstrate my learning that would've been a big struggle and I would've just studied for the test and afterwards forgot. Less learning is shared on tests than Senior Hō'ike which incorporates interviews, online research, and book research." (HFCS Senior, 2016).

Another HFCS senior shared, "We get to do interviews with people and we do online research as well as book research. It is a lot of reading, a lot of writing and a lot of reflecting." (HFCS student, 2016). A HFCS Alumni reflected on Senior Capstone Project Hō'ike which required students to merge their thinking with texts and develop new ideas:

We picked an akua and researched oli that had akua names in them. We had to makawalu the oli first, so we could makawalu the akua. Luckily I started makawaluing in eighth grade, but it was still really hard. Then, we had to make a PowerPoint and present the oli we researched, explain how we makawalu the oli, and the share journal

articles to support what we believe is in the environment. First, we presented to our class, then to the makawalu committee, then to the school (HFCS Alumnus, 2016).

According to the interview data, Hawaiian-focused Charter Schools hō'ike require students to merge knowledge from the past ('ike kupuna), with the knowledge from the present (family, community, texts) and use new knowledge to affect change in the future. "The research was the hardest part because finding the right articles that can relate to your topic are really hard to find." (HFCS Alumnus, 2016). The HFCS hō'ike process requires students to engage in cognitively rigorous learning found in the most sophisticated level of Webb's Depth of Knowledge, Level 4 Extended Thinking (Webb, 2002; Webb, 2007). A HFCS Senior Capstone Project about College Financial Planning required the design of a model of information to solve a complex, real world problem. Papakū Makawalu methodology requires students to analyze and synthesize information from multiple sources in two different languages.

A HFCS senior chuckled while he shared the following short story about graduation requirements. "Yesterday I was chilling with my good friend who goes to Kaiser High School. We were talking about graduation and he said he had a couple of things that needed to be done in order to graduate. He said the work over there is very easy compared to the things we do over here and they had to do a two page research paper that took a couple of weeks to finish. I told him yeah, I probably do a two page research paper every day." HFCS students are required to communicate their learning in a written research paper and expectations are outlined in school level project rubrics. Interview data revealed a variety of strategies schools use to prepare students for HFCS Senior Capstone Project Hō'ike and Graduation Ceremony Hō'ike. Figure 12 is an Alapi'i Project Information document (Hakipu'u Learning Center, 2015) that Hakipu'u Learning Center utilizes to communicate how students in grades 4-12 prepare for Senior

Capstone Project Hō'ike. Note that students are required to document the academic and community service hours invested in their projects. Harvard's *Turning the Tide* research (2016) recommends students investing one year into a meaningful community service project (Weissbourd et al, 2016). HFCS like Hakipu'u Learning Center greatly exceed this expectation and all students, beginning with the youngest and culminating with seniors, are expected to engage in meaningful community service annually. Appendix F features Hakipu'u Learning Center's Senior Capstone Project Hō'ike expectations rubrics in their entirety. The document outlines how hō'ike is scaffolded. Level one student projects feature staff as the primary driver of the project and a one page research paper. As students gain more experience with the hō'ike process, the project driver transitions to the student and requirements increase from a one page to a ten page paper.

Figure 14 Hakipu'u Learning Center Alapi'i Project Information

Level	1	2	3	4	5	6	7
Hours	25	25	50	75	100	150	300
Project Driver	Staff selects and defines topic, outcomes, activities, final products, timeline and pace	Initial efforts of student, Staff/student negotiate topic, outcomes, activities, final products, timeline and pace	Initial efforts of Student, Staff/student negotiate topic, outcomes, activities, final products, timeline, and pace	Student selects and defines topics, outcomes, activities, final products, timeline, and pace	Student selects and defines topics, outcomes, activities, final products, timeline, and pace	Student selects and defines topics, outcomes, activities, final products, timeline, and pace	Student selects and defines topics, outcomes, activities, final products, timeline, and pace
Research Paper (12 pt font, double spaced)	1 page 250 words	3 pages 750 words	3 pages 750 words	5 pages 1,250 words	5 pages 1,250 words	7 pages 1,750 words	10 pages 2,500 words
Public Presentation	3-5 minutes at HLC	5-7 minutes at HLC	5-7 minutes at HLC hō'ike or community setting	10-15 minutes at HLC hō'ike or community setting	10-15 minutes at HLC hō'ike or community setting	10-15 minutes at HLC hō'ike or community setting	20-30 minutes Senior Hō'ike
Community Impact	Content area expert; 1 hour of community service	Content area expert; 2 hours of community service	Content area experts; 2 hours of community service	Two content area experts; 10 hours of community service	Two content area experts; 10 hours of community service	Two content area experts, mentor in project/ content focus 20 hours of community service	Three to five content area experts, mentor in project/ content focus 50 hours of community service

Ka ‘Umeke Kā‘eo also outlines their hō‘ike expectations and student project guidelines in a Pāhana Symposium Report Criteria document (Ka ‘Umeke Kā‘eo, 2015). Table 18 outlines the requirements of students’ written reports and Table 19 on the next page features one section of the project rubric used to assess students. Appendix G features Ka ‘Umeke Kā‘eo Senior Capstone Project Hō‘ike project expectations and rubrics in their entirety. Students are taught the Papakū Makawalu Methodology (Ka Umeke Kā‘eo, 2016) from kindergarten to ensure they are adequately prepared for the requirements of both Senior Hō‘ike.

Table 19

Ka ‘Umeke Kā‘eo Written Research Paper Requirements

Pāhana Symposium Report Section		Pages	
I.	Introduction/Historical Context	I.	2 or more
	a. Oli		
	b. Focus Question		
	c. Historical Context		
II.	Methodology	II.	¾ - 1
	a. Data collection		
	b. Data analysis		
III.	Results	III.	2 or more
	a. Summary		
	b. Figures		
IV.	Conclusion	IV.	1½ - 2
	a. Conclusion		
	b. Methodology Improvements		
	c. Extension		
V.	Appendices		
	a. Bibliography	V.	2 or more
	b. Sample of Survey		

Interview data showed that in addition to project expectations, HFCS designed rubrics for students to self and peer-assess their progress. School administration and staff also utilize the rubric to assess all hō'ike components. Table 20 features one section of Ka 'Umeke Kā'eo's Senior Capstone Project Hō'ike rubric, the research paper expectations. Ka 'Umeke Kā'eo's complete rubric is featured in Appendix F. HFCS teachers and leaders did not hire consultants to design and validate hō'ike processes and rubrics. They created the assessment tools and tailored rubrics and processes to their schools mission and vision. A large amount of time, energy, and collaboration was invested into the systemization of the hō'ike to support students demonstrating cultural and academic proficiency.

Table 20

Ka 'Umeke Kā'eo Hō'ike Rubric Section 1 of 5

Ka 'Umeke Kā'eo Pāhana Symposium Report Rubric Section 1: Overall Document			
Area of Assessment	Needs Improvement	Acceptable	Quality
Components	1 or more section of the document missing	N/A	All sections of the document are included
# of pages	Less than 7 pages, not all pages numbered	7 pages, all pages numbered	More than 7 pages, all pages numbered
Bibliography	All resources cited with some inaccuracies	N/A	All resources cited accurately using appropriate format.
Visual Aesthetics	More than 1 aesthetic criteria NOT met	1 aesthetic criteria NOT met	All aesthetic criteria NOT met

Table 20 continued

Ka 'Umeke Kā'eo Hō'ike Rubric Section 1 of 5

Area of Assessment	Needs Improvement	Acceptable	Quality
Grammar and Spelling	Numerous grammatical / spelling errors / not written in past tense	Some grammatical / spelling errors / not written in past tense	Very few or no grammatical / spelling errors / not written in past tense
Plagiarism	Some plagiarism used in the paper	N/A	No plagiarism used in the paper
Organization and flow	Paper has very little or no flow, paper jumps around from subject to subject	Paper flows with some interruption, in need or some organization revision	Paper is appropriately organized and flows extremely well

In addition to written products such as 10 page research papers, HFCS Senior Capstone Projects culminate with students' presenting a ha'i 'ōlelo that outlines their project research question, findings, cultural and community connections. "We actually do a lot of presentations here for everything. That helps a lot because we're always up there speaking and have to get comfortable. I'm even going to come back after the graduation ceremony to do more presentations." (HFCS Senior, 2016). A HFCS Parent shared a portion of her child's Graduation Ceremony Hō'ike, "She wrote and presented a ha'i 'ōlelo to the whole school. Then she started to mahalo everybody. She started to cry because she was trying to thank her dad who passed away. She was going to bust out crying so I looked at her and inhaled quickly. Then she inhaled

really quickly too, held it together and continued on. It was nice for her to come out and say those things in front of everyone, that's a lot of growth for her (2016).

Interview data showed that students invested thought into the design of their presentation, and one senior shared, "For the presentation, I really tried to show the website I created to the audience in a way that they could get engaged and want to revisit it." (HFCS Senior, 2016). The Hawaiian language immersion HFCS expect student presentations to be completed in 'ōlelo Hawai'i. "She summarized all lessons and articulated details of mapping loko i'a and I was in awe of how she explained the mapping process, what lives where, what water goes where. She learned a lot listening from kumu and participating in hands on activities that helped her present in front of a panel of people in 'ōlelo Hawai'i." (HFCS parent, 2016). A parent of a HFCS senior student explained the oral presentation component of the project below:

"Her 'ōlelo was really on point. Majority of the family was on the panel and because she is the eldest they could poke and prod her for more explanation. Some presenters used English and went back and forth, but she could articulate her ideas all in 'ōlelo Hawai'i. In our family, that puts her on a higher level of understanding. I think she did really, really well and I think the panel felt that too (HFCS parent, 2016).

Data Summary

Data from all stakeholder groups in all four schools confirmed the assortment of academic knowledge hō'ike requirements. Participants described utilizing the inquiry process, critiquing multiple texts, and the written products and oral presentations created for Senior Capstone Project Hō'ike and Graduation Ceremony Hō'ike. The following table summarizes examples of academic knowledge interviewees shared about the Senior Capstone Project Hō'ike and Graduation Ceremony Hō'ike.

Table 21

Hō'ike Academic Knowledge

Academic Knowledge: Senior Capstone Project Hō'ike	Academic Knowledge: Graduation Hō'ike	Stakeholder Interview Data
<ul style="list-style-type: none"> • 'ōlelo Hawai'i • inquiry process • critique texts, analyze multiple perspectives • 'ike kupuna • deconstruct texts to create meaning • content area knowledge (Science, Social Studies, English/Language Arts, Math) • ha'i 'ōlelo • written product • PowerPoint presentation 	<ul style="list-style-type: none"> • 'ōlelo Hawai'i • inquiry process • critique texts, analyze multiple perspectives • 'ike kupuna • deconstruct texts to create meaning • content area knowledge (Science, Social Studies, English/Language Arts, Math) • ha'i 'ōlelo 	<ul style="list-style-type: none"> • HFCS parents, seniors, alumni, hō'ike coordinators

**HFCS HŌ'IKE THEME 3:
DEMONSTRATE COLLEGE, CAREER, COMMUNITY READINESS**

DEFINITION:

HFCS hō'ike process includes opportunities for students to demonstrate college, career and community readiness in three areas; community kuleana, college preparation, and career exploration.

KEY QUOTE:

Kī'o'e started with Kua o Ka Lā's first graduating class and is unique to us. It is significant to Puna specifically because it was used to eat uala wai niu. It is a coconut spoon made out of coconut shell and the cordage is made out of hau. At the end of graduation hō'ike, the students' receive them with the spoon facing out and it is a representation of the students feeding on the knowledge that has been passed on to them. The hope is one day they will take this knowledge they are gaining from all the kumu and be able to turn that kī'o'e back in to where they would eventually feed others their knowledge. It's a representation of them gaining the knowledge required to go out into the community and get more educated or explore a career path. They take the mana'o and 'ike that they gained over the years, come back to their communities again, whether it be this community or where they are from, and share that. It's about always giving and receiving (HFCS Hō'ike Coordinator, 2016).

Theme Description and HFCS Vision of the Graduate Connections

The HFCS Vision of the Graduate outlines that graduates will understand how to "...plan to attain current and future goals including providing adequately for themselves and their families." (HFCS, 2013). The opening quote in this section illustrates how one school honors the importance of community contributions during the graduation ceremony by presenting students with kī'o'e cultural artifacts reflective of their Puna community (Figure 15). A student shared, "We need to think about how the (Senior Capstone Project Hō'ike) topic connects back to our culture and what are the benefits for the community, our family and the world." (HFCS student, 2016). Interview data revealed that all of the HFCS that participated in this study included a community component in their Senior Capstone Project Hō'ike and Graduation Ceremony Hō'ike.

Figure 15 Kua o ka Lā community readiness kī'ō'e cultural artifact



Interview data showed that the hō'ike process included opportunities for students to demonstrate college, career and community readiness in three areas; community kuleana, college preparation, and career exploration. Table 22 summarizes these subthemes and their connection to the HFCS Vision of the Graduate.

Table 22

HFCS Hō‘ike Theme Three Summary: College, Career, Community Readiness

Subthemes	HFCS Vision of the Graduate	HFCS Hō‘ike Example	Stakeholder Interview Data
3a. Community Kuleana	<ul style="list-style-type: none"> ✓ accept leadership roles ✓ apply Hawaiian values ✓ attain goals ✓ communicate effectively ✓ honor genealogy 	3a. Oral presentation to preschool and elementary students (HFCS alumnus, 2016)	HFCS parents, seniors, alumni, hō‘ike coordinators
3b. Career Exploration	<ul style="list-style-type: none"> ✓ know a place as a piko ✓ lifelong learner ✓ provide for self and family 	3b. Fresh water fish business plan (HFCS alumnus, 2016)	HFCS parents, seniors, alumni, hō‘ike coordinators
3c. College Preparation	<ul style="list-style-type: none"> ✓ understand reciprocal relationships ✓ understand responsibilities 	3c. Early college credits (HFCS parent, 2016)	HFCS parents, seniors, alumni, hō‘ike coordinators

Hō‘ike Interview Data

HFCS Senior Capstone Project topics are selected by students and often reflect communities that are most important to them, including their family. A HFCS Class of 2016 Senior shared insights about the enduring understandings that emerged from his project:

We always knew how to cook and make the food and how to sell it for catering but I didn't know what the reason was. Why we do it and what was the family history about it?

I learned why my Tutu Man started the family business and what his goal was for the business. I was always working with my Grandma and Dad so I knew a lot about their history, but learning about my tutu man helped me learn more about who I am (HFCS student, 2016).

The school's Hō'ike Coordinator (2016) provided additional information about the student's project and the connection to responsibility to family:

His Senior (Hō'ike Capstone) project is about 'ai pono which his grandfather helped to spearhead. His whole idea was what is 'ai pono, how does that help my family and our community health overall? So in his case he was working at the restaurant, but he was also looking at as one of the grandchildren, what is his responsibility in carrying this? He just felt such a strong responsibility in helping to ensure that this way of taking care of your body, eating things that are healthy and right from the land. For him that was a huge responsibility, so much so, that it was almost overwhelming, daunting to him because he wasn't sure he could live up to it. I was just really impressed that at such a young age he felt that responsibility.

The relationship and responsibility aspects of community are reiterated in Ke Kula 'o Samuel M. Kamakau's Graduation Ceremony Hō'ike that is designed for students to participate in a culminating week long experience honoring the school's namesake, Samuel Mānaiakalani Kamakau. The table below summarizes the experience and community connections.

Table 23

Ke Kula 'o Samuel M. Kamakau Graduation Hō'ike Overview

Site Experience	Community	Responsibility
Kūkaniloko	learner, school, community	Kamakau's parents were caretakers of the site
Waialua Children's Cemetery	learner, school, community	Historically many Hawaiian children did not survive to the age of 17-18 years old to fulfill adult responsibilities.
Preschool and Elementary schools Seniors attended	learner, 'ohana, school, community (Hawaiian language)	Seniors would not have progressed to graduation without the strong foundation provided by Hawaiian Language immersion preschool and elementary schools.
Ha'i 'ōlelo shared with Kamakau students and staff	learner, school	Students return to school and share ha'i 'ōlelo with students.
Kailua Beach	learner, 'ohana, school, community	This represents the original school site in Kailua and is a spiritual anchor. Families are present to participate in students' hi'uwai.

An alumnus described responsibility to community as a mindset that is woven into one's identity as a HFCS graduate. "One of the school's main focus is students' always giving back in a little ways or big ways, then you end up expecting that of yourself, like a mindset." (HFCS Alumni, 2016). A HFCS Parent (2016) underscored this concept. "... if you grow up in a community

that is close, centered on sustainability, ‘ōlelo Hawai‘i, and culture, it runs through your veins and will emulate to other places because you carry it with you.”. A HFCS Senior explained, “Attending this school gave me a version of myself that I can be proud of.” (HFCS Senior, 2016).

Many of the students and alumni interviewed for the purposes of this study hoped to become first generation college graduates, and 24% of 2016 graduates responded that they are the first person in their immediate family to attend college (Kamehameha Schools, 2016). Student and parent interviews revealed appreciation for the amount of support Hawaiian-focused Charter Schools invested in preparing students for college and careers:

Going to this school helped me really figure out who I am. By the time I graduated, I knew who I was as a person, I knew what I wanted to do, and I knew that I could do it because I had these teachers and this ‘ohana to back me up. I knew that even though I graduate and I leave they would always be there for me if I needed them. That’s what kids need to know, that someone is always going to be there, I’m always going to have a cheerleading squad behind me backing me up all the way not matter what. So I think that having been here definitely taught me that and made it easier for me to continue on to college. (HFCS alumnus, 2016).

A variety of systems were referenced by interviewees, including early college courses, scholarship assistance, college counseling, SAT and ACT test preparation. “The school shared tons of information about scholarships and even took them to tour colleges, which was huge because it opens up their eyes to see that this is what they have to prepare themselves for.” (HFCS parent, 2016). The schools’ smaller environment was also cited by interviewees as

helpful with navigating through a complicated college application process and a HFCS alumna (2016) shared the following during her interview:

This school has been so supportive before, during and even after college. When I was a student they had SAT prep class and would pay for us to take the SAT classes. They would have us all get together to apply for scholarships and fast fund and help us apply to the college that we really wanted to get into. And even till today they're super supportive. I had a (college) paper that I was writing and I needed some books and (the principal) told me to go ahead, borrow whatever I need.

A HFCS Senior discussed how his HFCS teachers' value college, "Even if we say, we might not go to college the teachers are a lot of help and say, 'When school ends you're going to want to go to college and we're going to make sure you have options open'." (HFCS Senior, 2016).

Students shared examples of teacher persistence in helping students' develop a success plan reflective of their interests and strengths. "If I didn't transfer to this (HFCS), I think I would not have college interest, really. Public school is a different mindset. It can be a little boring and you just get that mindset that you just want to get out of school, I don't want to go to school anymore." (HFCS Senior, 2016).

In addition to Senior Capstone Project Hō'ike topics that reflect community connections, students often selected a potential career interest. A HFCS alumna reflected on the relevance of his Senior Capstone Project Hō'ike, "My senior project was actually trying to start a fresh water tropical fish breeding business in Hawai'i because the tropical fish industry is a top industry. Since Hawaii is a sub-tropical climate we don't need heaters for our tanks." (HFCS Alumni, 2016). A HFCS Senior selected a Senior Capstone Project Hō'ike topic that would help her in her immediate future, college financial planning. "A part of my (Senior Capstone Project Hō'ike)

that had the biggest impact was doing a lot of college research because I was able to setup my entire first year of college on the mainland.” (HFCS Senior, 2016). Another HFCS student shared how his HFCS Senior Capstone Project connected to his future goals.

I know it’s so predictable, but my senior project topic really connects to my career and life goals. Career wise that’s what I want to do because what I that’s what I love doing, keeping the fish and raising them. But life wise, the fish tank is more of a symbol. When I first started to do fish tanks my dad told me that it’s not going to look pretty at first. He said I need to work at it and slowly by slowly. I will learn each small part before the whole looks beautiful. That’s how I see it connected to my life goals because it’s not going start out pretty but I will reach my goals eventually. So I have to get each small part in my life before it will be good (HFCS Senior, 2016).

Data Summary

Data from all participants in all stakeholder groups from the four HFCS confirmed a variety of college, career, community readiness strategies present in Senior Capstone Project Hō‘ike and Graduation Ceremony Hō‘ike. Participants described community responsibilities, career exploration, and college preparation opportunities.

HFCS HŌ‘IKE THEME 4: HFCS CONTEXT

DEFINITION:

HFCS are culturally grounded in Native Hawaiian perspectives and three context conditions foster the attainment of the HFCS Vision of the Graduate; learner support, ‘āina and project-based learning, and authentic assessments.

KEY QUOTE:

In elementary school is when foundation of inferiority started and was reinforced. Poor performance on standardized assessments led to tutoring, a SPED label, and him being separated, culled from the herd. Which is what we were afraid of if he went to (conventional public school) he would get left behind. I really thought it would exacerbate an already bubbling situation. You know ‘forget about him’ so we decided to send him there (HFCS) with smaller classes. Yeah, because I know how it was, kids who aren’t immediately responsive get filtered and sifted to the back of the class then pretty soon in a different class all together. I’m just glad that nowadays there were other options because it looked like storm clouds ahead if there were only (conventional) public schools (HFCS Parent, 2016).

