



**Te Whare Wānanga  
o Awanuiārangi**

# **BRAIDING THE ROPES OF PILINA - INDIGENOUS PRACTICES IN EARLY CHILDHOOD EDUCATION**

**NANCY LEVENSON  
2025**

*A thesis presented to Te Whare Wānanga o Awanuiārangi in fulfilment of  
the requirements for the degree of Doctor of Indigenous Development and  
Advancement, Te Whare Wānanga o Awanuiārangi*

## **Copyright**

This thesis is the property of the author. You have permission to read and reference this thesis for the purposes of research and private study. This is provided you comply with the provisions of the Copyright Act 1994 (New Zealand).

Please do not reproduce this thesis without the permission of the author.

Copyright 2025, asserted by Nancy Levenson in Whakatāne, New Zealand.

## **Declaration**

To the best of my knowledge and belief, this thesis contains no material previously published by any other person except where due acknowledgment has been made. This thesis contains no material that I have submitted towards the award of any other degree or diploma in any other university or other institution. This thesis represents research I have undertaken. The findings and opinions in my thesis are mine and they are not necessarily those of Te Whare Wānanga o Awanuiārangi. This thesis has been stored at Te Whare Wānanga o Awanuiārangi. It is therefore available for future students and researchers to read and reference.

Nancy Levenson

Signature:

A handwritten signature in cursive script that reads "Nancy Levenson".

Date: September 6, 2024

## **Abstract**

This thesis, titled Braiding the Ropes of Pilina - Indigenous Practices in Early Childhood Education, examines the braiding of Indigenous philosophies, standards, and best practices within the Mālamapōki‘i Early Childhood Education Program on Hawai‘i Island. Grounded in Indigenous methodology, the research emphasizes cultural integrity, relational accountability, and the Hawaiian concept of mo‘okū‘auhau (genealogy) to underscore the interconnectedness of knowledge and community.

The study provides a comprehensive analysis of how the early learning framework at Mālamapōki‘i reflects and sustains Indigenous values, particularly within the context of Hawaiian culture. The research addresses the key question: “How does the early learning framework at Mālamapōki‘i reflect Indigenous philosophies, standards, and best practices?” and positions the framework as a tool for ongoing evaluation to ensure the retention of Mālamapōki‘i’s founding values and philosophies.

To contextualize its findings, the research draws comparative insights from Indigenous early childhood education practices in New Zealand and Australia. These comparisons illuminate shared themes across different Indigenous communities, enhancing the understanding of effective culturally responsive education.

Deeply connected to the Mālamapōki‘i community, this research aims to broaden the understanding of how Indigenous methodologies can be effectively applied within early childhood education frameworks. The findings reveal that Mālamapōki‘i successfully braids traditional Hawaiian values into its framework, fostering an environment that supports cultural continuity and identity formation. This work offers valuable insights into the potential of Indigenous education to nurture holistic development and serves as a model for other communities seeking to evaluate and sustain cultural practices in early childhood education.

## **Dedication**

*“Ka mo‘opuna i ke alo – A vision of legacy which places the grandchild as the focal point from which one addresses the actions of the present in preparation for the future” (Kawai‘ae‘a, 2002, p. 11)*

*This work is dedicated to my ancestors, whose wisdom and resilience have laid the foundation for my journey, and to my descendants, for whom I strive to create a better world. May this work honor the legacy of those who came before and contribute to the legacy I leave for those who will follow.*

## **Acknowledgements**

Mahalo to all the participants who generously shared their time, experiences, and insights, making this research possible. I am grateful for your trust as you candidly shared your experiences at Mālamapōki‘i. Your stories and perspectives were rich and meaningful providing a depth of understanding that went beyond the surface. Each of your contributions brought unique insights that have greatly enriched this work, allowing me to capture the essence of the learning environment at Mālamapōki‘i.