Theme Description and HFCS Vision of the Graduate Connections

The final theme that resulted from Mission Driven Data Analysis emerged as a synthesis of the previous three themes; Manifest Cultural Knowledge, Synthesize Academic Knowledge, and Demonstrate College and Career Readiness. Unlike conventional public schools, Hawaiian-focused Charter Schools’ teaching and learning environment is culturally grounded in Native Hawaiian perspectives. Interviews with HFCS students and alumni from all four schools included many examples of the benefits of engaging in ‘āina and project-based learning. HFCS parents described a conventional public school system that did not align with their family’s educational values and described how HFCS’ designed and implemented support systems for their child in ways unavailable in public schools. Hō‘ike Coordinator interview responses emphasized the importance of students demonstrating proficiency with authentic assessments. Theme four outlines the specific conditions of Hawaiian-focused Charter Schools’ learning context that make it possible for students to achieve the HFCS Vision of the Graduate.

Table 24

HFCS Context Conditions, Examples, and Stakeholders

HFCS Context Conditions	HFCS Context Examples	Stakeholder
1. Learner Support	1a. Connection to School	Parents
	1b. Mismatch of Conventional Schools	
	1c. Small Group Instruction	
	1d. School Size	
2. ‘Āina and Project-based Learning	2a. ‘Āina-based Learning	Students and
	2b. Project-based Learning	Alumni
3. Authentic Assessment	3a. Ha‘i ‘ōlelo	Hō‘ike
	3b. Food preparation	Coordinators
	3c. Oli	

Parents: Learner Support

Interviews with families revealed an abundance of examples of the conventional public school system failing their child:

I kept telling (the conventional public school) he’s never going to be able to go back to school because of his medical condition. It took how many years of fighting, from fourth grade all the way to ninth grade, trying to get some help. We lived twenty miles from that school and that was an excuse they used, ‘Nobody lives out there so we don’t have any tutors’. I was just trying to get somebody to help because my child should have a right to education like everybody else. This (HFCS) was our savior (HFCS Parent, 2016).

In contrast to their conventional public school experience, HFCS parents and families cited many examples of schools providing learner support. “At his previous public school, he’d skip lunch because he was too shy to order his lunch. The (HFCS) finally helped him but for the

first couple of years the teachers said, ‘Whoa, we just can’t quite get him to open up.’ But they finally did.” (HFCS Parent, 2016). The interview quote that opened this section is an example of HFCS providing learner support for students in the form of smaller learning environments.

Another parent explained “It’s more personal and the school takes the time to help you, even if you’re doing well they take that time out to support you in whatever way they can.” (HFCS Parent, 2016). Families of students who previously attended a conventional public school explained a relationship with HFCS administrators, teachers and staff that was absent in their previous school.

Families also described a strong connection to the mission of the Hawaiian-focused Charter School’s that their child attended. Many of the families with children attending Hawaiian language immersion schools enrolled their child in preschool or kindergarten. “I must have been twenty years old and I had just finished work and was waiting for my ride. This kupuna walked by and he said, ‘Aloha, pehea oe?’ and I didn’t understand him. Then he said, ‘Ae, how come you Hawaiian girl and you no understand?’ I knew from that day that I wanted my children to learn ‘ōlelo Hawai‘i.” (HFCS parent, 2016). For these families, there was a mismatch between the conventional English speaking public school mission and their family values. It was imperative that their child contribute to the renormalization of ‘ōlelo Hawai‘i, therefore conventional public schools were never an option:

If he was in a public school, he would have the sports and all that other fluff stuff, but nothing cultural. No taking off of the shoes, getting in the lepo, and being grounded to the ‘āina. No putting on a malo, no makahiki games, and no Hawaiian language. My son has been quiet all these years and if you put him in a public school setting, he’d be one of those that would just get pushed off because he’s not a behavior problem, he’s a good kid.

He's all good because he no make trouble and he'd probably fall through the cracks
(HFCS parent, 2016).

Students and Alumni: ‘Āina and Project Based Learning

“My favorite thing was having classes outside and being able to see the environment we're going to be interacting with for the rest of our lives. Attending (a HFCS) really opened my eyes about how I can look at things in the world from a Hawaiian aspect.” (HFCS Alumnus, 2016). Hawaiian-focused Charter School students learning environments are grounded in ‘āina and project-based learning. “I came to this HFCS because I had a really hard time talking to people. This is an easier setting for me to understand and help me talk to people. Plus all the things are hands on here and I had hard time sitting in classrooms.” (HFCS Senior, 2016). A HFCS Senior explained, “My friends who go to other schools said that this school sounds pretty exciting because we go outside and everyone’s doing hands on activities.” (HFCS student, 2016). “When I tell other kids what we do at school, they say we’re lucky because we’re always at the beach or in the mountain. They might think we’re cruising but we’re really working hard. I think public school kids don’t really have the same connection to land that charter school kids have.” (HFCS student, 2016). The HFCS Senior Capstone Hō‘ike and Graduation Ceremony Hō‘ike were prefaced by many opportunities for students to participate in learning experiences that required students to actively engage with the environment as opposed to sitting in a classroom all day. “My senior project is based on the loko i‘a down the road and we’re collecting baseline data, hands on at the pond, creating our some of own tools from scratch. We have quadrants and measure the area and depth of the pond, saltwater, and freshwater.” (HFCS student, 2016).

A HFCS Senior explained how ‘āina-based learning enhanced her understanding about her Native Hawaiian culture. “We get to do all these super cool things that some other people

don't get to do like restore canoes and go sailing, so culture is a big part, because I didn't know all about my culture until I started going to this school." (HFCS Senior, 2016). Students also shared examples how 'āina-based experiences helped to strengthen their understanding and relationship with land. "We do so much community service and we spend all this time working on farms, on the land, and in the ocean to make it a better place. It has made me appreciate where I live and the values that the Earth has for us. When we take care of the land, the land will take care of us." (HFCS Senior, 2016)

Students also communicated an appreciation of the student ownership component of project-based learning. "I'm an independent learner, so this school is perfect for me because I get to take charge of my own projects and if I need help there's always someone to help me." (HFCS Senior, 2016). They were also passionate about describing their Senior Capstone Hō'ike projects because students selected topics they were genuinely interested in. "I love to do art...and since this is a project based school I can focus on what I'm interested in, but in a regular public school I couldn't have the flexibility to do what I want to do." (HFCS Senior, 2016). Many of the students felt that the HFCS administration, staff, and teachers wanted students to also embrace their independence. "The first time I even got to drive a hundred foot boat was at school. The school has a lot of trust in students and by the fifth day I was in the helm all by myself for like twenty minutes. It was just an awesome experience and life changing." (HFCS student, 2016). A HFCS senior shared, "I have friends that go to all these public schools and have these subjects they tell me about that they don't like it or hate, and I barely say that because I enjoy school." (HFCS Senior, 2016).

Hō‘ike Coordinators: Authentic Assessment

Hō‘ike require students to demonstrate their understanding to authentic audiences inclusive of ‘ohana, school staff, alumni, community members, and subject matter experts. “Hō‘ike is application of all those things learned, it’s applying it to something real as opposed to the testing which is answering questions on a piece of paper.” (HFCS Hō‘ike Coordinator). A HFCS hō‘ike coordinator articulated the difference between hō‘ike and standardized assessments such as the SAT (Scholastic Aptitude Test) or SBAC (Smarter Balance Assessment Consortium):

There’s less critical thinking happening in answering questions on a test and filling in a bubble. You’re not just filling in a bubble (when someone asks) ‘how do you build in imu?’ You actually make the imu. A test is not testing if the student uses its kilo skills to go down to the river and choose the right rocks. There’s so much involved in making an imu, not just put the rocks in the imu, put the wood in the imu. Where do the rocks and the wood come from? Can the student apply cultural knowledge...to that practice? If a student doesn’t know the right answer to something do they know where to find the right answer? Do you know the right resource in your community to help you to make that imu? That’s a lot different and is not just memorizing information (HFCS Hō‘ike Coordinator, 2016).

Interview data showed that the hō‘ike process included opportunities for students to receive ongoing feedback from staff. Hakipu‘u Learning Center Senior Projects and presentations are assessed with rubric criteria (Hakipu‘u Learning Center, 2015). The Senior Capstone Project Hō‘ike Rubric assesses students’ presentation delivery, content, and visual aids. Table 25 is one section of Hakipu‘u Learning Center’s Senior Capstone Project Hō‘ike. The complete rubric is featured in Appendix F.

Table 25

Hakipu‘u Learning Center Hō‘ike Presentation Rubric Section 1 of 4

Hakipu‘u Senior Presentation and Exhibition Form				
Section 1: Overall Oral Presentation				
	Exemplary	Proficient	Approaching Proficient	Novice
Overall Presentation	Interesting, well-rehearsed, smooth delivery, holds audience attention	Relatively interesting, fairly smooth delivery, usually holds audience attention	Delivery not smooth, able to hold audience attention most of the time	Delivery not smooth, audience attention lost.
Time Limit	Presentation is 20-25 minutes long.	Presentation is 20-25 minutes long.	Presentation is 20-25 minutes long.	Presentation is 20-25 minutes long.

“The students are discussing directly what they're learning and what their experience was. When you look at tests, they might tell you what academically you are remembering at that particular moment in time. I'm not against testing, but I just don't feel that that should be the only measure of growth because hō‘ike really shows true growth of a student.” (HFCS Hō‘ike Coordinator).

In addition to authentic assessment tasks, hō‘ike coordinators also described the importance of audience composition. Table 26 on the next page summarizes the different audiences present during each hō‘ike.

Table 26

Hawaiian-focused Charter School Hō‘ike Audience

Hō‘ike	Purpose	Grade	Genre	Audience
HFCS Capstone Project Hō‘ike	Demonstrate interdisciplinary academic and cultural knowledge about a student selected topic.	12	Written paper and oral presentation	Teachers, administration, students, family, community, subject matter experts
HFCS Graduation Hō‘ike	Honor successful acquisition of cultural and academic expectations and transition to post-secondary phase of life.	12	Ceremony, Performance, Artifacts	Teachers, administration, students, family

Hō‘ike coordinators explained that students were more motivated to demonstrate cultural and academic proficiency because audiences were comprised of family, community members, and content experts. “It’s about the students, not about us and when they’re up there performing or presenting, it’s all about them so they better be ready.” (HFCS Hō‘ike Coordinator, 2016). In addition to audience assessment, hō‘ike coordinators design school level rubrics to assess student proficiency:

Project rubric and presentation rubrics are used to assess hō‘ike. Seniors have three evaluators, two advocates, and a junior shadow, so there are a lot of people who want to find out what they learned. Their advisor grades them in one area and then the evaluation team goes through the rubric and to determine the final score. Students also self-assess at

each status check and then at the end they do a project reflection. They also have to document 50 hours of community service about their topic (HFCS Hō‘ike Coordinator, 2016).

They also discussed the transformational component of hō‘ike, when students transition from students to graduates, “They pull into the school after their hō‘ike like they're coming home and that’s the day that I see the transformation because in the past all those kids were just kids, but on that day when they come home, they're truly the kūana.” (HFCS Hō‘ike Coordinator, 2016).

Hawaiian-focused Charter School leaders and teachers understand assessment best practices and applied them to the design and implementation of project rubrics and processes that support Native Hawaiian students demonstrating cultural and academic proficiency. Hō‘ike assessment tools document HFCS cognitive rigor required for students to manifest cultural knowledge and synthesize academic knowledge.

Conclusion

Interview data with HFCS students, alumni, parents, and staff revealed four hō‘ike themes; 1) Manifesting Cultural Knowledge, 2) Synthesize Academic Knowledge, 3) Demonstrate College, Career, Community, Readiness, 4) HFCS Context. Interviewees from all stakeholder groups described examples of HFCS students manifesting cultural knowledge (theme one). Table 15 features examples of HFCS students demonstrating proficiency in Hawaiian ceremonies (i.e. hi‘uwai), creating cultural artifacts (i.e. kīhei), and sharing Hawaiian performances (i.e. ha‘i ‘ōlelo). Synthesize Academic Knowledge was the second theme identified by HFCS stakeholder interviews. Interviewees described examples of HFCS students synthesizing academic knowledge and Table 17 features examples of HFCS students demonstrating proficiency in engaging in the inquiry process through student selected research

topics, critiquing multiple texts during the research process, and creating written products and oral presentations. Interviewees from all stakeholder groups described examples of HFCS students demonstrating college, career, and community readiness (theme three). Table 21 features examples of HFCS students' community responsibilities, career exploration, and college preparation. Hō'ike theme four, HFCS Context was the fourth theme identified by HFCS stakeholder interviews. Interviewees described examples of HFCS providing learner support unavailable in conventional public schools, project and 'āina-based learning, and opportunities for authentic assessments.

The themes that emerged from the qualitative data analysis suggest that HFCS Senior Capstone Project Hō'ike and Graduation Ceremony Hō'ike reflect the high cultural and academic expectations of HFCS leaders and teachers. HFCS hō'ike require students to engage in levels of cognitive rigor present in the most sophisticated level of Webb's Depth of Knowledge, Level 4 Extended Thinking. HFCS students a) synthesize information across multiple sources or texts, and b) design models to inform and solve a real world, complex, or abstract problem (Webb, 2002; Webb, 2007). They are also required to utilize a multitude of 21st century skills throughout the project and 'āina based learning experience. Community is also woven throughout Senior Capstone Project Hō'ike and Graduation Ceremony Hō'ike and often becomes a mindset of HFCS students.

CHAPTER V

QUANTITATIVE FINDINGS

Introduction

The qualitative findings presented in Chapter four answered the research question and confirmed that HFCS hō'ike encapsulate components of the HFCS Vision of the Graduate. HFCS stakeholder interviews included evidence the following: manifesting cultural knowledge, synthesizing academic knowledge, demonstrating college/career/community readiness, and HFCS context factors. Kamehameha Schools Keiki, 'Ōpio, 'Ohana, and HFCS Graduate surveys were reviewed and interestingly, there were survey questions that linked with the four qualitative data analysis themes. Chapter five presents findings from quantitative data that aligned with the four qualitative themes.

Figure 16 Quantitative Data Process



Survey Background

Kamehameha Schools administers surveys to all seventeen HFCS families and students annually. The 2016 Kamehameha Schools Nā Keiki (n=141), Nā 'Ōpio (n=148), 'Ohana (n=148), and HFCS Graduate (n=22) survey data from the four HFCS participating in this study were reviewed to determine if the interview themes would be present in larger data sets. Table 27 outlines the KS surveys used for the quantitative data review.

Table 27

Kamehameha Schools Surveys Administered to HFCS

Survey Name	Respondents	Method
KS HFCS Graduate	n=22, HFCS class of 2016 graduates	Mixed method
KS Nā Keiki	n=141, HFCS students in grades 4-6	Quantitative
KS Nā ‘Ōpio	n=148, HFCS students in grades 7-12	Quantitative
KS ‘Ohana	n=211, HFCS parents	Quantitative

KS surveys were reviewed, and questions that aligned to the interview themes were selected for quantitative validation analysis. Chapter five organizes quantitative data by interview theme and presents the findings from the quantitative analysis including; theme definition, KS survey questions used for analysis, and HFCS survey respondent data from the four schools participating in this study.

**QUANTITATIVE DATA CORRELATED WITH THEME 1:
MANIFEST CULTURAL KNOWLEDGE**

DEFINITION:

HFCS hō‘ike require students to manifest cultural knowledge in three areas; ceremonies, artifacts, and performances.

KEY SURVEY DATA:

100% of parents who participated in the survey (n=211) agree that their child’s HFCS provides an education that is rooted in Hawaiian culture (Kamehameha Schools, 2016).

The first hō‘ike theme, Manifest Cultural Knowledge, was evident in all HFCS stakeholder interviews with students 18 years of age, alumni, parents, and hō‘ike coordinators. Table 27 features the KS survey questions that gathered student survey participant’s knowledge and experience with ceremonies, performances, and artifacts (Kamehameha Schools, 2016).

Table 28

Theme 1 Quantitative Data Analysis: Manifesting Cultural Knowledge

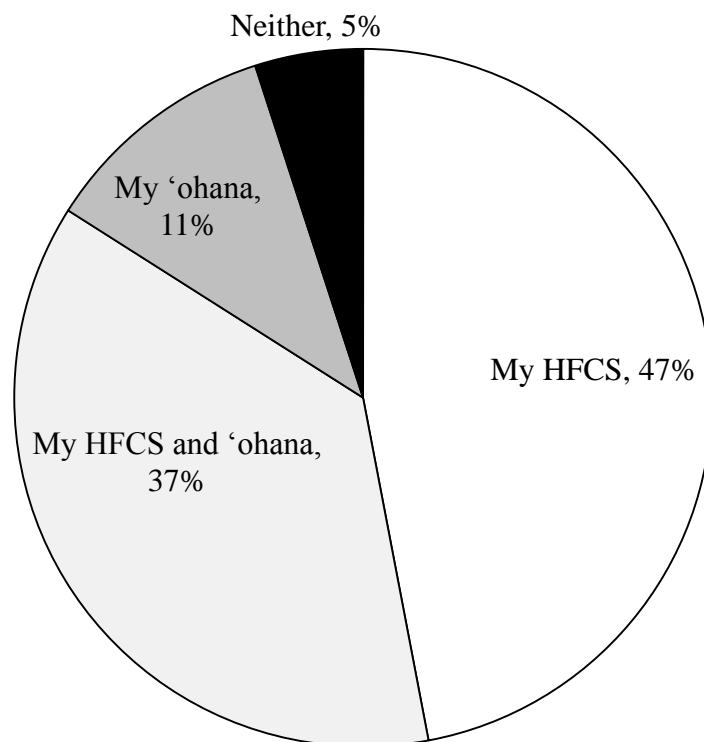
Cultural Knowledge Survey Questions	Theme 1	Survey Name
Alignment		
Hawaiian language, culture, and practices knowledge source (HFCS, family, other).	Ceremonies, Artifacts, and Performances	KS HFCS Graduate Survey n=22
Knowledge and practice of:		KS Nā ‘Ōpio Survey
dancing hula	Performance	n=148
chanting oli	Performance	
Hawaiian food preparation	Ceremony	
Hawaiian home/space blessing	Ceremony	
asking permission before hunting or gathering	Ceremony	
ho‘okupu at cultural sites	Ceremony	
Native Hawaiian plant uses	Ceremony	
Hawaiian greetings	Ceremony	
HFCS provides an education rooted in Hawaiian culture.	Ceremonies, Artifacts, and Performances	KS ‘Ohana Survey n=211

Quantitative data analysis of the 2015-2016 KS ‘Ohana Survey results from the four participating schools (n=211) revealed 100% parents that completed the survey agree that their HFCS provides an education grounded in Native Hawaiian culture (Kamehameha Schools, 2016). The opening portion of this section and Table 28 outline quantitative data that reflect

parent interview and student responses about manifesting cultural knowledge. HFCS Graduates who participated in the survey were asked to identify where they learned about Native Hawaiian culture, practices, and language. Figure 17 outlines the results.

Figure 17 KS Graduate Survey 2016 n=22

Most of what I know of Native Hawaiian language, culture, and practices, I learned from:



HFCS students in grades 7-12 completed the KS Nā 'Ōpio Survey shared knowledge and experience with two cultural performances, dancing hula and chanting oli. 94% of students knew or practiced dancing hula and 92% knew or practiced chanting oli (Kamehameha Schools, 2016).

The two graphs below feature survey data about students manifesting knowledge through cultural performances and ceremonies. The figure below summarizes survey results of HFCS secondary students who completed the survey (n=148). Data revealed student knowledge of and experience with examples of Hawaiian ceremonies. This data correlated well with qualitative data theme 1: manifest cultural knowledge. Figure 19 outlines student experience with a variety of Hawaiian cultural ceremonies including Hawaiian blessings, gathering protocol, ho‘okupu, native plant use, Hawaiian food preparation, and Hawaiian greetings (Kamehameha Schools, 2016).

Figure 18 KS ‘Ōpio Survey grades 7-12 responses to questions 128-129, n=148

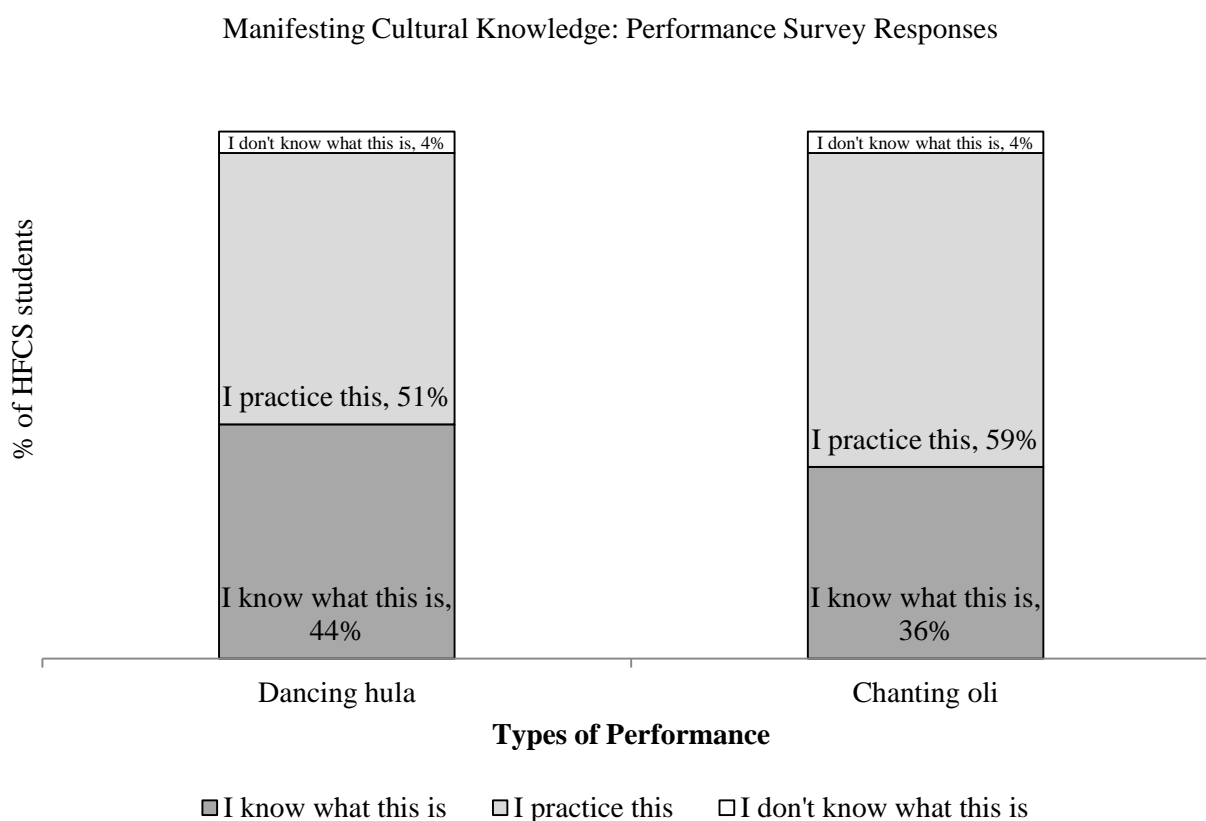
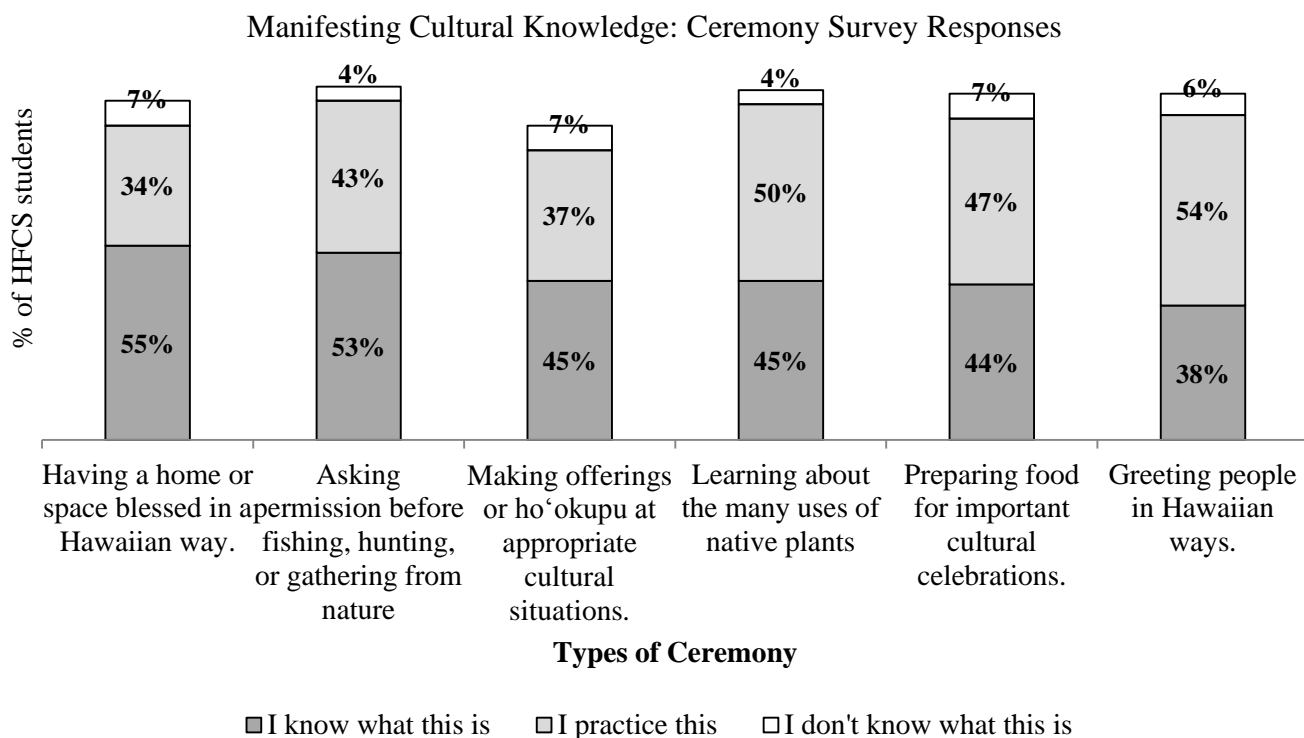


Figure 19 KS ‘Ōpio Survey grades 7-12 responses to questions 117, 120, 122, 124, 126-127 n=148



**QUANTITATIVE DATA CORRELATED WITH THEME 2:
SYNTHESIZE ACADEMIC KNOWLEDGE**

DEFINITION:

HFCS hō‘ike require students to demonstrate proficiency in synthesizing academic knowledge by engaging in the inquiry process, critiquing multiple texts, creating a written product and oral presentation.

KEY SURVEY DATA:

90% of parents who participated in the survey (n=211) agree that their child’s HFCS promotes high achievement (Kamehameha Schools, 2016).

Table 26 features the KS survey questions that reflect theme two, Synthesize Academic Knowledge, and were the focus of quantitative data validation of students manifesting cultural knowledge.

Table 29

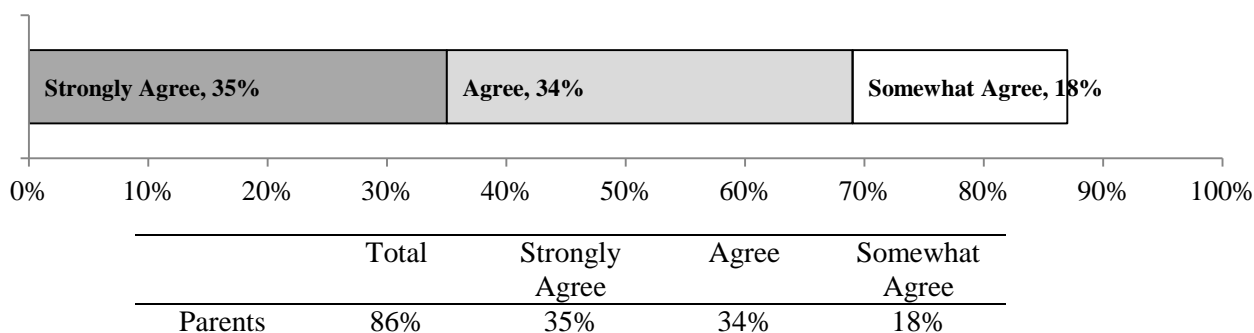
Theme 2 Quantitative Data Analysis: Synthesize Academic Knowledge

Academic Knowledge Survey Question	Theme 2 Alignment	Survey Name
HFCS promote high achievement for students.	Inquiry Process, Critique Multiple Texts, Written	KS Nā Keiki Survey n=141
HFCS set high expectations for students.	Product and Presentation	KS Nā ‘Ōpio Survey n=148
HFCS prepare my child for the next grade and content level.		KS ‘Ohana Survey n=211

Quantitative data analysis of the 2015-2016 KS ‘Ohana Survey results from the four participating schools (n=211) confirmed that 86% of parents agree that their HFCS prepares students for the next level of schooling (Kamehameha Schools, 2016). Figures 20-21 outline quantitative data that are reflective of parent interview responses.

Figure 20 KS ‘Ohana Survey question 2d responses, n=211

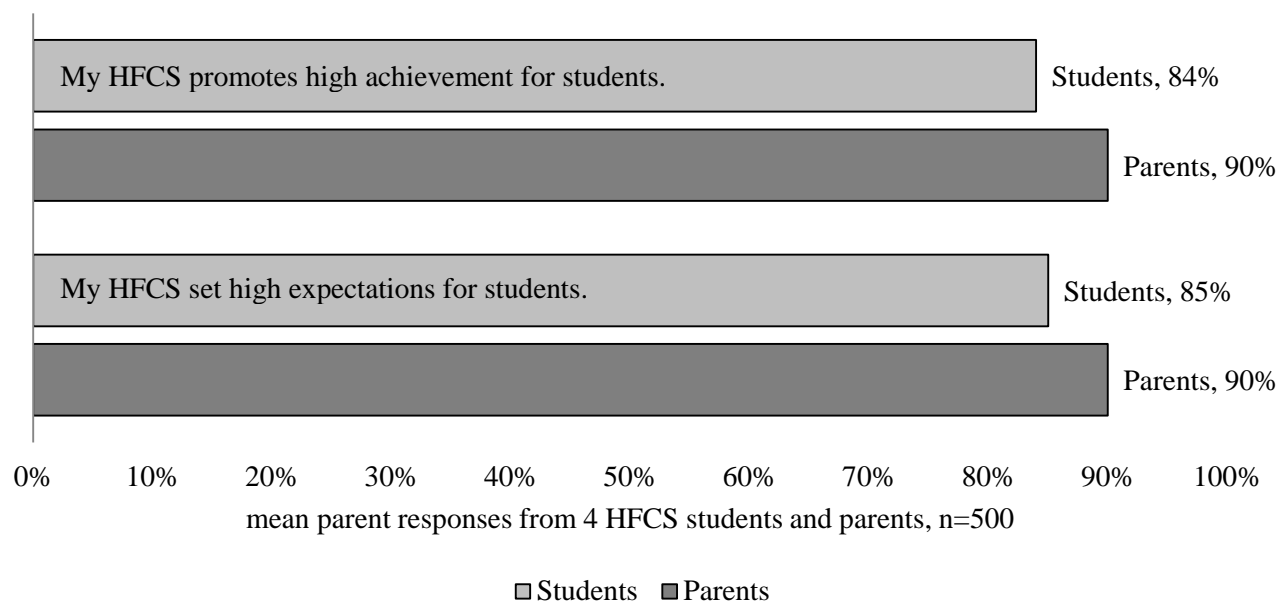
86% of HFCS parents agree their child is prepared for the next grade or school level by the end of the school year.



In addition to parents agreeing that students are academically prepared for the next grade or content level, parent surveys (n=211) also showed that HFCS promote high achievement and set high expectations for all students. Student surveys (n=289) were also analyzed and revealed that HFCS students agree that their school promotes high achievement and teachers establish

high expectations for students. Figure 21 presents student and parent survey data analysis on one graph (Kamehameha Schools, 2016). This data correlates well with the qualitative theme 2 synthesize academic knowledge.

Figure 21 KS ‘Ohana, Keiki, and ‘Ōpio Surveys n=500
 ‘Ohana Survey question 2d, 3f, 3g responses, n=211, KS ‘Ōpio Survey question 20, 21 responses, n=148, KS Keiki Survey question 17-18 responses, n=141



**QUANTITATIVE DATA CORRELATION WITH THEME 3:
 DEMONSTRATE COLLEGE, CAREER, COMMUNITY READINESS**

DEFINITION:

HFCS hō‘ike process includes opportunities for students to demonstrate college, career and community readiness in three areas; community kuleana, college preparation, and career exploration.

KEY SURVEY DATA:

95% of 2016 HFCS graduates who participated in the survey (n=22) agree that their HFCS had a system in place to support their post-secondary transition (Kamehameha Schools, 2016).

100% of parents who participated in the survey (n=211) agree that their child views him/herself as contributing to healthy communities at home, school, and beyond.

Table 30 features the KS survey questions that reflect theme three, College, Career, Community Readiness, and were the focus of quantitative data validation.

Table 30

Theme 3 Quantitative Data Analysis: College, Career, Community Readiness

College, Career, Community Readiness Survey Data	Theme 3 Alignment	Survey Name
College enrollment	College, Career, Community	KS Nā Keiki Survey n=141
HFCS post high school transition plan.	College, Career, Community	KS Nā ‘Ōpio Survey n=148
Child contributes to communities.	Community	KS ‘Ohana Survey n=211
Post high school responsibilities	College, Career, Community	KS Graduate Survey n=22

One hundred percent of parents from four HFCS participating in this research responded on the KS ‘Ohana Survey (n=211) that their child views him/herself as a community contributor (Kamehameha Schools, 2016). The HFCS Graduate Survey (Kamehameha Schools, 2016) asked students to describe their post high school kuleana and many student responses included community connections as well as college and career (Kamehameha Schools, 2016). Table 31 summarizes student responses about post-secondary college, career, and community responsibilities.

Table 31

2016 HFCS Graduate Survey, n=22

Student Response to survey question: I would describe my kuleana as...	College, Career, Community Link
Taking care of my family.	Community
Being a good student and learning about my culture and ancestors.	College, Career
Lead pōki'i to appreciate and value what they have. 'ōlelo Hawai'i needs to be appreciated by students and valued for it to continue and thrive in the future. This generation does not understand the mission of HFCS and their intent to continue the native language for more generations to come.	College, Career, Community
Taking care of myself, peers, family and my loved ones.	Community
Making good choices, surrounding myself with good people, and being a good/positive role model to the people who look up to me.	College, Career, Community
Teaching the younger generation with the hope that one day they will be a better person than me.	Community
Show other people how we can better this island and our people.	Community
Continuing the Hawaiian language so that it may never die and taking care of everything to show aloha for where I live.	College, Career, Community
Be there for the next generations to come. ALWAYS respect the people who came before me because they cleared the pathway for me.	Community
Perpetuate my culture to in the best of my ability.	Community
Keeping the Hawaiian culture alive.	Community
Speaking 'ōlelo Hawai'i as much as possible to kumu and students.	Community
Attending school, staying sober, and being close to my family. Using my community to help me, being a good resource for others. Basically trying make a pono difference.	College, Career, Community
Going to college, continuing my Hawaiian studies, and volunteering at a lo'i.	College, Career, Community
Enroll in college and get a job.	College, Career

The HFCS Graduate Survey is administered to all HFCS Seniors annually. Survey data from the four schools participating in this study revealed that 95% graduates agree that their HFCS had a system in place to support his/her transition out of high school (Kamehameha Schools, 2016). Survey data also showed that college attendance was included in 77% of students post high school plans (Kamehameha Schools, 2016). Figures 22-23 outline 2016 HFCS graduate responses to the survey question. This data correlates well with qualitative theme three college, career, and community readiness.

Figure 22: KS HFCS Graduate Survey question 14 responses, n=22

My school had a system in place to support my transition out of high school.

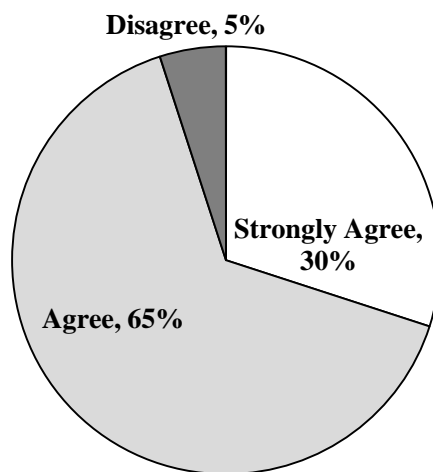
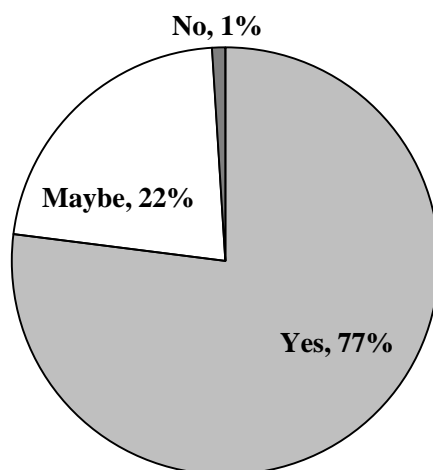


Figure 23: KS HFCS Graduate Survey question 5 responses, n=22

Are you going to college?



QUANTITATIVE DATA CORRELATED WITH THEME 4: HFCS CONTEXT

DEFINITION:

HFCS are culturally grounded in Native Hawaiian perspectives and three context conditions foster the attainment of the HFCS Vision of the Graduate; learner support, ‘āina and project-based learning, and authentic assessments.

KEY SURVEY DATA:

95% of parents who participated in the survey (n=211) agree that the entire HFCS ‘ohana (teachers, administration, board, and families) support their child’s education.

Learner Support

Table 32 features the KS survey questions that reflect theme one and were the focus of quantitative data validation about HFCS context.

Table 32

Theme 4 Quantitative Data Analysis: HFCS Context

HFCS Context Survey Data	Theme 4 Alignment	Survey Name
The entire school supports my child’s education.	Learner Support	KS ‘Ohana Survey n=211
HFCS care about students.	Learner Support	KS ‘Ohana Survey n=211 KS Nā ‘Ōpio Survey n=148 KS Nā Keiki Survey n=141

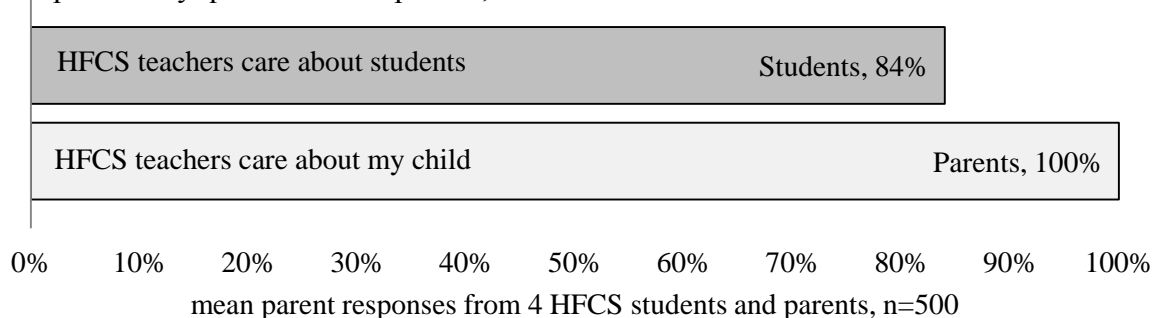
Table 32 continued

Theme 4 Quantitative Data Analysis: HFCS Context

HFCS Context Survey Data	Theme 4 Alignment	Survey Name
HFCS creates an environment where my child enjoys going to school	Learner Support	KS 'Ohana Survey n=211
HFCS supports my child's education.	Learner Support	KS 'Ohana Survey n=211
Parents understand our HFCS mission and vision	Learner Support	KS 'Ohana Survey n=211
'Āina is a part of my identity	'Āina and Project-based Learning	KS Nā 'Ōpio Survey n=148 KS Nā Keiki Survey n=141
'Āina is a living, sacred being that should be protected.	'Āina and Project-based Learning	KS Nā 'Ōpio Survey n=148 KS Nā Keiki Survey n=141
I feel hurt when people disrespect the 'āina.	'Āina and Project-based Learning	KS Nā 'Ōpio Survey n=148 KS Nā Keiki Survey n=14

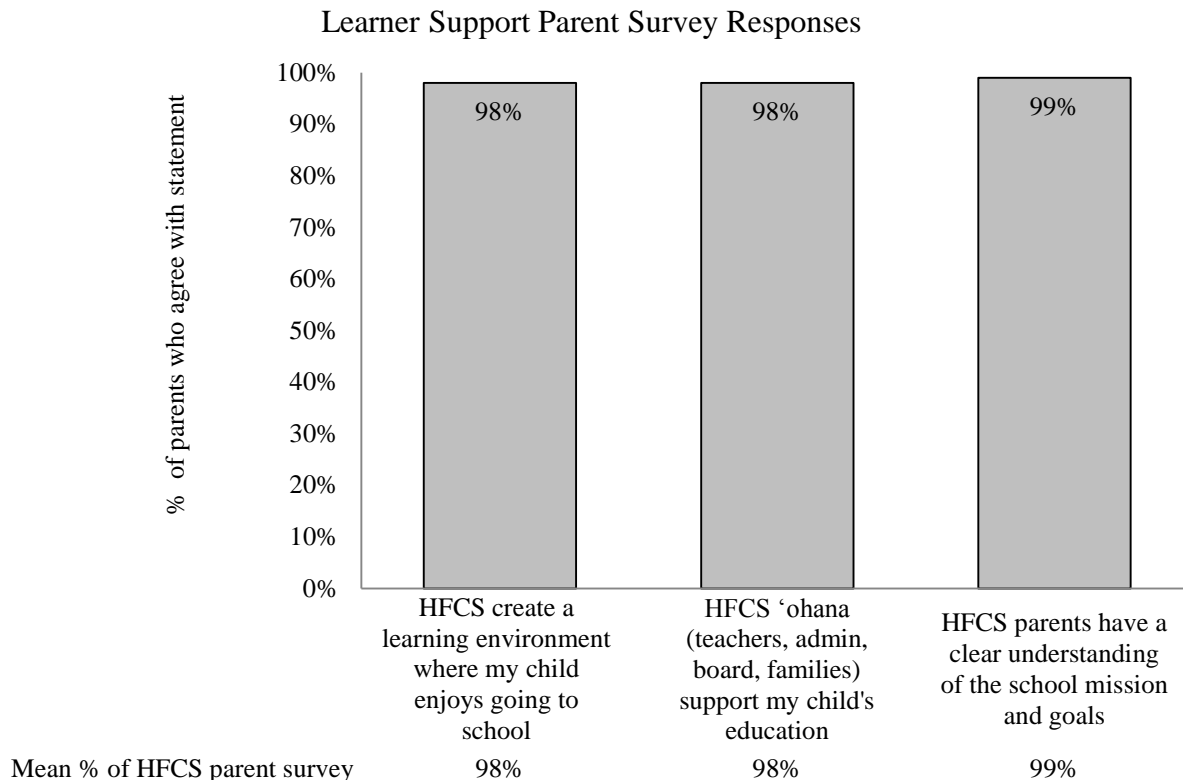
The Mission Driven Data Analysis of interviews confirmed that HFCS parents and families from all participating schools explained that the learner support offered at HFCS is a unique contextual factor. Quantitative data analysis of the 2015-2016 KS ‘Ohana Survey from the four participating schools confirmed that learner support is also valuable to a larger sampling of parents (n=211). Figures 24-25 outline critical quantitative data that align with parent interview responses about HFCS learning environment, relationships with school staff, and parent commitment to HFCS missions (Kamehameha Schools, 2016).