A special mahalo to my advisor, Mera Penehira; your visits were an inspiration that motivated me to excel in this work. Mahalo for your guidance, wisdom, and patience. Your mentorship and encouragement have been invaluable in shaping this work.

To my examiners, thank you for your thoughtful feedback and for challenging me to think critically. Your input has greatly improved the quality of this thesis.

To the KALO board, your encouragement and support in this endeavor have been a blessing in my life. Mahalo for creating an environment where I could grow both personally and professionally.

Mahalo to our cohort team—I can’t imagine doing this without all of you! The synergy I feel when we come together is unmatched, and it has fueled my determination throughout this journey. Our shared experiences, from navigating challenges to

celebrating victories, have been a source of strength, and I am honored to have walked this path with such an incredible group of women.

Mahalo to my parents, who always made education a priority and showed me that the sacrifices made to pursue education were worth it. Your unwavering support and belief in my abilities have been a source of strength throughout this journey.

To my ‘ohana, thank you for believing in me, even during the moments when I doubted myself. Your unwavering faith in my abilities has been a constant source of strength, and your words of encouragement and prayers have sustained me through the toughest times. Mahalo for all the meals and snacks that not only kept me fueled but also reminded me of the love and care that surround me. Each thoughtful gesture, whether it was a comforting meal or a simple check-in, made a world of difference and reminded me that I was never alone on this journey. Your support has been the foundation upon which I’ve built this work, and I am deeply grateful for everything you’ve done to help me reach this milestone.

Finally, to everyone who has been a part of this journey, whether in big ways or small, your contributions have not gone unnoticed. Mahalo nui loa for your support.

## Table of Contents:

<b>Copyright .....</b>	<b>i</b>
<b>Declaration .....</b>	<b>ii</b>
<b>Abstract .....</b>	<b>iii</b>
<b>Dedication .....</b>	<b>iv</b>
<b>Acknowledgements .....</b>	<b>v</b>
<b>Chapter 1 Introduction .....</b>	<b>1</b>
Overview of Research Study .....	2
Key Research Questions .....	4
Study Rationale .....	5
Site of the Research Study .....	8
History of Mālamapōki‘i .....	14
Mālamapōki‘i 2002-early 2008 .....	14
Mālamapōki‘i 2008-2018 .....	15
Mission, Vision, and Values .....	17
Mission Statement .....	17
Vision Statement .....	18
Values .....	18
Mālamapōki‘i 2018-Present .....	19
Significance of the Research .....	19
Potential Outcomes .....	21
Overview of Thesis .....	22
Chapter One – Introduction .....	22
Chapter Two - Methodology .....	22
Chapter Three - ECE Indigenous Philosophies and Frameworks .....	22
Chapter Four - ECE Indigenous Assessment Models .....	23
Chapter Five - Data Collection and Analysis .....	23
Chapter Six - Findings .....	23



Chapter Seven - Recommendations and Conclusion .....	24
Chapter Summary .....	24
<b>Chapter 2 Methods and Methodologies.....</b>	<b>26</b>
Ontology .....	27
Epistemology .....	28
Axiology .....	28
Methodology .....	30
Theory .....	33
Respect for Indigenous ways of knowing .....	36
Relationships .....	36
Give Back .....	37
“Insider” research and stakeholder participation.....	38
Braiding the Ropes of Pilina Research Methodology .....	39
Data Collection Methods and Sources .....	52
‘Ike.....	54
Nīnau .....	55
Kilo.....	57
Chapter Summary .....	57
<b>Chapter 3 ECE Indigenous Philosophies and Frameworks.....</b>	<b>60</b>
Reclaiming Indigenous Education.....	61
Indigenous Epistemology and Educational Philosophies.....	65
Indigenous Early Childhood Education Approaches and Frameworks.....	70
Māori Indigenous Early Childhood Education.....	72
Aboriginal and Torres Strait Islander Indigenous Early Childhood Education .....	76
Indigenous Early Childhood Education in Hawai‘i .....	80
Culture-based Education .....	81
Hawaiian Medium Early Childhood Schools.....	82
Culture-based non-Hawaiian Medium Early Childhood Schools .....	85