Figure 24 KS ‘Ohana Survey question 4b responses, n=211
 KS Keiki Survey question 10 responses, n=141
 KS ‘Ōpio Survey question 10 responses, n=148



	Total	Strongly Agree	Agree	Somewhat Agree
Students	84%	38%	43%	12%
Parents	100%	55%	34%	8%

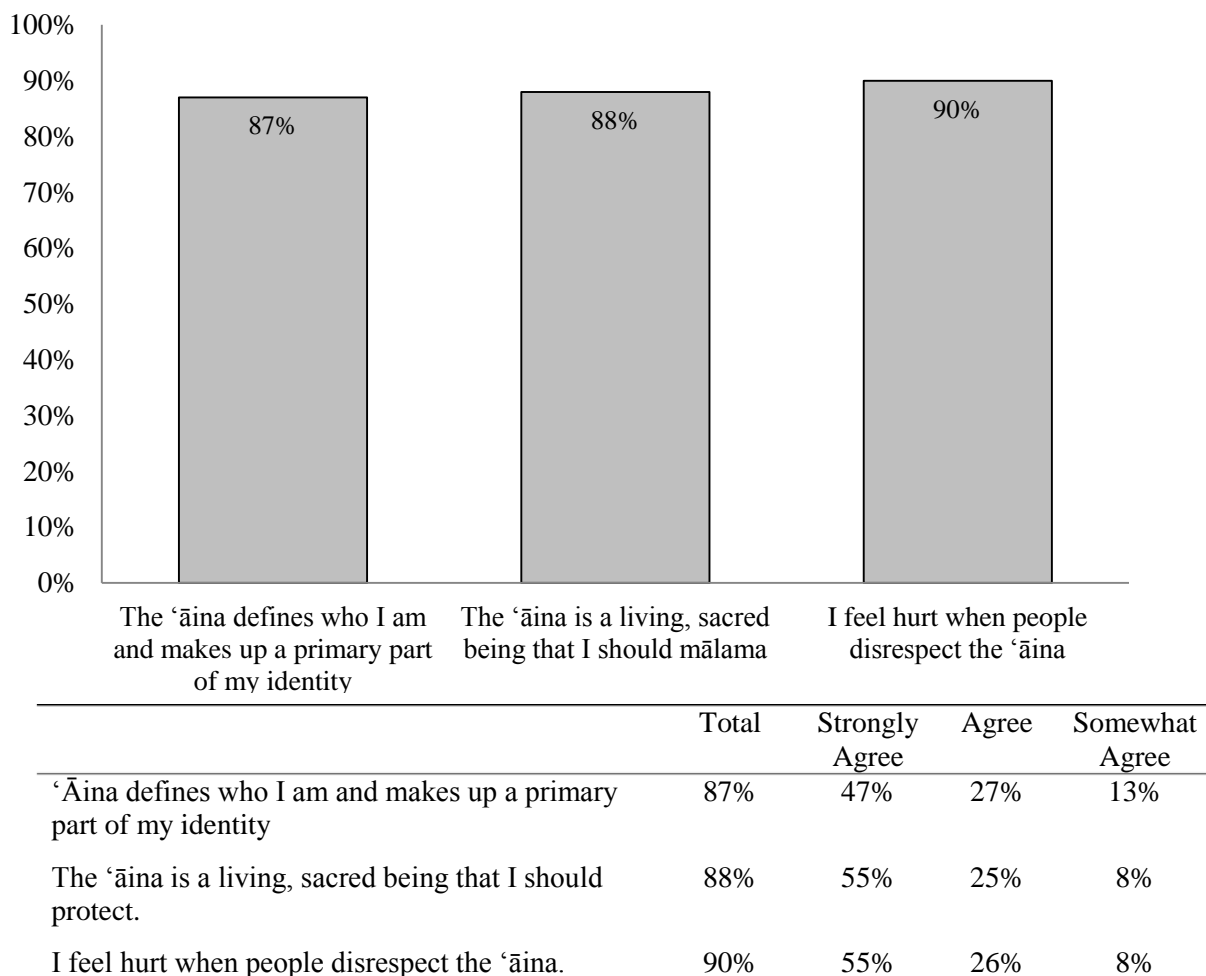
Figure 25 KS 'Ohana Survey question 3h, 13, 14 responses n=211



HFCS graduates also echoed parent survey results and a large percentage recognized a variety of support specifically from HFCS teachers and adults (HFCS Graduate Survey, 2016). The HFCS Graduate Survey is administered to all HFCS Seniors annually. Survey data from the four schools participating in this study provided additional insight about students' connection to land. Figure 26 on the next page outlines 2016 HFCS graduate responses to who agree with the following survey statements. This data correlates well with qualitative data theme four, Hawaiian-focused Charter School context.

‘Āina and Project-based Learning

Figure 26 KS Keiki and ‘Ōpio Surveys n=289
 KS Keiki Survey question 56-59 responses, n=141
 KS ‘Ōpio Survey question 76-79 responses, n=148



Summary

Interview data with HFCS students, alumni, parents, and staff revealed four hō‘ike themes; 1) Manifesting Cultural Knowledge, 2) Synthesize Academic Knowledge, 3) Demonstrate College, Career, Community, Readiness, 4) HFCS Context. The 2016 Kamehameha Schools Nā Keiki (n=141), Nā ‘Ōpio (n=148), ‘Ohana (n=148), and HFCS Graduate (n=22) survey data from the four HFCS participating in this study were analyzed to determine if the themes identified by HFCS stakeholder interviews would be present in larger

data sets. Student survey questions (Kamehameha Schools, 2016) that asked about student knowledge and experience with cultural artifacts, ceremonies, and performances were analyzed to determine if theme one, Manifesting Cultural Knowledge would be present in a larger data set (n=148). Survey data summaries reveal that students who participated in surveys had knowledge of and practiced in a variety of cultural ceremonies and performances (Kamehameha Schools, 2016). The quantitative data from the 2016 Kamehameha Schools surveys linked with interview data theme one, Manifesting Cultural Knowledge; HFCS require students to manifest cultural knowledge through ceremonies, artifacts, and performances.

Student and family survey questions (Kamehameha Schools, 2016) about HFCS academic expectations and student preparation for the next grade level were analyzed to determine if theme two, Synthesizing Academic Knowledge would be present in a larger data set. Data summaries revealed high percentages of students and parents who participated in the surveys agreed that their child is prepared for the next grade level and the HFCS promote high achievement (Kamehameha Schools, 2016). The quantitative data from the 2016 Kamehameha Schools surveys showed that HFCS require students to demonstrate proficiency in synthesizing academic knowledge (theme two).

Kamehameha Schools Keiki and 'Ōpio survey questions (2016) that asked about student preparation for college, career, and community contributions were analyzed to determine if theme three, Demonstrating College, Career, Community Readiness would be present in a larger data set (n=148). Data featured in this chapter revealed that students who participated in surveys felt prepared for their future in college/careers and understood their community responsibilities (Kamehameha Schools, 2016). The quantitative data from the 2016 Kamehameha Schools surveys connected with interview data theme three, Demonstrating College, Career, Community

Readiness; HFCS include opportunities for students to demonstrate college, career, and community readiness through community kuleana, college preparation, and career exploration.

Student and family survey questions (Kamehameha Schools, 2016) about HFCS were analyzed to determine if HFCS context factors would be also present in a larger data set. Survey data summarized in Table 31 and Figures 25-27, summarized high percentages of specific learner support strategies and ‘āina based learning experiences (Kamehameha Schools, 2016). The quantitative data from the 2016 Kamehameha Schools surveys linked with theme four; HFCS are culturally grounded in Native Hawaiian perspectives and provide learner support and ‘āina based learning experiences. The mixed method data analyses conducted during this research confirms that HFCS Senior Capstone Project Hō‘ike and Graduation Ceremony Hō‘ike encapsulate components of the Hawaiian-focused Charter School Vision of the Graduate. HFCS student readiness for college/career/community and proficiency in cultural and academic knowledge are assessed with an authentic assessment, HFCS hō‘ike. The Hawaiian-focused Charter School mission and vision is correlated in the quantitative data presented in this chapter.

Table 33

HFCS Vision of the Graduate and HFCS Hō‘ike

HFCS Vision of the Graduate Component	HFCS Hō‘ike Data
Manifest Cultural Knowledge	ceremonies, artifacts, performances
Synthesize Academic Knowledge	inquiry process, critique multiple texts written product and oral presentation
Demonstrate College, Career, Community Readiness	community kuleana, career exploration college completion
HFCS Context	learner support, ‘āina and project-based, authentic assessments

CHAPTER VI

CONCLUSION

Overview

Hawaiian-focused Charter Schools were created in the early 2000s to provide families with educational sovereignty and learning environments grounded in Native Hawaiian language and values (Goodyear Kaopua, 2013). Although each HFCS is a reflection of its unique community, all HFCS share common values. The HFCS Vision of the Graduate (HFCS, 2013) articulates these common values and goals which all HFCS have for students regarding their responsibility to land, family, community, and readiness for college, career, and community. Native Hawaiians utilize hō‘ike to demonstrate understanding and readiness for the next level of training or career paths. Historical accounts document an array of evidence of Native Hawaiian hō‘ike in hula, medicine, writing, reading, oral presentation, leadership training, and international policy. HFCS students follow in the footsteps of their ancestors and demonstrate proficiency and readiness for the next grade level and content area through hō‘ike. This study focused on two hō‘ike that occur at the end of students’ K-12 educational journey; Graduation Ceremony Hō‘ike and Senior Capstone Project Hō‘ike. Hakipu‘u Learning Center, Ka ‘Umeke Kā‘eo, Ke Kula ‘o Samuel M. Kamakau, and Kua o ka Lā Hawaiian-focused Charter Schools participated in this study designed to answer the research question, “How do HFCS hō‘ike encapsulate the components of the HFCS Vision of the Graduate?”

HFCS students, alumni, parents, and staff were interviewed about the aforementioned two hō‘ike. Vision and Mission Driven data analyses of interview data identified four HFCS hō‘ike themes. The qualitative themes were also present in larger quantitative data sets of surveys completed by HFCS students, parents, and graduates.

- 1. Manifest Cultural Knowledge:** HFCS hō'ike require students to manifest cultural knowledge in three areas; ceremonies, artifacts, and performances. Qualitative data analysis revealed that this theme resonated with all participants and all four HFCS and the quantitative survey data correlated with theme one.
- 2. Synthesize Academic Knowledge:** HFCS hō'ike require students to demonstrate proficiency in synthesizing academic knowledge by engaging in the inquiry process, critiquing multiple texts, creating a written product and delivering an oral presentation. Hō'ike processes and rubrics clearly articulate rigorous cultural and academic expectations. Qualitative data analysis revealed that this theme resonated with all participants at all four HFCS and quantitative survey data correlated with theme two.
- 3. Demonstrate Readiness for College, Career, and Community:** The HFCS hō'ike process includes opportunities for students to demonstrate college, career and community readiness in three areas; community kuleana, college preparation, and career exploration. Qualitative data analysis revealed that this theme resonated with all participants at all four HFCS and quantitative survey data correlated with theme three.
- 4. HFCS Context:** HFCS are culturally grounded in Native Hawaiian perspectives and three context conditions foster the attainment of the HFCS Vision of the Graduate; learner support, 'āina and project-based learning, and authentic assessments. Qualitative data analysis revealed that this theme resonated with all participants and quantitative survey data correlated with theme three.

The aforementioned HFCS Hō'ike themes reflect the five researched based components of culture-based education; 1) language, 2) family and community, 3) content, 4) context, 5) assessment and accountability (Kana'iaupuni, Kawai'ae'a, 2008). HFCS Senior Capstone

Project Hō‘ike and Graduation Ceremony Hō‘ike also effectively illustrate the assessment and accountability component of culture-based education. Throughout the hō‘ike process, HFCS gathered and maintained data using a variety of methods to ensure student progress occurred in culturally responsible ways (Kana‘iaupuni, Kawai‘ae‘a, 2008). Interview data included the following examples: progress meetings with students, practice presentations to authentic audiences, oral presentations, research papers, ha‘i ‘ōlelo, community service, student selected research topics, Hawaiian artifacts, cultural ceremonies and performances.

HFCS Hō‘ike are also inclusive of the core tenants of indigenous evaluation presented in *Improving the Practice of Evaluation Through Indigenous Values and Methods: Decolonizing Evaluation Practice—Returning the Gaze From Hawai‘i and Aotearoa* (2007). HFCS hō‘ike promote an indigenous worldview, epistemology, values, and spirituality that are reflective of each school’s unique community (Kawakami, Aton, Cram, Lai, Porima, 2007). Table 34 outlines the four HFCS hō‘ike themes and the connection to components of the HFCS Vision of the Graduate.

Table 34

HFCS Hō‘ike Qualitative Data Themes

Themes	HFCS Vision of the Graduate		
	Cultural Knowledge	Responsibility to Family, Community, Environment	College, Career, Community Readiness
1. Manifest Cultural Knowledge	✓	✓	✓
2. Synthesize Academic Knowledge		✓	✓
3. Demonstrate College, Career, Community Readiness	✓	✓	✓
4. HFCS Context	✓	✓	✓

In spite of receiving 39% less funding than conventional public schools, HFCS Senior Capstone Project Hō‘ike and Graduation Ceremony Hō‘ike in this study provided evidence of the implementation of 21st Century Best Practices outlined in *21st Century Skills for Students and Teachers* (Pacific Policy Research Center, 2010). “Emerging research encourages teachers and other educational stakeholders to focus on real world problems and processes, support inquiry-based learning experiences, provide opportunities for collaborative project approaches to learning, and focus on teaching students how to learn (above ‘what’ to learn).” (Pacific Policy Research Center, p. 12, 2010). Interview data with HFCS revealed examples of student investment in hō‘ike due to the aforementioned 21st century skills implemented at HFCS. Hō‘ike featured in this study also address all six International Society for Technology in Education Standards: Creativity and Innovation, Communication and Collaboration, Research and Information Fluency, Critical Thinking, Problem Solving, and Decision Making, Digital Citizenship, and Technology Operations and Concepts (ISTE, 2007).

All HFCS hō‘ike featured in this study included Harvard’s four components of community service engagement recommended for creating responsible work, caring relationships and ethical citizenship (Weissbourd et al., 2016). Students engaged in authentic, meaningful, sustained, collective community service. Student and alumni interviewees also described their gratitude and sense of responsibility for the future (Weissbourd et al., 2016). HFCS hō‘ike research findings revealed that the HFCS hō‘ike can be used to assess and document 21st century skills and ancestral knowledge through the creation of Hawaiian cultural artifacts, performances, and ceremonies. Hawaiian-focused Charter School hō‘ike are robust assessments that successfully merge ancestral knowledge from the past with 21st century skills required for students’ post-secondary success in college, career, and community.

Implications for Theory, Practice, Policy

Hawaiian-focused Charter School hō‘ike reflect the components of the HFCS Vision of the Graduate and have the potential to influence theory, practice, and policy. The following research implications are organized by potential impact.

Theoretical Implications. The findings support the perspective of an alternative theory of assessment in contrast to standardized, norm-referenced assessments. Documentation of existing HFCS existing hō‘ike capstone project requirements including existing rubrics and exemplars could support greater understanding of authentic assessments in a Hawaiian culture based education environment. Mandated standardized assessments measure the lowest level of thinking, rote memorization (Anderson & Krathwohl, 2001). Further compounding the problem is that current assessment theories do not reflect the level of rigor evident in HFCS hō‘ike. This study proves that HFCS Hō‘ike are authentic assessments that promote higher order thinking skills and require students to demonstrate rigorous cultural and academic proficiency. American assessment theories must evolve to include assessments that measure student growth over time and replicate real world situations.

Practice Implications. It is imperative that HFCS continue to resist mission drift in spite of consistent pressure from the United States Department of Education and the Hawai‘i Charter School Commission to conform to American values of education that rely solely on standardized assessments. Families and students deserve the right to attend schools grounded in Native Hawaiian language and culture, ‘āina and project-based learning, and authentic assessments. HFCS Senior Capstone Project Hō‘ike and Graduation Ceremony Hō‘ike document the attainment of HFCS community based missions and the HFCS Vision of the Graduate. Hawaiian-focused Charter School schoolwide curricular articulation and alignment would

engage all grade levels and identify each level's contributions to HFCS Senior Hō'ike. Staircasing end of the year grade level and content area 'ōlelo Hawai'i, speaking, writing, and reading curriculum and assessments would support schoolwide investment in hō'ike. Teacher developed preschool-grade 12 assessments that build to the HFCS Senior Capstone Project Hō'ike could include the following components; Cultural Knowledge, Academic Knowledge, College/Career/Community Readiness. This study proves that HFCS understand assessment best practices and applied them in the design of hō'ike processes and rubrics. These systemized, concerted efforts were not happenstance. HFCS leaders and teachers are very cognizant that the hō'ike process and assessment prepare students for a successful future. Mainstream education has historically and continues to prove that it does not adequately prepared Native Hawaiian children for success in life.

Policy Implications. HFCS Senior Capstone Project Hō'ike and Graduation Ceremony Hō'ike have the potential to become accepted as evidence of student attainment of the HFCS Vision of the Graduate and should be supported as legitimate assessment methods recognized in policy. Clearly articulating the connections between HFCS Cultural Competence, Interim Growth Measures, and College/Career/Community Readiness could help external stakeholders better understand the components of the HFCS Vision of the Graduate and provide alternatives to American, standardized, summative assessments. It is critical that all HFCS continue to participate in the HFCS Culturally Relevant Assessment Project to develop assessment alternatives reflective of the entire Hawaiian-focused Charter School system. Identifying hō'ike commonalities across all HFCS could lead to the development of a process to aggregate data based on HFCS similarities (Vision Analysis) and school level rubrics (Mission Analysis). The outcomes of the CRA Project could be accepted as value added data by educational policy

making bodies. It is important to note that it is the responsibility of the Hawai‘i Charter School Commission and Board of Education to embrace innovative, rigorous, culture-based assessments such as hō‘ike. The Hawai‘i Charter School Commission and Board of Education must enhance their collective understanding of HFCS learning environments and research-based indigenous assessments to fully comprehend HFCS assessments. They must finally embrace and empower the innovation occurring at Hawaiian-focused Charter Schools to prevent more Native Hawaiian children from falling through the cracks of a broken mainstream education system.

Limitations

There were three research limitations identified in this study, sample size, a partial data set, and language. Only four of 17 total Hawaiian-focused Charter Schools participated in the study. Although HFCS are located on four islands; Hawai‘i Island, O‘ahu, Kaua‘i, Moloka‘i, only Hawai‘i Island and O‘ahu perspectives are reflected in this research. Of the four schools that participated in the study, only two of the schools are Hawaiian language immersion schools. There are additional Hawaiian-focused Charter and DOE Kula Kaiapuni Hawaiian language immersion schools in the state of Hawai‘i. Furthermore, interviews with Hawaiian language immersion principals, teachers, students, alumni, and hō‘ike coordinators were conducted in English due to the researcher’s lack of fluency in ‘ōlelo Hawai‘i. HFCS preschool, elementary, and middle school perspectives were not gathered, and for the purpose of this study data collection and analysis focused on hō‘ike that occurred closest to graduation. Due to the unforeseen expansion in sample size, interview data from HFCS po‘okumu and teachers were not analyzed. Instead the following key stakeholders were the focus of data analysis: HFCS students, alumni, parents, and hō‘ike coordinators.

Recommendations

The following recommendations could support the identification and communication of HFCS hō‘ike components that encapsulate the HFCS Vision of the Graduate. Hawaiian-focused Charter Schools should organize a collaborative, multimedia campaign focused on HFCS hō‘ike. The multimedia information could raise awareness about hō‘ike as an authentic assessment. Audience friendly research and statistics be incorporated to bolster hō‘ike validity. In addition to educating various groups about hō‘ike, HFCS students would also have the opportunity to amplify their projects, communities, and culture to a larger authentic audience.

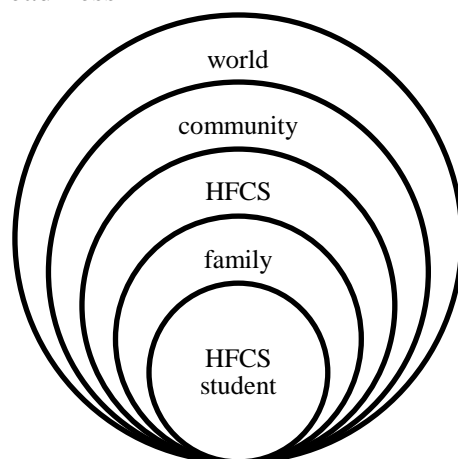
Vision and Mission Driven Analyses utilized to identify the four hō‘ike themes should be expanded to include additional groups. Po‘okula, po‘okumu, and teacher interview data collected for this study should be analyzed to determine if the four interview themes are present. The findings from additional stakeholder groups could strengthen the triangulation of this study. Data about hō‘ike capstone projects that occur during other key transition years (i.e. preschool to elementary, elementary to middle, middle to high school) could be gathered to determine the four interview themes are evident in other hō‘ike. Four HFCS on Hawai‘i Island will begin a collaborative three year project in 2017-2018. *Papaiakea: A System of Hawaiian-focused Charter High Schools* (Ka ‘Umeke Kā‘eo, Ke Ana La‘ahana, Kanu ‘o ka ‘Āina, Kua o ka Lā, 2016) project components include fostering students’ post-secondary success through early college credits and a shared design project. It could be advantageous to all four schools if the Papaiakea Coordinator works with school and teacher leaders to develop project guidelines and rubrics that feature the four research themes outlined in this study. The three year project could provide additional student support prior to Senior Capstone Project Hō‘ike and Graduation Ceremony Hō‘ike. The four schools could also gather additional secondary school data about

the hō‘ike rigor and effectiveness in demonstrating cultural and academic proficiency. An additional collaboration could occur with HFCS Hawaiian language immersion schools and DOE Kula Kaiapuni schools. Engaging in discussions about hō‘ike could both groups learn more about their mission driven hō‘ike process and identify connections to HFCS Vision of the Graduate.

Interviews with additional HFCS alumni should be completed to further explore the college, career, and community readiness data analysis theme. Select HFCS graduates that pursued college, career, and community pathways and focus data collection on how prepared they were for those roles. The snowball data collection method could be utilized to identify college professors, supervisors, and community leaders connected to HFCS alumni. Conduct interviews to gather their interpretation of HFCS student readiness for college, career, and community.

A HFCS Community Readiness inventory of best practices should be compiled to document the variety of strategies HFCS utilize to connect students to various communities. The 2016 Harvard *Turning Tides* report recommends students commit to one year of meaningful community service, however HFCS expect all students in preschool through grade 12 to connect with various communities. Community Readiness strategies implemented by Hawaiian-focused Charter Schools could be gathered from teachers and organized by developmental level and by community size (Figure 27).

Figure 27 HFCS Community Readiness



For example, younger students may enjoy opportunities to engage with smaller communities that are most meaningful to them, their families and classmates. In addition to community proximity, strategies could be organized according to Harvard's four recommendations; 1) meaningful, sustained community service, 2) collective action that takes on community challenges, 3) authentic, meaningful experiences with diversity, and 4) service that develops gratitude and a sense of responsibility for the future (Weissbourd et al., 2016).

It is important for all Hawaiian-focused Charter Schools develop a research based multiyear assessment plan. All schools should communicate the assessments they are administering to students and each assessment's purpose. The assessment purpose continuum featured in Parsi and Darling-Hammond's performance assessment whitepaper (2015) could be used to assist schools in determining if traditional assessments on the left side of the continuum (Figure 4) are being utilized to validate the richer, teacher developed assessments on the right side of the continuum. This is critical since school developed assessments are reflective of HFCS missions and visions. Schools with comprehensive project rubrics should collaborate with external reviewers to validate the assessment tool. Webb's Depth of Knowledge and Bloom's Taxonomy could be utilized to communicate the cognitive rigor present in HFCS assessment

tools, tasks, and products. This multiyear assessment plan could also support teachers and hō'ike coordinators who do not often have a counterpart to engage in assessment dialogue. Teachers could collaborate on hō'ike design and reflect on implementation

Reflection

June 2017 marked the end of Hōkūle'a's Mālama Honua worldwide voyage. In preparation for her historic return and in an effort to unify communities, Hawaiian organizations collaborated to teach Native Hawaiian protocol, mele, and oli to people across the state. A welcome ceremony was organized at Magic Island in Honolulu, Hawai'i. Tens of thousands of people gathered to witness, participate in, and celebrate Hōkūle'a's return. The homecoming was broadcast live on local television networks and as Hōkūle'a prepared to dock, commentator Amy Kalili stated, "He Hawai'i au and I'm proud of it, but this is not a Hawaiian thing, this is a Hawai'i thing. It proves to us what we can do when we stand on the shoulders of the people who came before us. You believe in the knowledge they hold and that knowledge has application today." (2017). While watching the ceremony, the only other recent examples of comparable crowds we could think of were organized for critical political and environmental protests such as the John Doe vs. Kamehameha Schools and Mauna Kea/TMT lawsuits. At one point during the ceremony, a speaker asked members of the audience to stand if they learned about Hōkūle'a in school and a throng of children and young adults stood to affirm that Hawaiian history is indeed the kahua of their schools. The awa ceremony was conducted by Laiana Wong, a graduate of Kula Kaiapuni, and some of the young kane who assisted him were students from Ke Kula 'o Samuel M. Kamakau Hawaiian-focused Charter School. It was beautiful to see so many people excited about the special occasion and there was an undeniable air of hope and pride that permeated the event.

Polynesian Voyaging Society Navigator Nainoa Thompson's commitment to the revitalization of the Hawaiian culture spans over 40 years and he is also the cofounder of the youngest Hawaiian-focused Charter School located in Waimānalo, O'ahu. Mālama Honua Public Charter School's mission reflects their founder's goal of "cultivating the caring, compassionate, and astute mind of the navigator in students." (Mālama Honua PCS, 2013). During the afternoon portion of Hōkūle'a's Welcome Ceremony, he shared a poignant speech that honored leaders who played a large role in Hōkūle'a's creation story:

She was a woman professor in the University of Hawai'i system and she was Hawaiian. You can count the Hawaiian professors in the 1950s on one hand. She gave Dr. Ben Finney a book and said, 'Read this, it's all wrong. It's all wrong and you as an anthropologist who believes in the ancient voyages of the Polynesians, you need to change that.' It was a decade later that there would be a phone call, not on our phone lines, but a long distance phone call from Santa Barbara University to a painter in Chicago, Herb Kawaiianui Kane. They would talk about building a voyaging canoe and I always wondered how come the phone call wasn't here? How come we couldn't see it? Well, go look what we teach in our schools. Hawaiian was outlawed by policy in the public schools. Private teachers had the privilege and authorization to beat the kids. I know, my grandmother was at Kamehameha. You graduate from high school and have no idea how Hawaiians got here. Had no idea they were the greatest navigators, voyagers, and explorers on the face of the earth (Thompson, 2017).

Hawaiian-focused Charter Schools represent the antithesis of what Nainoa described in his speech. The qualitative and quantitative data presented in this dissertation provides evidence of HFCS students and families strong relationship with Hawaiian language, culture, and history.

Students manifest cultural knowledge and synthesize academic knowledge in preparation for community, college, and career. HFCS Senior Capstone Project Hō‘ike and Graduation Ceremony Hō‘ike require students to demonstrate a high level of proficiency that is not the norm at most Hawai‘i public and private schools. During interviews with HFCS Seniors, I explained the dissertation process by drawing direct parallels to their HFCS Senior Capstone Projects. HFCS hō‘ike expectations are closely aligned to graduate college level expectations.

In spite of the wealth of evidence that illustrates HFCS hō‘ike rigor and effectiveness in strengthening students’ cultural connectedness, Hawaiian-focused Charter Schools face a relentless battle with conventional education systems such as the Hawai‘i Charter School Commission and Hawai‘i Board of Education that do not value Hawaiian epistemology. Although Hawaiian organizations such as the Office of Hawaiian Affairs (OHA) and Kamehameha Schools provide HFCS additional funding, the disparity between conventional DOE schools and HFCS persists. One may expect Hawaiian institutions to embrace ancestral ways of teaching and assessing students, however these Hawaiian organizations require HFCS to report funding impact on students using the same antiquated assessment measures valued by the Hawai‘i Board of Education and Hawai‘i Charter School Commission. Hawaiian-focused Charter School teachers and leaders are providing a culture-based learning environment for students and families in spite of appalling funding disparities and a web of complicated, time consuming accountability systems. HFCS leaders are forced to invest an exorbitant amount of time applying for or adhering to funding requirements without many of the support systems conventional public and private schools take for granted. The majority of HFCS do not receive facilities funding and most of the schools do not have extra support from vice principal, counselor, and curriculum/assessment coordinator positions. In essence, these institutions are

continuing the violent assault against Hawaiian children described in Nainoa's speech. Native Hawaiian children continue to be punished for attending Hawaiian-focused Charter Schools that place Hawaiian culture and language at the forefront of all learning.

As Nainoa's speech continued, he shared how his experience as one of the original Hōkūle'a voyage crew members influenced his contributions to the Hawaiian cultural renaissance:

Kane and Finney had a dream. They launched a voyaging canoe and they gave it to us.

The question was what will we do with it? Eddie had the dream that we're going to go down to Kahikinui and pull it out of the sea with Hōkūle'a. We were going to bring pride back to our ancestors and then we were going to give pride to our children. That's why

he had to go, because Hōkūle'a was the light, and it was upside down (Thompson, 2017).

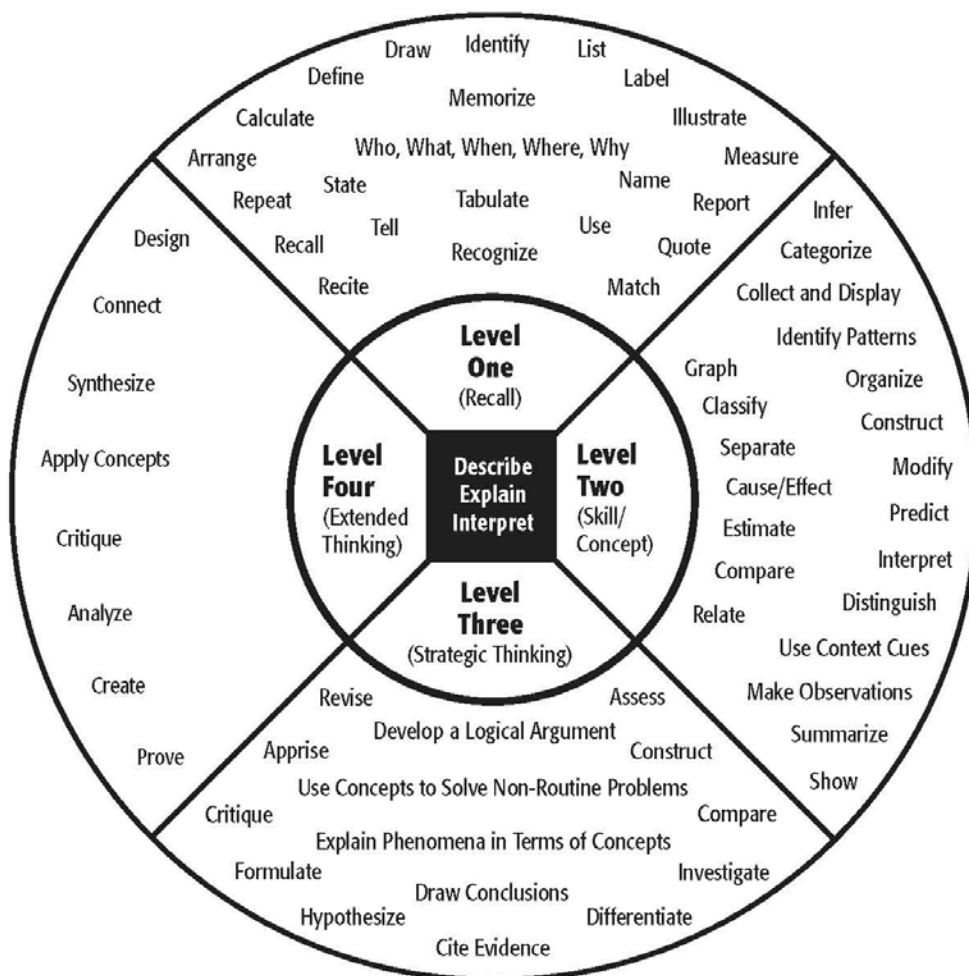
Hawaiian-focused Charter School leaders envisioned their schools as vessels that could be used to strengthen children's Hawaiian cultural pride in the same way Nainoa and Eddie viewed Hōkūle'a. A total of 17 distinct communities across the state of Hawai'i rallied together to create learning environments grounded in their unique community values, as well as Hawaiian language and culture. Hawaiian-focused Charter Schools were created to provide innovative alternatives to conventional educational systems. It is only fitting that HFCS assessments surpass mandated, standardized assessments that measure low level thinking skills. The current assessment paradigm utilized in American education does not honor indigeneity and HFCS revitalized hō'ike as a culturally appropriate, rigorous assessment. In the same way Hōkūle'a personifies Hawaiian ancestral knowledge of navigation, hō'ike reflects Native Hawaiian brilliance in assessment and demonstrating readiness for the next level of education, training, and career.

I wholeheartedly agree with Nainoa's sentiments about the brilliance of our Hawaiian ancestors and mainstream education's inability to meet the needs of Hawaiian children. Hawaiian-focused Charter Schools are sanctuaries where Native Hawaiian knowledge is placed on a pedestal and is at the heart of all teaching, learning, and assessments. Every hula performance, lei hulu creation, imu construction, and ha'i 'ōlelo presentation recalls ancestral memories once buried under generations of historical trauma. I firmly believe that Hawaiian-focused Charter Schools re-right the failures of the Hawai'i public school system and it is my intense hope that the findings of this study can assist the acceleration of HFCS hō'ike as a valid and rigorous assessment.

APPENDICES

Appendix A: Webb's Depth of Knowledge Framework

Depth of Knowledge (DOK) Levels



Level One Activities	Level Two Activities	Level Three Activities	Level Four Activities
<p>Recall elements and details of story structure, such as sequence of events, character, plot and setting.</p> <p>Conduct basic mathematical calculations.</p> <p>Label locations on a map.</p> <p>Represent in words or diagrams a scientific concept or relationship.</p> <p>Perform routine procedures like measuring length or using punctuation marks correctly.</p> <p>Describe the features of a place or people.</p>	<p>Identify and summarize the major events in a narrative.</p> <p>Use context cues to identify the meaning of unfamiliar words.</p> <p>Solve routine multiple-step problems.</p> <p>Describe the cause/effect of a particular event.</p> <p>Identify patterns in events or behavior.</p> <p>Formulate a routine problem given data and conditions.</p> <p>Organize, represent and interpret data.</p>	<p>Support ideas with details and examples.</p> <p>Use voice appropriate to the purpose and audience.</p> <p>Identify research questions and design investigations for a scientific problem.</p> <p>Develop a scientific model for a complex situation.</p> <p>Determine the author's purpose and describe how it affects the interpretation of a reading selection.</p> <p>Apply a concept in other contexts.</p>	<p>Conduct a project that requires specifying a problem, designing and conducting an experiment, analyzing its data, and reporting results/solutions.</p> <p>Apply mathematical model to illuminate a problem or situation.</p> <p>Analyze and synthesize information from multiple sources.</p> <p>Describe and illustrate how common themes are found across texts from different cultures.</p> <p>Design a mathematical model to inform and solve a practical or abstract situation.</p>

Appendix B: Dedoose Demographic Descriptors

Sets & Fields

Descriptor Sets

Default, Fields: 0, Descriptors: 0

Participant Demographics, Fields: 9, Descriptors: 29

Set Fields

Field	Type	Dynamic
ID	Number	False
Stakeholder	Option List	False
School	Option List	False
Interview #	Option List	False
School Language	Option List	False
Sex	Option List	False
College	Option List	False
Island	Option List	False
Name	Text	False

Descriptors In Set

Columns & Filters

Columns

- Linked Media
- Memos
- ID
- Stakeholder
- School
- Interview #
- School Language
- Sex
- College
- Island
- Name

Filters

- ▶ Selected
- ▶ ID
- ▶ Stakeholder
- ▶ School
- ▶ Interview #
- ▶ School Language
- ▶ Sex
- ▶ Island

	Stakeholder	School	Interv...	School ...	Sex	Island
1	Parent	Kua o Ka Lā	Pre	English	Male	Hawai'i
2	Parent	Kua o Ka Lā	Post	English	Group	Hawai'i
3	Alumni	Kua o Ka Lā	Single	English	Male	Hawai'i
4	Alumni	Kua o Ka Lā	Single	English	Female	Hawai'i
5	Student, 18 YO	Kua o Ka Lā	Pre	English	Male	Hawai'i
6	Student, 18 YO	Kua o Ka Lā	Post	English	Male	Hawai'i
7	Hō'ike Coordi...	Kua o Ka Lā	Single	English	Female	Hawai'i
8	Parent	Ka 'Umeke Ka...	Pre	Hawaiian	Female	Hawai'i
9	Parent	Ka 'Umeke Ka...	Post	Hawaiian	Female	Hawai'i
10	Student, 18 YO	Ka 'Umeke Ka...	Post	Hawaiian	Female	Hawai'i
11	Student, 18 YO	Ka 'Umeke Ka...	Post	Hawaiian	Female	Hawai'i
12	Alumni	Ka 'Umeke Ka...	Single	Hawaiian	Male	Hawai'i
13	Hō'ike Coordi...	Ka 'Umeke Ka...	Single	Hawaiian	Female	Hawai'i
14	Alumni	Kamakau	Single	Hawaiian	Female	O'ahu
15	Alumni	Kamakau	Single	Hawaiian	Female	O'ahu
16	Hō'ike Coordi...	Kamakau	Single	Hawaiian	Female	O'ahu
17	Parent	Kamakau	Pre	Hawaiian	Female	O'ahu
18	Parent	Kamakau	Post	Hawaiian	Female	O'ahu
19	Parent	Kamakau	Pre	Hawaiian	Male	O'ahu
20	Parent	Kamakau	Post	Hawaiian	Male	O'ahu
21	Parent	Kamakau	Pre	Hawaiian	Female	O'ahu
22	Parent	Kamakau	Post	Hawaiian	Female	O'ahu

Page: 1 of 2. Items: 1-22 of 29

1 | 2 | Next > | Last >>

Delete Selected | Select All | Select None

Appendix D: Kamehameha Schools Keiki, 'Ōpio, 'Ohana, HFCS Graduate Survey

Nā Keiki: Youth Development and Assets Survey

Student Assent Form

I, _____ understand that my parents/guardians have given permission (said it's okay) for me to take part in a project about how I feel about my school and myself under the direction of Kamehameha Schools.

In this project they want to learn about the skills and feelings that I have and to see how these will help me as I grow up. I understand that this survey will help them learn more about kids my age and what our thoughts are.

I will be given a survey (lists of questions to answer). It will take about 45 minutes to finish.

This is not a test, there will be no grades. I do not have to answer all of the questions. If I have any questions or concerns during the survey I am free to ask.

The survey is confidential no one in class will know how I answered each question.

I know I can change my mind later and that nothing will happen to me if I want to stop.

Student Signature: _____

Date: _____

School Name: _____

Last Name:

First Name:

NĀ KEIKI
DEVELOPMENT & ASSETS SURVEY

This is a confidential survey. No one other than the research staff will be able to find out how you or anyone else answered.

You will be asked to tell about yourself, your experiences, and your feelings. Please be as honest as you can.

This survey will take about 45 minutes.

IMPORTANT MARKING DIRECTIONS

- Use black lead pencil only (No. 2).
- Do NOT use ink or ballpoint pens.
- Make heavy black marks that fill the circle.
- Erase cleanly any answer you wish to change.
- Do not make any stray marks on the questionnaire.

EXAMPLES

<p>Proper Mark</p> <p>● ○ ○ ○</p>	<p>Improper Mark</p> <p>⊗ ⊗ ○ ○</p>
--	--

The 40 Developmental Assets[®] have been adapted and reprinted with permission from Search Institute (Minneapolis, MN, USA). Copyright © 1997 Search Institute. To view the original framework, visit www.search-institute.org. All rights reserved. Search Institute[®], Developmental Assets[®] and Healthy Communities • Healthy Youth[®] are trademarks of Search Institute.

About Me

1. How old are you?
 8 or younger 9 10 11 12 or older
2. What is your grade in school?
 3rd 4th 5th 6th
3. Are you a boy or a girl?
 Boy Girl
4. Are you Hawaiian/part Hawaiian?
 Yes No Don't know
5. How do you describe yourself? (Mark all that apply)
 Hawaiian Samoan Tongan Other Pacific Islander
 Portuguese Filipino White/Caucasian Native American/Alaska Native
 Puerto Rican Hispanic/Latino Chinese Black/African American
 Japanese Korean Other Asian Don't know
 Other ethnicity or race (Please specify): _____

BELOW ARE *SOME* ITEMS ABOUT HAWAIIAN LANGUAGE. FOR EACH STATEMENT, CHOOSE ONE RESPONSE THAT BEST DESCRIBES YOU.

- | | This is a lot like me | This is sort of like me | This is a little like me | This is not like me |
|---|-----------------------|-------------------------|----------------------------------|-----------------------|
| 6. I use some Hawaiian words..... | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> |
| 7. I can speak complete sentences in Hawaiian..... | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> |
| 8. I can talk story in Hawaiian..... | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> |
| 9. Some people in my family talk story with me in Hawaiian..... | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> |

About My School

CHOOSE THE ONE ANSWER FOR EACH OF THE FOLLOWING STATEMENTS THAT BEST DESCRIBES YOUR EXPERIENCE AT THIS SCHOOL.

- | | Strongly Agree | Agree | Somewhat Agree | Neutral | Somewhat Disagree | Disagree | Strongly Disagree |
|--|----------------------------------|-----------------------|----------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 10. My teachers really care about me..... | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 11. My teachers tell me I can do things well..... | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 12. My teachers make me feel good about what I do at school..... | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 13. Many people at this school are like family to me..... | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 14. I trust people at this school..... | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 15. The students here are friendly to me..... | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 16. The students here treat me with respect..... | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

	Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree
37. I look forward to going to school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
38. I feel school is a waste of time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
39. I like to learn by going to places outside school like libraries, historical or cultural places, or nature centers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
40. I like learning new things, even if they're not what we're studying at school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
41. I enjoy learning new things in school.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
42. I feel like a real part of my school.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
43. I can really be myself at this school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

About My Family & Community

FOR EACH STATEMENT BELOW, MARK THE RESPONSE THAT BEST DESCRIBES HOW YOU FEEL ABOUT YOURSELF. CHOOSE THE ONE ANSWER THAT BEST DESCRIBES YOUR FAMILY AND COMMUNITY.

	Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree
44. My family expects me to do my best in everything I do	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
45. My family teaches me right from wrong.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
46. My family cares about me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
47. I tell my family about things I learn in school.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
48. I like spending time with my family	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
49. It is important for family members to take care of each other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
50. How often do you see parents or community members involved in school activities?			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<i>How often does one of the adults in your family...</i>							
51. Help you with your school work?			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
52. Talk to you about what you are doing in school?			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
53. Ask you about your homework?			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
54. Talk with you about how doing well in school can help you in the future?			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Most days A couple of times per week About once a week A couple of times a month Hardly ever

About My Activities

MARK THE ONE RESPONSE THAT BEST DESCRIBES YOUR INVOLVEMENT IN THE ACTIVITIES LISTED.

How many days each week do you usually ...

	More than 5 times	3-5 times	Twice	Once	None
72. play on or help with sports teams at school or in the community (for example, football, softball, paddling, surfing)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
73. participate in group activities after school or on the weekends (for example, after-school programs, boys and girls scouts, choir, hālau, band, church groups, student government, martial arts)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
74. participate in individual activities outside of school (for example, individual music lessons, language lessons, tutoring, Kumon)?.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How often do you ...

	Daily	Weekly	Monthly	Yearly	Almost never
75. volunteer to help other people or to help make your community a better place?.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
76. do something to protect our land, air, and natural resources, such as recycling your own materials, using less water, using less electricity?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
77. participate in group activities to protect our environment, such as school or community recycling drives, or beach or stream clean-ups?.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
78. do things on the 'āina or kai like growing and using native plants, paddling canoe, surfing, or fishing?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
79. do Hawaiian activities like hula, chanting, lei making, or preparing Hawaiian food?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Mahalo for completing this survey.

Last Name:

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

First Name:

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

NĀ ‘ŌPIO
YOUTH DEVELOPMENT & ASSETS SURVEY

This is a confidential survey. No one other than the research staff will be able to find out how you or anyone else answered.

You will be asked to tell about yourself, your experiences, and your feelings. Please be as honest as you can.

This survey will take about 45 minutes.

IMPORTANT MARKING DIRECTIONS

- Use black lead pencil only (No. 2).
- Do NOT use ink or ballpoint pens.
- Make heavy black marks that fill the circle.
- Erase cleanly any answer you wish to change.
- Do not make any stray marks on the questionnaire.

EXAMPLES

Proper Mark ●○○○	Improper Mark ⊗⊗○○
----------------------------	------------------------------

The 40 Developmental Assets[®] have been adapted and reprinted with permission from Search Institute (Minneapolis, MN, USA). Copyright © 1997 Search Institute. To view the original framework, visit www.search-institute.org. All rights reserved. Search Institute[®], Developmental Assets[®] and Healthy Communities • Healthy Youth[®] are trademarks of Search Institute.

	Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat Disagree	Disagree	Strongly Disagree
80. It is important for me to know my genealogy from both of my parents	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
81. I strive to show aloha for everyone I interact with.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
82. I strive to be pono and do the right thing in all parts of my life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
83. I am ha'aha'a or humble when praised by others for doing excellent work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
84. The 'āina (land) is a living sacred being that I should mālama or protect.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
85. I strive to achieve lōkahi or harmony with myself, others, and the environment.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
86. I understand my role and kuleana, or responsibilities and privileges, within my 'ohana or extended family.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
87. I am not afraid to take a stand (kū i ka pono) when something is wrong	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

FOR EACH OF THE FOLLOWING STATEMENTS, MARK THE ANSWER THAT BEST DESCRIBES YOU.

	This is a lot like me	This is sort of like me	This is a little like me	This is not like me
88. I seek out opportunities to help me grow spiritually.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
89. I take time for periods of prayer or meditation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
90. I feel a deep sense of responsibility for reducing pain and suffering in the world	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
91. I try to apply my faith/spirituality to political and social issues.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
92. I have a real sense that God or something spiritual is guiding me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
93. I am spiritually moved by the beauty of creation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
94. My spiritual beliefs help me figure out and prioritize what is most important in life.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
95. I seek the guidance of God or a higher power to help me become the person that I am intended to be.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
96. I participate in a religious or spiritual community.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
97. I spend time doing things to make my school, neighborhood, or community a better place (for example, writing letters or circulating petitions about issues that affect my community, volunteering to serve others, raising money to support community improvement activities or to benefit others)?.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How much does each of the following influence your daily life?

	Big influence	Some influence	A little influence	No influence
98. Helping make the world a better place to live.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
99. Being religious or spiritual	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
100. Helping other people.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- | | Big influence | Some influence | A little influence | No influence |
|---|----------------------------------|-----------------------|----------------------------------|-----------------------|
| 101. Keeping my family's culture and traditions alive | <input checked="" type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> |
| 102. Protecting the natural environment | <input checked="" type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> |

About My Activities

MARK THE ONE RESPONSE THAT BEST DESCRIBES YOUR INVOLVEMENT IN THE ACTIVITIES LISTED.

- | | 0 hours | 1 hour | 2-5 hours | More than 5 hours |
|---|----------------------------------|-----------------------|----------------------------------|-----------------------|
| <i>How many hours per week do you usually spend...</i> | | | | |
| 103. playing on or helping with sports teams at school or in the community (for example, football, softball, paddling, surfing)? | <input checked="" type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> |
| 104. in school-sponsored clubs or organizations (other than sports) (for example, school newspaper, student government, school plays, hālau, language clubs, hobby clubs, drama clubs, debate, etc.)? | <input checked="" type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> |
| 105. in other clubs or organizations outside of school (for example, 4-H, Scouts, Boys and Girls Clubs, YWCA, YMCA, community or recreation centers, hālau, martial arts, cultural groups, youth groups, etc.)? | <input checked="" type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> |
| 106. doing volunteer work to help other people or to help make your community a better place? | <input checked="" type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> |

How often do you ...

- | | Daily | Weekly | Monthly | Yearly | Never/
Almost never |
|---|----------------------------------|-----------------------|----------------------------------|-----------------------|------------------------|
| 107. do something to protect our land, air, and natural resources – such as recycling your own materials, using less water, using less electricity? | <input checked="" type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 108. participate in group activities to protect our environment – such as school or community recycling drives, or beach or stream clean-ups? | <input checked="" type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |

When you spend time in AFTER-SCHOOL or COMMUNITY programs, how often are you...

- | | Very Often | Often | Sometimes | Never |
|---|----------------------------------|-----------------------|----------------------------------|-----------------------|
| 109. learning skills like teamwork, leadership, or how to resolve conflicts without violence? | <input checked="" type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> |
| 110. developing warm and trusting relationships with peers? | <input checked="" type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> |
| 111. developing warm and trusting relationships with adults? | <input checked="" type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> |
| 112. allowed to help make decisions? | <input checked="" type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> |

BELOW ARE SOME EXAMPLES OF HAWAIIAN ISSUES. THEY DO NOT REPRESENT ALL ISSUES THAT MAY BE IMPORTANT TO HAWAIIANS. FOR EACH STATEMENT, CHOOSE THE ANSWER THAT BEST DESCRIBES YOU.

- | | I don't know what this is | I know what this is | I have an opinion about this | I have done something about this | I do something about this regularly |
|--|----------------------------------|-----------------------|----------------------------------|----------------------------------|-------------------------------------|
| 113. Native sovereignty or the desire of Hawaiians to govern themselves | <input checked="" type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 114. Native gathering rights such as shoreline access or the ability to collect plants from private property | <input checked="" type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 115. Protecting wahi pana or cultural sites from misuse, neglect, or abuse..... | <input checked="" type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 116. Keeping Hawaiian language alive..... | <input checked="" type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> |

136. What is the highest level of education your mother/ female caregiver completed?

- Eighth grade or lower
- Some high school
- High school or GED
- Some college
- College graduate (Associate's degree/ Bachelor's degree)
- Some graduate work or graduate degree
- Don't know/ Not applicable

137. What is the highest level of education your father/ male caregiver completed?

- Eighth grade or lower
- Some high school
- High school or GED
- Some college
- College graduate (Associate's degree/ Bachelor's degree)
- Some graduate work or graduate degree
- Don't know/ Not applicable

138. How important is a good education to having a successful life?

- Very important
- Somewhat important
- Not very important
- Not important at all
- Don't know

139. What is the highest level of education that you plan on completing?

- Some high school
- High school graduate or GED
- Trade school or military training
- 2 year college degree
- 4 year college degree
- Graduate degree

How familiar are you with the following items and do you plan on completing each?

	I don't know what this is	I do not plan on completing this	I plan on finding out more about this	I know what this is	I plan on completing this	I have already completed this
140. Filling out the FAFSA form.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
141. Taking the SAT/ACT.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
142. Filling out College applications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How aware are you about the ways to help pay for your education?

	I don't know what this is	I know what this is	I plan on applying for this	I have already applied for this
143. Financial aid.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
144. Scholarships.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
145. Student loans.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

146. How would your parents feel if you did not go to college?

- Very disappointed
- Disappointed
- Somewhat disappointed
- Not disappointed
- Don't know

147. Have you searched for more information on schools that you are interested in attending after high school? If so, what resources have you used? (Select all that apply.)

- I have not looked for information on schools yet
- Websites
- Brochures
- Campus site visits
- Interviews/ talk story with students or faculty
- College fairs
- Other

148. What are the top three (3) factors you would consider when choosing a school or college to attend?
 (Select your top 3 choices with "1st choice" being the most important item for you.)

Example, if cost is the most important item to you then the 1st choice bubble would be colored in, if choice of majors was the second most important then the 2nd choice bubble would be colored, and if diversity of the student body was the third most important, that bubble would be colored. (All other bubbles would be left unmarked)

	1st choice	2nd choice	3rd choice
Academic standards	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Athletic program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Climate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
College enrollment size	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
College prestige	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cost	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Distance from home	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Diversity of student body	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Location	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Majors offered	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Social opportunities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What I hear from others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

MARK YOUR RESPONSE BELOW

	1st choice	2nd choice	3rd choice
Academic standards	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Athletic program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Climate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
College enrollment size	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
College prestige	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cost	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Distance from home	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Diversity of student body	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Location	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Majors offered	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social opportunities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What I hear from others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

MAHALO FOR COMPLETING THIS SURVEY.

'Ohana Survey

Instructions:

1. Fill in the bubbles completely using a black ball point pen or #2 pencil. Do not use red.
2. Erase changes completely if necessary.
3. Skip an item if it feels uncomfortable, but please do your best to answer all questions.

		Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Don't Know
1	I am:							
	Comfortable sharing my opinions or concerns with school staff.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Given opportunities to participate in important decisions about my child's education (for example, discipline, homework).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Satisfied with how much my child is learning at school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Satisfied with the variety of classes and programs offered at my child's school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Satisfied with the quality of this school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Taken seriously by school staff when I have concerns.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Aware of my child's progress in school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2	My child:							
	Can get help from counselors when he/she needs it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Can get the care needed when he/she becomes ill or injured.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Feels safe from bullying at school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Is prepared for the next grade or school level by the end of the school year.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Is learning to take responsibility for his/her individual learning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Sees him/herself as a contributing member to building healthy communities at home, at school, and beyond.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	My child's school:							
	Emphasizes thinking and problem-solving.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Handles discipline problems properly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Informs me of what is going on.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Is clean and well kept.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Offers activities that meet my child's interests and talents.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Promotes high student achievement.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Sets high learning expectations for all students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Creates a learning environment where my child enjoys going to school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Provides an education that is rooted in Hawaiian culture.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Provides an education that helps my child to develop a sense of place and a relationship to 'āina.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

		Strongly Agree	Agree	Somewhat Agree	Somewhat Disagree	Disagree	Strongly Disagree	Don't Know
4	My child's teachers:							
	Clearly tell me what my child is expected to learn.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Care about my child.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Provide a variety of ways to demonstrate student learning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Provide help when my child needs it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5	The school:							
	Has enough resources such as money, equipment, and staff.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Has programs that meet the needs of all students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Provides a variety of ways for parents to become involved.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Provides opportunities for me to be involved in its efforts to improve.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Seeks ways to improve my child's learning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6	My child's homework helps him/her learn.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7	Teachers provide me with feedback on my child's progress including suggestions for improvement.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8	I talk with my child about school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9	My schedule allows me to attend school events, such as student performances, Open Houses, and other school activities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10	I have met or contacted my child's teachers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11	I participate in classroom and school activities.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12	I feel welcome when I contact or visit my child's school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13	I have a clear understanding of the school's vision and goals.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14	The entire school 'ohana (teachers, administration, board, and families) supports me and my child's education.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15	Is there anything else you would like to share with us?							

 Demographic Information

1 What grade does your child attend? (Bubble all that apply.)

- | | |
|------------------------------------|----------------------------------|
| <input type="radio"/> Kindergarten | <input type="radio"/> 7th Grade |
| <input type="radio"/> 1st Grade | <input type="radio"/> 8th Grade |
| <input type="radio"/> 2nd Grade | <input type="radio"/> 9th Grade |
| <input type="radio"/> 3rd Grade | <input type="radio"/> 10th Grade |
| <input type="radio"/> 4th Grade | <input type="radio"/> 11th Grade |
| <input type="radio"/> 5th Grade | <input type="radio"/> 12th Grade |
| <input type="radio"/> 6th Grade | |
-

2 What school does your child attend?

- | | |
|--|--|
| <input type="radio"/> Hakipu'u Learning Center | <input type="radio"/> Ke Kula 'o Nāwahīokalani'ōpu'u Iki |
| <input type="radio"/> Hālaui Kū Māna | <input type="radio"/> Ke Kula 'o Samuel M. Kamakau |
| <input type="radio"/> Ka 'Umeke Kā'eo | <input type="radio"/> Kua O Ka Lā |
| <input type="radio"/> Ka Waihona o ka Na'auao | <input type="radio"/> Kula Aupuni Ni'ihau A Kahelelani Aloha |
| <input type="radio"/> Kanu o ka 'Āina | <input type="radio"/> Kamaile Academy |
| <input type="radio"/> Kanuikapono | <input type="radio"/> Kualapu'u Elementary |
| <input type="radio"/> Kawaikini | <input type="radio"/> Mālama Honua |
| <input type="radio"/> Ke Ana La'ahana | <input type="radio"/> Waimea Middle |
| <input type="radio"/> Ke Kula Ni'ihau o Kekaha | |
-

3 How many years has your family been at this school?

- | | |
|---|--|
| <input type="radio"/> Less than 1 year | <input type="radio"/> Between 5-7 years |
| <input type="radio"/> Between 1-2 years | <input type="radio"/> Between 7-10 years |
| <input type="radio"/> Between 3-5 years | <input type="radio"/> Over 10 years |
-

2016 Graduate Survey

Aloha mai kāua,

This is a survey to help find out about your experience as a Hawaiian Focused Charter School (HFCS) student.

You may skip questions, but please do your best to answer ALL the items. There are no "right" or "wrong" answers, so please take your time. This survey may take between 15-25 minutes.

Mahalo for your thoughtful participation!

2016 Graduate Survey

1. Name of School

- Hakipu'u Learning Center
- Hālau Kū Māna
- Ka 'Umeke Kā'eo
- Kawaikini
- Kanu o ka 'Āina
- Kanuikapono Learning Center
- Ke Ana La'ahana
- Ke Kula Niihau o Kekaha Learning Center and Laboratory
- Ke Kula 'o Samuel M. Kamakau Laboratory
- Kua O Ka Lā
- Kula Aupuni Niihau a Kahelelani Aloha
- Kamaile Academy

Other (please specify)

2. Grade Entered HFCS

K

1st

2nd

3rd

4th

5th

6th

7th

8th

9th

10th

11th

12th

Other (please specify)

3. Gender

Kāne

Wahine

4. Which of the following ethnic groups do you strongly identify with? (Check all that apply)

- Hawaiian
- Samoan
- Tongan
- Other Pacific Islander
- Filipino
- Chamorro
- Chinese
- Japanese
- Korean
- Black/African American
- Native American/Native Indian
- Hispanic/Latino
- Puerto Rican
- Portugese
- Irish
- German
- English
- Dutch
- French
- Spanish
- Russian
- Don't Know
- Other (please specify)

5. Are you going to attend college?

- Yes
- Maybe
- No

6. Do you plan on enrolling in college immediately after graduating from high school?

Yes

Maybe

No

If no or maybe, please explain:

7. Do you have a sense of what you might like to do as a graduate of your HFCS?

No

Yes

If yes, please explain:

2016 Graduate Survey

These questions are about you and your 'ohana.

8. To me, my 'ohana includes: (Check all that apply)

- Parent(s) Hānai
- parents Guardian(s)
- Brother(s)/Sister(s)
- Aunt(s)/Uncle(s)
- Cousin(s)
- Niece(s)/Nephew(s)
- Grandparent(s)
- Great-grandparent(s)
- Ancestors
- My own child(ren)
- Boyfriend/Girlfriend
- Friend(s)
- Haumāna
- Neighbor(s)
- Kumu
- Pet(s)
- Additional (please specify)

9. I have someone in my 'ohana attending or working at a HFCS.

Yes

- No
-

10. I teach what I learn at my HFCS to someone in my 'ohana.

- Daily
- Weekly
- Monthly
- Yearly
- Never

11. I am the first person in my immediate family to graduate from high school.

- Yes
- No
- Don't know

12. I am the first person in my immediate family to attend college.

- Yes
- No
- Don't know

13. Please rate the following...

	Strongly Agree	Agree	Disagree	Strongly Disagree
My family gives me guidance and teaches me right from wrong	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I rely on my family for help when I am upset or sad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I shared what I learned in school with my family	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My family gets together often	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Family activities are just as important to me as activities with my friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is important for older brothers and sisters to take care and look after their younger siblings	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
It is important to respect and care for kupuna or elder family members	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2016 Graduate Survey

These questions are about you and your school.

14. How strongly do you agree or disagree with the following statements about your school?

	Strongly Agree	Agree	Disagree	Strongly Disagree
I feel close to people at my school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am happy to be at my school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel like a part of my school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel proud of belonging to my school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel safe at my school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that my school had a system in place to support my transition from middle school to high school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that my school had a system in place to support my transition out of high school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

15. At my school, there is a kumu or some other adult...

	Strongly Agree	Agree	Disagree	Strongly Disagree
Who really cares about me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Who notices when I am not there.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Who listens to me when I have something to say.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Who tells me when I do a good job.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Who always wants me to do my best.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Who believes that I will be a success.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2016 Graduate Survey

These questions are about Hawaiian language, culture, performing arts and environmental stewardship.

16. Please answer the following regarding Hawaiian language...

	Very Well	Fairly Well	With Difficulty	Not At All
I speak Hawaiian.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understand Hawaiian when it is spoken.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am able to participate in cultural protocol in Hawaiian (for example, entry chants, personal introductions, or pule, prayer).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

17. For each statement, choose the answer that best describes you using the following 4-point scale.

	Strongly Agree	Agree	Disagree	Strongly Disagree
I have spent time trying to find out more about Hawaiian history, traditions and customs.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is important for me to know my genealogy from both of my parents.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I strive to show aloha for everyone I interact with.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I strive to be pono and do the right thing in all parts of my life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am ha'aha'a or humble when praised by others for doing excellent work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The 'āina (land) is a living sacred being that I should mālama or protect.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I strive to achieve lōkahi or harmony with myself, others, and the environment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understand my role and kuleana, or responsibilities and privileges, within my 'ohana or extended family.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am not afraid to take a stand (kū i ka pono) when something is wrong.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

18. For each statement, choose the answer that best describes you using the following 4-point scale.

	Strongly Agree	Agree	Disagree	Strongly Disagree
The 'āina (land) defines who I am and make up a primary part of my identity.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Doing things on the 'āina (land) deepens my appreciation for Hawaiian history and culture.	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
I feel hurt when people disrespect the 'āina (land).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

19. Most of what I know of Native Hawaiian language, culture and practices, I have learned from

- My 'Ohana
- My HFCS
- Both
- Neither
- Other

Other (please specify)

2016 Graduate Survey

These are questions about Hawaiian leadership.

20. I understand my kuleana.

- Very Well
- Fairly Well
- A Little
- Not At All

21. I would describe my kuleana as...

22. I fulfill my kuleana by...

23. How well do you feel prepared by your HFCS to assume leadership roles in the community?

- Very Well
- Fairly Well
- A Little
- Not At All

24. I serve in an alaka'i role.

Yes

No

If yes, in what way(s)

25. Please indicate your level of agreement with the following statements about Hawaiian leadership

	Strongly Agree	Agree	Disagree	Strongly Disagree
I am guided to lead by the presence of a higher power.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am taught to lead by my ancestors.	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
I listen to my na'au.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I obtain the input of kupuna before making a decision	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
I am ha'aha'a or humble when praised by others for doing excellent work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am not afraid to take a stand.	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
I lead in hula and chant.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I use my cultural foundation to serve my 'ohana.	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
I use my cultural foundation to serve my community.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I use my cultural foundation to serve the global/universal honua.	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
I pass on knowledge from my ancestors to younger generations.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I lead by example.	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
Part of my kuleana is to be a leader.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2016 Graduate Survey

These are questions about how you see yourself and your life.

26. How true do you feel these statements are about you personally?

	Strongly Agree	Agree	Disagree	Strongly Disagree
When I make plans, I am certain I can make them work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I can't do a job the first time, I keep trying until I can.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I have something unpleasant to do, I stick to it until I finish it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I decide to do something, I go right to work on it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Failure just makes me try harder.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

27. Below are five statements that you may agree or disagree with. Using the 1 - 4 scale below, indicate your agreement with each one.

	Strongly Agree	Agree	Disagree	Strongly Disagree
In most ways my life is close to my ideal.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The conditions of my life are excellent.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am satisfied with my life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
So far I have gotten the important things I want in life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I could live my life over, I would change almost nothing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2016 Graduate Survey

28. What made you and your family decide to have you attend a HFCS?

Appendix E: Oli

Hanau Maui mua, hanau Maui waena.
 Hanau Maui-kiki'i, hanau Maui-a-ka-malo
 O ka malo o Akalana i humea
 He huamoa ke kaiki a Hina I ho'okahua
 He keiki āiwaiwa na Hina-a-ke-ahi
 Ukiuki Kiaioloa ma laua o Kiai-a-ka-poko
 Paio haka Maui, hina ua kia['i]
 A-Nu'u
 Ki'i a inu i ka 'awa a Kane ma laua o Kanaloa
 A-Nu'u
 Kukula I ka heiau
 A-Nu'u
 ninau i ka makuakane
 Ho'ole Hina, 'A'ole au makua
 O ka malo o Kalana o ka makua ia
 A-Nu'u
 'E k'i oe i ko makuakāne, O Manai-a-ka-lani o ka makau ia
 O ka lou [a]na o na moku e hui ka moana kahiko
 A-Nu'u
 Ki'i [a]na ka ala'e nui a Hina
 A-Nu'u
 O Pimoe, O ka i'a 'Aimoku e haluhalu ai ka moana
 I koe ka hi'u o Mahanaulu'ehu ke kama
 A-Nu'u
 Waluhia ka maka o Pe'ape'a-makawalu
 A-nu'u i ka lā
 Kilika ke kaua a Maui I ka La, lilo ke kau ia Maui
 O Maui-a-ka-malo
 O ka ho'okala kupua o ka moku
 He moku—no!

Appendix F: Hakipu‘u Learning Center Senior Hō‘ike Rubrics

	1	2	3	4	5	6	7
Level	1	2	3	4	5	6	7
Hours	25	25	50	75	100	150	300
Project Driver	Staff selects and defines topic, outcomes, final products, final timeline and pace	Initial efforts of student, Staff/student negotiate topic, outcomes, final activities, final products, final timeline and pace	Initial efforts of Student, Staff/student negotiate topic, outcomes, final activities, final products, final timeline, and pace	Student selects and defines topics, outcomes, activities, final products, timeline, and pace	Student selects and defines topics, outcomes, activities, final products, timeline, and pace	Student selects and defines topics, outcomes, activities, final products, timeline, and pace	Student selects and defines topics, outcomes, activities, final products, timeline, and pace
Research Paper <small>(12 pt font, double spaced)</small>	1 page 250 words	3 pages 750 words	3 pages 750 words	5 pages 1,250 words	5 pages 1,250 words	7 pages 1,750 words	10 pages 2,500 words
Public Presentation	3-5 minutes at HLC	5-7 minutes at HLC	5-7 minutes at HLC hō'ike or community setting	10-15 minutes at HLC hō'ike or community setting	10-15 minutes at HLC hō'ike or community setting	10-15 minutes at HLC hō'ike or community setting	20-30 minutes at Senior Hō'ike
Community Impact	Content area expert; 1 hour of community service	Content area expert; 2 hours of community service	Content area experts; 2 hours of community service	Two content area experts; 10 hours of community service	Two content area experts; 10 hours of community service	Two content area experts, mentor in project/ content focus 20 hours of community service	Three to five content area experts, mentor in project/ content focus 50 hours of community service

HLC Student Self Assessment and Project Evaluation
Version 11/25/09; amended 4/2/12

BASIC PROJECT SKILLS

ELEMENT	1 Emerging	2 Approaching	3 Proficient	4 Exemplary
Documentation of Time and learning	Little or no learning efforts and/or time documented	Less than 1/2 of the learning efforts and time documented	More than 1/2 of the learning efforts and time documented with basic, clear description	All learning efforts and time fully documented with journals, pictures or other methods including description of activities, problems, and successes
Project Quality	Numerous blemishes, flaws, and mistakes. Aim higher and try again.	Approaching satisfactory quality.	Good quality. Excellent evidence of learning but less than professional. Limited market.	Professional quality. No blemishes, flaws, or mistakes. Marketable.
Resources	No resources used	Few resources used- only those noted in the ppf.	Used all resources noted in ppf and at least three different types of resources that include a live (primary) expert.	Used all resources noted in ppf and at least three or more different types of resources specific to the project that including additional live (primary) expert (s).
Ownership	No personal interest reflected in the project. Others gave student the idea.	Independently Made and demonstrated some personal choices. Followed the model with close supervision.	Adapted the model to own personal interest. Ideas came from elsewhere discovered by not copied.	Generated own idea, model, process, and product(s).
Task Completion	Difficulty in completing projects; unable to utilize or apply to outside world.	Completes most products with assistance	Completes required products with minimum assistance.	Consistently completes products independently and on time.
Manages Time	With daily supervision, cannot/chooses not to follow schedule or meet deadlines.	Meets deadlines with daily supervision.	Meets deadlines with periodic supervision.	Works independently; sets own deadlines, meets them, and has evidence of same.

Manages Information	With large amounts of assistance, cannot or chooses not to acquire, organize, or interpret information.	With significant assistance, can acquire, organize, and interpret information.	With minimal assistance, can acquire, organize, and interpret information.	Can acquire, organize, and interpret information independently.
INTERPERSONAL SKILLS				
ELEMENT	1 Emerging	2 Approaching	3 Proficient	4 Exemplary
Team Member	Unable or unwilling to work with a group. (For Senior Project = Evaluation Team, Advisor/Ed Team, mentors, etc.)	Able to work in a single role and/or with a select group.	Able to work in multiple roles and in diverse groups.	Able to adjust role to make a successful team.
Service and Ownership	Refuses to cooperate and does not see value in complying.	Helps out for an external reward.	Helps out when asked for intrinsic reward.	Takes responsibility for the success of self and the community; self-guided; pro-active.
THINKING SKILLS				
ELEMENT	1 Emerging	2 Approaching	3 Proficient	4 Exemplary
Comprehension	Only follows specific directions and “letter” of the process.	Contributes a limited level of creative ideas with limited follow through to product.	Uses creative ideas to adapt, improve, enhance product(s) and/or process(es).	Invents or creates unique original products and/or process(es).
Problem Solving	No positive, constructive effort when confronted with a problem or challenge.	Identifies problem or challenge, but uses little effort to solve same.	Shows persistence in problem solving; demonstrates follow through to solving a problem or challenge.	Persistent and successful in solving problems and/or challenges.
Context	Collects basic information for project; unable to utilize or apply outside world	Completes large projects but unable to meaningfully connect to real world context.	Purposefully connecting large projects to real world purpose.	Projects consistently designed/implemented to integrate/contribute to comty.

Critical Thinking	Basic recall of information.	Ability to understand information in context presented.	Comprehends how material (new knowledge and skills, and products created) connects to self, own community, and/or environment.	Able to understand, analyze, synthesize, and create informed decisions from learning experiences.
TECHNOLOGY				
ELEMENT	1 Emerging	2 Approaching	3 Proficient	4 Exemplary
Applies Computer Technology	Little ability, but willing to learn; basic understanding of computers.	Competent technology skills.	Demonstrated limited specialized or intermediate technology skills.	Demonstrates specialized or advanced technology knowledge and assists other students in their use of the computer.
HAWAIIAN VALUES/PERSONAL QUALITIES				
ELEMENT	1 Emerging	2 Approaching	3 Proficient	4 Exemplary
Kūlia I Ka Nu`u	No demonstration of personal goals; negative effect on others	Goals established but no consistent follow through to accomplishment; no real attempt at challenging self to reach excellence.	Sets high personal goals that stretch beyond student's current skills and level of knowledge	Consistently sets high personal goals that stretch beyond student's current skills and level of knowledge and organizes time and focus to achieve these goals.
Mālama	Works hard at not working; distracts self from task at hand; interferes with own and other students learning; does not take care of personal, group or community resources	Takes care of personal kuleana at a basic minimum level; will assist others or take care of resources only if personally asked	Strives to take care of personal kuleana; will help others or take care of resources if becomes aware of the need	Proactive contributes to level of personal best; seeks opportunities to help others and care for resources to help insure those resources are available and in good condition for future use by self and others.

Aloha	Demonstrates lack of self respect by verbal, mental or physical abuse or harassment of others and self	Demonstrates respect for self and others by tone, attitude and actions.	Initiates actions and attitudes that help others feel respected and valued	Consistently models respect to self and others; guides others to do the same; actively works to make others comfortable and to minimize conflict or discord
Kuleana	Unable to manage self to identify and carry out kuleana (school chores, academic progress, personal behavior, practice of values); blames others	Manages self with regular but minimal guidance	Consistently manages self and takes responsibility for own successes and failures.	Provides a positive role model for self management toward personal kuleana; assists/guides others for success in same
Aloha 'Āina	Limited understanding of stewardship and one's role in the health of our environment and place	Understands interdependence of all living organisms; initial demonstration of how and individual can contribute to the health of our natural resources	Regular demonstration by personal action of interdependence of all living organisms and the connectedness of ecosystems	Proactively engaged in the care and maintenance of place and natural resources to help insure sustainability into the future.

Please discuss what experiences, mentoring, and supports have helped you grow and build your skills, knowledge and capabilities the most during your time at Hakipu'u Learning Center?

HAKIPU’U LEARNING CENTER
SENIOR Presentation and Exhibition Form

Presenter’s Name: _____ Ho’ike Date: _____
 Project Title: _____ Evaluator: _____

	Exemplary	Proficient	Approaching Proficient	Novice
	4	3	2	1
Overall Oral Presentation	Interesting, Well-rehearsed, Smooth delivery, Holds audience attention	Relatively interesting, Fairly smooth delivery, Usually holds audience attention	Delivery not smooth; Able to hold audience attention <i>most</i> of the time	Delivery not smooth; Audience attention lost
Time Limit	Presentation is 20-25 minutes long.	Presentation is 15-19 minutes long.	Presentation is 10-14 minutes long.	Presentation is 9 minutes or less.

Delivery:

Enthusiasm	Facial expressions & body language generate strong interest & enthusiasm about the topic in others.	Facial expressions & body language sometimes generate strong interest & enthusiasm about the topic in others.	Facial expressions & body language are used to try to generate interest & enthusiasm but seem somewhat forced.	Very little use of facial expressions & body language. Did not generate much interest in the topic.
Speaks Clearly	Speaks clearly & distinctly 100% of the time.	Speaks clearly & distinctly 95-99% of the time OR Mispronounces or stumbles with a few words.	Speaks clearly & distinctly 85-94% of the time OR Mispronounces or stumbles with words, which disrupts flow.	Often mumbles or cannot be understood.
Posture & Eye Contact	Stands up straight Looks relaxed & confident; Establishes eye contact with all in the room throughout the presentation.	Stands up straight; Looks relaxed and confident; Generally establishes eye contact with the audience.	Sometimes stands up straight. Sometimes establishes eye contact.	Slouches and / or Does not look at people during the presentation.

Content:

Preparedness	Completely prepared & obviously rehearsed	Pretty prepared; may have needed more rehearsal.	Somewhat prepared; Clear that rehearsal was lacking.	Does not seem prepared at all to present.
Organization	Content is well organized , includes 1) introduction, 2) project topic & its significance 3) clear outline of material to be covered	Good content organization; includes 1) introduction 2) project topic 3) overall organization is somewhat unclear.	Content is fairly well organized, but overall topic organization is somewhat confusing	Content is not organized OR organization is confusing/does not make logical sense
Stays on Topic	Stays on topic all (100%) of the time.	Stays on topic most (90-99%) of the time.	Stays on topic some (75-89%) of the time.	Does not stay on topic OR it was hard to tell what the topic was.
Content	Covers content in-depth with details & examples; Shows full understanding of the topic.	Includes essential knowledge about the topic; Shows a good understanding of the topic.	Has 1-2 factual errors OR Shows good understanding of parts of the topic.	Content is minimal OR There are several factual errors; Does not seem to understand the topic very well

	Exemplary	Proficient	Approaching Proficient	Novice
	4	3	2	1

Content (continued):

Originality	Shows large amount of original thought. Ideas are creative & inventive. Acknowledges resources & mentors	Shows some original thought. Shows new ideas & insights. Acknowledges resources	Uses other people's ideas & gives them credit; but little evidence of original thinking.	Uses other people's ideas, but does not give them credit.
Comprehension	Able to accurately answer almost all questions about the topic posed by the audience.	Able to accurately answer most questions about the topic posed by the audience.	Able to accurately answer a few questions about the topic posed by the audience.	Unable to accurately answer questions about the topic posed by the audience.
Integration of Maoli culture or malama 'aina	Project integrates the maoli culture or malama 'aina in a meaningful way that connects past, present, and future	Project integrates the maoli culture or malama 'aina in a meaningful way	Briefly mentions maoli culture or malama 'aina, but does not integrate either throughout the project	Does not include the maoli culture or malama 'aina

Visual Aids:

Use of Technology and/or Props	Uses technology and / or several props (could include a costume) that show considerable work/ creativity & which make the presentation better.	Uses either technology or one prop (could include a costume) that show considerable work/ creativity & which make the presentation better.	Student uses one prop which adds to the presentation.	Uses no technology or props OR the ones chosen detract from the presentation.
Attractiveness	Makes excellent use of font, color, graphics, effects, etc. to enhance the presentation.	Makes good use of font, color, graphics, effects, etc. to enhance the presentation.	Use of font, color, graphics, effects, etc. occasionally detracts from the presentation	Makes little attempt to use of font, color, graphics, effects, etc. to enhance project
Mechanics	No misspelling or grammatical errors.	One to three misspellings or grammatical errors.	Four to six misspellings or grammatical errors.	More than six errors in spelling or grammatical errors.

Please add any additional comments you might have regarding areas done especially well or suggestions for improvement:

Appendix G: Ka 'Umeke Kā'eo Senior Hō'ike Rubrics

Pāhana Symposium Report Criteria

Rough Draft Due _____

Final Draft Due _____

The final report brings together all parts of your study from focus question to methodology to final conclusion. This report will most likely be the most comprehensive formal piece of writing that you have done in your entire educational career thus far. It is one that (whether you know it or not) you have been putting together all year. If you have been keeping up with the timeline, you have most of the parts to this document already completed. The report must include the following:

1. Title Page
2. Introduction / Historical Context
3. Methodology
4. Written Results Section
5. Collection Of Figures (data tables & graphs – part of results)
6. Conclusion
7. Bibliography

Title Page Sample

Ka ‘Umeke Kā‘eo
Pāhana Symposium Document

Write your complete
project title here

First & Last Name

Due Date

Page Sample

Introduction

Oli Title

‘Ōlelo Hawai‘i

‘Ōlelo Pelekania

Ka Mana ‘o

For the introduction you will begin with the oli you composed, Hawaiian, English and mana‘o. In complete sentences, you will state your overall focus question and your hypothesis.

Aesthetic Criteria:

- Typed
- Times New Roman font style
- Double-spaced
- Justify text
- 1-inch margins on all four sides
- 12 point font for the body
- 14 or 16 point font for headings

Section 1 – Introduction / Historical Context (2/+ pages)

1. OLI
 - you will haku an oli that expresses some aspect of your pāhana (i.e., the importance of your research, documenting your results, etc.)
2. FOCUS QUESTION / HYPOTHESIS
 - Individual Focus Question
 - Hypothesis
3. HISTORICAL CONTEXT
 - A comprehensive summary of your historical context research, including any additional research you did after collecting your data

Section 2 – Methodology (3/4 – 1 page)

*This should be written in the **past tense** since you have already collected the data.*

1. IDENTIFY the type(s) of data you collected & EXPLAIN how you collected the data
 - paragraph summary of data collection methodology
2. EXPLAIN how your methodology EFFECTIVELY answers your focus question and tests your hypothesis
3. EXPLAIN how your data was analyzed
 - identify all mathematical operations you used
 - explain why the operations you chose were appropriate

Section 3 – Results (2/+ pages)

*This should be written in the **past tense** since you have already collected the data*

1. RESULTS SUMMARY
 - Identify every result (patterns, trends, solitary findings, etc.)
2. FIGURES
 - Data table(s) & graphs (you may have more than one graph for one data table)
 - Include title and figure heading for every data table and graph

<p>Results</p> <p>Summarize your results here. Organize the results so that you are not jumping around. Do not give any reasoning for the results yet.</p> <p style="text-align: center;">5</p>
--

<table border="1" style="width: 80%; margin: 0 auto;"> <tr> <td style="text-align: center; padding: 5px;">Data Table</td> </tr> </table> <table border="1" style="width: 80%; margin: 0 auto;"> <tr> <td style="text-align: center; padding: 5px;">Graph</td> </tr> </table> <p style="text-align: center;">6</p>	Data Table	Graph
Data Table		
Graph		

<p>Title Of Graph</p> <table border="1" style="width: 80%; margin: 0 auto; height: 100px;"> <tr> <td style="width: 100%; height: 100%;"></td> </tr> </table> <p style="text-align: center; font-size: small;">Figure 2. A graph showing...</p>	

Section 4 – Conclusion (1 ½ - 2 pages)

This is the most important section of this document. This is where you use the knowledge you've gained from your HC research and your data collection to create your inferences. This section will clearly show whether or not you've grasped sufficient content knowledge through the inquiry process.

*This should be written in the **past tense** since you have already collected the data*

1. CONCLUSION

- State the result & then give the reasoning for that finding
- Do the same for each result (some results may be grouped together if the reasoning is the same)
- Summarize your overall conclusions

2. METHODOLOGY IMPROVEMENTS

- IDENTIFY & EXPLAIN any challenges and/or errors that occurred in executing your methodology
- IDENTIFY & EXPLAIN ways that you would change and improve your methodology to collect more and/or better data

3. EXTENSION

- IDENTIFY 2 or more new inquiry questions that stem from this pāhana
 - * 1 inquiry question stemming directly from your focus question
 - * 1 inquiry question prompted from something you're curious to investigate about 'ōhi'a
- EVALUATE your work ethic throughout this pāhana
 - * what were your strengths and weaknesses (i.e., time management, organization, research, etc.)
 - * IDENTIFY specific ways you could improve your work ethic

Section 5 – Appendices (2/+ pages)

1. Appendix A - Bibliography
2. Appendix B – Sample Of Survey (if applicable)

Pāhana Symposium Report Rubrics

326 pts.

Overall Document (51 pts)

Area Of Assessment	Needs Improvement (3 pts)	Acceptable (5 pts)	Quality (7 pts)
Components	1 or more sections of the document missing	N/A	All sections of the document are included
# of pages	< 7 pages, not all pages are numbered	7 pages, all pages numbered	More than 7 pages, all pages numbered
Bibliography	All resources cited with some inaccuracies	N/A	All resources cited accurately using the appropriate format
Area Of Assessment	Needs Work (6 pts)	Acceptable (8 pts)	Quality (10 pts)
Visual aesthetics	More than 1 aesthetic criteria NOT met	1 aesthetic criteria NOT met	All aesthetic criteria met
Grammar & spelling	Numerous grammatical / spelling errors / not written in past tense	Some grammatical / spelling errors, written in past tense	Very few or no grammatical / spelling errors, written in past tense
Plagiarism	Some plagiarism used in the paper	N / A	No plagiarism used throughout the paper
Organization & flow	Paper has very little or no flow, paper jumps around from subject to subject	Paper flows with some interruption, in need of some organizational revision	Paper is appropriately organized & flows extremely well

Introduction / Historical Context (80 pts)

Area Of Assessment	Needs Work (5 pts)	Acceptable (7 pts)	Quality (10 pts)
Oli	Does not connect well to the pāhana topic	Connects to the pāhana topic	Well selected/crafted in connecting to the pāhana topic
Focus Question / Hypothesis	Unclear/incorrect focus question and/or hypothesis	N/A	Clearly states focus question and hypothesis
Synthesis Of Information	Section reads like the information was copied & pasted from different resources, very little demonstration of understanding the information	Clearly compiles research information & attempts to synthesize information, demonstrates understanding of the information	Information is synthesized, demonstrates clear understanding of the information, writing is organized & flows well
Area Of Assessment	Needs Work (15 pts)	Acceptable (20 pts)	Quality (25 pts)
Accuracy of Information	Paper contains numerous inaccuracies	Paper contains very few inaccuracies	Information is extremely accurate
Thoroughness of Research	Historical context is NOT comprehensive, missing a lot of vital information	Historical context is somewhat comprehensive, missing some vital information	Historical context is very comprehensive, leaves little to question

Methodology (55 pts)

Area Of Assessment	Needs Work (15 pts)	Acceptable (20 pts)	Quality (25 pts)
Investigative Methodology	Methodology is NOT comprehensive, missing a lot of vital information	Methodology is somewhat comprehensive, missing some vital information	Methodology is very comprehensive, leaves little to question
Area Of Assessment	Needs Work (9 pts)	Acceptable (12 pts)	Quality (15 pts)
Rationale	Rationale fails to justify methodology	Rationale needs more info/needs more justification	Effectively rationalizes methodology, shows link to prior studies
Data Analysis	Data analysis is very inaccurate / does not make sense	Data analysis needs some revision to be more accurate	Thoroughly & accurately explains how data will be analyzed

Results (50 pts)

Area Of Assessment	Needs Improvement (15 pts)	Acceptable (20 pts)	Quality (25 pts)
Written Results	Some patterns/trends not identified / identification very inaccurate	All patterns & trends identified w/minimal inaccuracy	All patterns & trends identified correctly
Figures	Missing 1 or more figures / most figures missing title and/or heading	All figures (all figures needed to show trends are provided) included format needs work	All figures (all figures needed to show trends are provided) included w/ proper format

Conclusion (80 pts)

Area Of Assessment	Needs Improvement (12 pts)	Acceptable (16 pts)	Quality (20 pts)
Results	1 or more results are not re-stated before conclusions are given	N/A	Each result is re-stated before conclusion is given
Conclusions	1 or more trends/patterns does not have a conclusion	N/A	All trends/patterns have conclusions
Accuracy	Conclusions are inaccurate	Conclusions are accurate & supported by the HC	Conclusions are accurate, supported by the HC & explained thoroughly
Area Of Assessment	Needs Improvement (6 pts)	Acceptable (8 pts)	Quality (10 pts)
Extensions (Inquiry Questions)	Identifies less than 2 inquiry questions / new inquiry questions do not stem from investigation	Identifies 2 inquiry questions stemming from this inquiry	Identifies 2 or more high quality inquiry questions stemming from this inquiry
Extensions (Work Ethic Evaluation)	Evaluation is incomplete, does not look at all steps in the process / Evaluation is inaccurate	Evaluates work ethic throughout the year	Effectively evaluates work ethic throughout the year, gives specific examples

Name _____

Pāhana Symposium PowerPoint Score Sheet

 Rough Draft Final Draft

Score: _____ / 300 pts.

Introduction / Historical Context (40 pts)

Area Of Assessment	Needs Work (6 pts)	Acceptable (8 pts)	Quality (10 pts)	Score
Oli	Oli is showcased in the Ppt but presenter does not speak to it enough	Speaks to the oli showcasing its pili to the pāhana	Creatively presents oli showcasing its pili to the pāhana	
Focus Question / Hypothesis	Fails to identify focus question or hypothesis	Clearly identifies the focus question & hypothesis within the presentation	Clearly identifies the focus question & hypothesis before going to methodology	
Area Of Assessment	Needs Work (12 pts)	Acceptable (16 pts)	Quality (20 pts)	Score
Historical Context Information	HC summary is missing quite a bit of information necessary for preview of the study & for conclusion explanation	HC is summarized but could use more information / more thorough explanation	Gives a comprehensive summary of the HC, enough to prepare audience for presentation	

Methodology (30 pts)

Area Of Assessment	Needs Work (6 pts)	Acceptable (8 pts)	Quality (10 pts)	Score
Investigative Methodology	Explanation of data collection is lacking information	Clearly explains how data was collected	Clearly explains how data was collected, includes images of data collection	
Data Analysis	Unable to explain how data was analyzed (confusing)	Explains how data was analyzed	Clearly & thoroughly explains how data was analyzed	
Justification	Unable to justify how the methodology tested the hypothesis	Justifies how the methodology tested the hypothesis but explanation needs to be clearer	Effectively justifies how the methodology tested the hypothesis	

Results (50 pts)

Area Of Assessment	Needs Improvement (12 pts)	Acceptable (16 pts)	Quality (20 pts)	Score
Figures	Is missing more than 1 necessary data table or graph	Is missing necessary 1 data table or graph	Includes all necessary data tables & graphs for selected results	
Area Of Assessment	Needs Improvement (9 pts)	Acceptable (12 pts)	Quality (15 pts)	Score
Summary Of Results	Does not present ALL the trends / patterns relative to the support/rejection of the hypothesis	Presents the trends / patterns relative to the support/rejection of the hypothesis but explanation needs to be clearer	Effectively presents the trends / patterns relative to the support/rejection of the hypothesis	
Explanation Of Figures	Explanation of figures is poor	Explains all necessary data tables & graphs for selected results	Thoroughly explains all necessary data tables & graphs for selected results	

Conclusion (90 pts)

Area Of Assessment	Needs Improvement (12 pts)	Acceptable (16 pts)	Quality (20 pts)	Score
Summary Of Results	Does not refer to the results when discussing conclusions	Somehow ties conclusions to the results	Effectively re-states each result before stating the conclusion	
Conclusions	Does not explain 1 or more conclusions	States all conclusions but explanation needs to be clearer	Effectively explains all conclusions, using info from HC to support conclusions	
Accuracy	Conclusions are inaccurate	Conclusions are accurate & supported by the HC	Conclusions are accurate supported by the HC & explained thoroughly	
Area Of Assessment	Needs Improvement (6 pts)	Acceptable (8 pts)	Quality (10 pts)	Score
Methodology Improvements	Identifies flaws in methodology but does not explain how methodology could be improved, suggested changes do not improve the methodology	Accurately identifies flaws in methodology & explains how methodology could be improved	Accurately identifies flaws in methodology & thoroughly explains how methodology could be improved	
Extensions (Inquiry Questions)	Identifies less than 2 inquiry questions / new inquiry questions do not stem from investigation	Identifies 2 inquiry questions stemming from this inquiry	Identifies 2 or more high quality inquiry questions stemming from this inquiry	
Extensions (Work Ethic Evaluation)	Evaluation is incomplete, does not look at all steps in the process / Evaluation is inaccurate	Evaluates each person's work ethic throughout the year	Effectively evaluates each person's work ethic throughout the year, gives specific examples	

Overall Presentation (90 pts)

Area Of Assessment	Needs Improvement (9 pts)	Acceptable (12 pts)	Quality (15 pts)	Score
Visual Appeal	Presentation is not appealing, way too plain/flashy	Presentation is appealing but a little too plain/flashy	Presentation is very appealing to the eye, not plain but not too flashy/distracting	
Figures / Images	Figures and/or images used need to be used more appropriately, lacks sufficient use of figures/images	Attempts to use figures & images in the presentation	Contains a well-selected variety of figures & images to compliment the information, all used appropriately	
Content Strength	Content does not provide adequate support in presenting the study	Content provides adequate support in presenting the study	Content provides strong support in presenting the study	
Organization / Flow	Presentation jumps around from section to section	Organization is okay, 1 or 2 things need to be re-organized to be more effective	Organized very well, audience is taken through each step in order	
Spelling & Grammar	Presentation has many spelling or grammar errors	Presentation has very few spelling or grammar errors	Presentation has no spelling or grammar errors	
Overall Effectiveness	Presentation does not summarize all the parts of the thesis	Presentation summarizes all the parts of the thesis	Presentation very effectively summarizes all the parts of the thesis	

REFERENCES

- Airasian, P. (1997). *Classroom Assessment*. (3rd ed) New York, NY: McGraw Hill.
- Anderson, L. W., and Krathwohl, D. R. (Eds.). (2001). *A taxonomy for learning, teaching, and assessing : a revision of Bloom's taxonomy of educational objectives: Complete edition*, New York: Longman.
- Atkinson, J. (2001) “*Privileging Indigenous Research Methodologies.*” Presentation at the Indigenous Voices Conference, Rainforest. CRC: Cairns, Queensland.
- Batdorff, M. (2014). *Charter School Funding: Inequity Expands*. University of Arkansas Department of Education Reform. Retrieved from <http://www.uaedreform.org/charter-funding-inequity-expands/>
- Chase, C. (1999). *Contemporary Assessments for Educators*. New York, NY: Addison Wesley Educational Publishers
- Chun, M. (2011). *No Nā Mamo: traditional and contemporary Hawaiian beliefs and practices*. Honolulu, HI: University of Hawai‘i Press.
- Creswell, J. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* [Kindle Edition]. Retrieved from Amazon.com
- ECS. (2011). *50 States Funding at a Glance*. Education Commission of the States. Retrieved From <https://schoolfinancesdav.files.wordpress.com/2013/08/50-state-survey-vol-iirevfinalbu.pdf>
- ECS (2012). *Understanding State School Funding*. Education Commission of the States. Retrieved from <http://www.ecs.org/clearinghouse/01/02/86/10286.pdf>
- Emerson, N. B. (1906). Unwritten Literature of Hawaii. *American Anthropologist*, 8(2), 271-275.
- Goodyear-Ka‘opua, N. (2013) *The seeds we planted: Portraits of a Native Hawaiian charter school*. University of Minnesota Press. Minneapolis, MN.
- Gulikers, J. T. M., Bastiaens, T. J., & Kirschner, P. A. (2004). A five-dimensional framework for authentic assessment. *Educational Technology Research and Development*, 52(3), 67-86.
- Hakipu‘u Learning Center Public Charter School. (2001). *Hakipu‘u Learning Center Public Charter School Mission*. Hakipu‘u Learning Center PCS: Kāne‘ohe, HI. Retrieved from <https://www.hakipuulc.org/>

- Hakipu'u Learning Center, Hālau Kū Māna, Ka Waihona o ka Na'auao, Kanu o ka 'Āina, Kanuikaponu, Kawaikini, Ke Ana La'a Hana, Ke Kula Ni'ihau O Kekaha Learning Center, Ke Kula 'o Nāwahīokalani'ōpu'u, Ke Kula 'o Samuel M. Kamakau, Kua O Ka Lā, Kualapu'u, Kula Aupuni Ni'ihau A Kahaalani Aloha. (2013). *Hawaiian focused charter school vision of the graduate*. Kamehameha Schools: Honolulu, HI. Retrieved from <https://drive.google.com/file/d/0B1yqzjzu1LLRUpUX1pqS25mSlk/view>.
- Hammond, L., & Adamson, F. (2010). *Beyond Basic Skills: the role of performance assessment in achieving 21st century standards of learning*. Stanford, CA: Stanford Center for Opportunity Policy in Education.
- Hawai'i Charter School Commission . (2016). *Hawai'i Charter School Commission Academic Performance Framework Effective July 2017*. Hawai'i Charter School Commission: Honolulu, HI. Retrieved from http://docs.wixstatic.com/ugd/448fc8_7a708f0738284d608de840be116b408a.pdf
- Hawai'i DOE | Charter Schools. (n.d.). Retrieved November 13, 2016, from <http://www.hawaiipublicschools.org/TeachingAndLearning/EducationInnovation/CharterSchools/Pages/home.aspx>
- Herr, K., & Anderson, G. (2015). *The Action Research Dissertation: a guide for students and faculty* (2nd ed.) [Kindle edition]. Retrieved from Amazon.com
- hō'ike. (n.d.). In Wehewehe. Retrieved from <http://wehewehe.org/?l=en>
- International Society for Technology in Education. (2007). *National educational technology standards for students*. Retrieved from <http://www.iste.org/standards/standards/for-students>
- Kamehameha Schools Research and Evaluation Division. (2008). *Why Hawai'i Needs Public Charter Schools: the positive effects of Hawaiian-focused charter schools on student outcomes*. Kamehameha Schools: Honolulu, HI.
- Ka 'Umeke Kā'eo Public Charter School. (2001). *Ka 'Umeke Kā'eo Public Charter School Mission*. Ka 'Umeke Kā'eo PCS: Hilo, HI. Retrieved from <https://www.kaumeke.org/sample-page/nu%CA%BBukia-mission/>
- Ka 'Umeke Kā'eo, Kanu 'o ka 'Āina, Ke Ana La'ahana, Kua o ka Lā. (2016). *Papaiakea: A System of Hawaiian-focused Charter High Schools*. Kamehameha Schools: Honolulu, HI.
- Kamakau, S. M., Barrère, D. B., & Pukui, M. K. (1964). *Ka Po'e Kahiko: The People of Old*. Bishop Museum Press.
- Kamakau, S. M. (1961). *Ruling chiefs of Hawaii*. Kamehameha Schools Press.

- Kana'iaupuni, S. & Kawai'ae'a, K. (2008). E Lauhoe Mai Nā Wa'a: Toward a Hawaiian Indigenous Education Teaching Framework, *Hūlili*, 5, 67-90.
- Kana'iaupuni, S., Ledward, B., & Jensen, U. (2010). Culture-Based Education and Its Relationship to Student Outcomes. *EDUCATION*.
- Kawakami, A., Au, K. H., & Carroll, J. H. (2013). *A framework for Hawaiian focused charters: Working toward a vision of the graduate*. SchoolRise: Honolulu, HI. Retrieved from <https://drive.google.com/file/d/0B1yqzwjzu1LLZWtCNGhIRGxNWEk/view>.
- Kawakami, A. J., Aton, K., Cram, F., Lai, M., & Porima, L. (2008). Improving the practice of evaluation through indigenous values and methods. *Fundamental issues in evaluation*. New York, NY: Guilford.
- Ke Kula 'o Samuel M. Kamakau Laboratory Public Charter School. (2000). *Ke Kula 'o Samuel M. Kamakau Laboratory Public Charter School Mission*. Ke Kula 'o Samuel M. Kamakau Laboratory PCS: Kāne'ohe, HI. Retrieved from <http://www.kamakau.com/>
- Knuth, R. & Adams, E. (2011). The power of the symposium: Impacts from students' perspectives. *Rural Educator*, 32 (3). 22-28
- Kua o ka Lā Public Charter School. (2002). *Kua o ka Lā Public Charter School Mission*. Kua o ka Lā PCS: Pahoa, HI. Retrieved from <http://kuaokala.org/mission.html>
- Kuykendall, R. S. (2017). The Hawaiian Kingdom: Volume 1: Foundation and Transformation, 1778-1854. *Cross-Currents*, 6(1).
- Levin, J. (2013). Evaluation of Hawai'i's Weighted Student Funding Formula. American Institutes for Research. Retrieved from http://www.air.org/sites/default/files/downloads/report/AIR_Evaluation_of_Hawaii's_Weighted_Student_Formula_Full_Report06-19-13_0.pdf
- Mālama Honua Public Charter School. (2013). *Mālama Honua Public Charter School Mission*. Mālama Honua PCS: Waimānalo, HI. Retrieved from <http://www.malamahonuapcs.org/purpose-promise-principles>.
- Marion, S., & Leather, P. (2015). Assessment and Accountability to Support Meaningful Learning. *Education Policy Analysis Archives*, 23(9).
- McMillan, J. (1997). *Classroom Assessment: principles and practice for effective instruction*. Boston, MA: Allyn and Bacon.
- McNiff, J. (2016). *You and Your Action Research Project* (4th ed.). New York, NY: Routledge.
- Merriam, S. (2001). *Qualitative Research and Case Study Applications in Education*. San Francisco, CA: Josey-Bass Publishers.

- Merriam, S. (2009). *Qualitative Research: A guide to design and implementation*. San Francisco, CA: Josey-Bass Publishers.
- Meyer, M. A. (1998). *Native Hawaiian epistemology: contemporary narratives* (Doctoral dissertation, Harvard University).
- Meyer, M. A. (2001). Our own liberation: Reflections on Hawaiian epistemology. *The Contemporary Pacific*, 13(1), 124-148.
- Pacific Policy Research Center. 2010. *21st Century Skills for Students and Teachers*. Honolulu: Kamehameha Schools, Research & Evaluation Division.
- Parsi, A., & Darling-Hammond, L. (2015). Performance assessments: How state policy can advance assessments for 21st century learning. *A white paper prepared for National Association of State Boards of Education and Stanford Center For Opportunity Policy in Education*. Retrieved, 5.
- Patton, M. Q. (1990). *Qualitative Evaluation Methods* (2nd ed.). Thousand Oaks, CA: Sage.
- Patton, M. Q. (2015). *Qualitative Research and Evaluation Methods* (4th ed.) [Kindle edition]. Retrieved from Amazon.com
- Pukui, M. K. (1983). *'Olelo No'eau: Hawaiian proverbs & poetical sayings* (Vol. 71). Bishop Museum Pr.
- Shaunessy, E. (2004). The Senior Project and Gifted Education. *Gifted Child Today*, 27 (3), 38-51.
- Speilberg, H. A. (1965). *The Phenomenological Movement*. Vol 2. The Hague, Netherlands: Marinus Nijhoff.
- State Public Charter School Commission. (n.d.). Retrieved November 13, 2016, from <http://www.chartercommission.hawaii.gov/about-hawaii-charter-schools>
- Thompson, J. (1992). *Hawai'i School Funding*. National Center for Educational Statistics. Retrieved from <https://nces.ed.gov/edfin/pdf/StFinance/Hawaii.pdf>
- Thompson, N. "Hōkūle'a Mālama Honua Welcome Ceremony Speech." *Hawai'i, Hōkūle'a Mālama Honua Welcome [Ceremony]*. Honolulu. 24 June. 2017.
- Vagle, M. (2014). *Crafting Phenomenological Research*. Walnut Creek, CA: Left Coast Press.
- Webb, N. L. (2007). Issues related to judging the alignment of curriculum standards and assessments. *Applied Measurement in Education*, 20(1), 7-25.
- Webb, N. L. (2002). Depth-of-knowledge levels for four content areas. *Language Arts*.

- Weber-Pillwax, C. (2001). What is Indigenous Research? *Canadian Journal of Native Education*, 25 (2), 166-174.
- Wegener, D. T., & Petty, R. E. (1994). Mood management across affective states: The hedonic contingency hypothesis. *Journal of Personality and Social Psychology*, 66, 1034-1048.
- Weissbourd, R., Thacker, L., Anderson, T. R., Cashin, A., Feigenberg, L. F., & Kahn, J. (2016). Turning the tide: Inspiring concern for others and the common good through college admissions. Retrieved from Harvard University Graduate School of Education website: http://mcc.gse.harvard.edu/files/gsemcc/files/20160120_mcc_ttt_report_interactive.pdf.
- Wilson, S. (2008). *Research Is Ceremony-Indigenous Research Methods*. Nova Scotia, CA: Fernwood Publishing.
- Yuan, K. & Le, V. RAND Education. 2012. Estimating the Percentage of Students Who Were Tested on Cognitively Demanding Items Through the State Achievement Tests.