Chapter Summary .....	87
<b>Chapter 4 ECE Indigenous Assessment Models .....</b>	<b>90</b>
Historical Context and Background of Assessment in Early Childhood Education .....	91
Colonial Influence and Western Education .....	91
Culturally Responsive Assessment .....	92
Indigenous Standards and Best Practices .....	92
Early Childhood Education Assessment in New Zealand .....	93
Te Whatu Pōkeka: Kaupapa Māori Learning and Assessment Exemplar Project .....	94
The Best of Both Worlds Preschool .....	96
Te Whāriki Assessment Indicators .....	100
Early Childhood Education Assessment in Australia .....	107
Early Childhood Education Assessment in Hawai‘i .....	111
Nā Honua Maui Ola – Hawai‘i Guidelines for Culturally Healthy and Responsive Learning Environments .....	111
Nā Honua Maui Ola Guidelines .....	112
Nā Hopena A‘o (HĀ) .....	118
The Hawaiian Indigenous Education Rubric (HIER) .....	119
Chapter Summary .....	120
<b>Chapter 5 Data Collection and Analysis .....</b>	<b>123</b>
Data Collection .....	124
Mo‘oki‘i Data Set .....	125
Keiki Mo‘oki‘i .....	126
Keiki Mo‘oki‘i Data Presentation .....	127
Mākua Mo‘oki‘i .....	130
Mākua Mo‘oki‘i Data Presentation .....	131
Friendships .....	138
Creative Expression .....	139
Community .....	142
Mākua Data Set .....	143

Mākua Data Presentation.....	144
Kumu and Ho‘okumu Data Set .....	151
Kumu and Ho‘okumu Data Presentation.....	151
Past Haumāna Data Set .....	160
Past Haumāna Data Presentation.....	161
Observation and Document Review Data Set .....	166
Makahiki Ceremony and Games Observation.....	172
Classroom Observations.....	179
‘Ohana Data Set.....	194
Chapter Summary .....	204
<b>Chapter 6 Findings and Discussion .....</b>	<b>207</b>
Common Indigenous Practices from the Literature .....	208
Mālamapōki‘i Framework Findings.....	210
Findings From Supporting Questions.....	213
‘Ohana Survey Findings .....	215
Limitations of the Study .....	216
Chapter Summary .....	216
<b>Chapter 7 Recommendations and Conclusion.....</b>	<b>218</b>
Summary of Key Findings .....	219
Recommendations .....	219
For Mālamapōki‘i.....	219
For Policymakers.....	220
For Future Research .....	221
Reflection on Mission, Vision, and Values.....	222
Conclusion.....	227
<b>References .....</b>	<b>231</b>
<b>Appendix A: Research Information Sheets .....</b>	<b>244</b>
<b>Appendix B: Interview and Talk Story Guides .....</b>	<b>248</b>

<b>Appendix C: Participant Consent Forms .....</b>	<b>250</b>
<b>Appendix D: Ethics Approval .....</b>	<b>253</b>
<b>Appendix E: Glossary .....</b>	<b>254</b>
<b>Appendix F: Our Research Adventure.....</b>	<b>259</b>

## List of Figures

1.1	<i>Mālamapōki ‘i keiki (children). Kumu 1 (2023).</i>	1
2.1	<i>Me with my mo ‘opuna. De Aguiar (2024).</i>	25
2.2	<i>Indigenous research paradigm. Levenson (2022).</i>	26
2.3	<i>Web of Relationships. Levenson (2022).</i>	39
2.4	<i>Foundational relationships. Levenson (2022).</i>	41
2.5	<i>Braiding the rope of pilina. Levenson (2024).</i>	48
2.6	<i>Data Collection Methods. Levenson (2023).</i>	53
3.1	<i>Map of Australia, New Zealand, and Hawai ‘i, areas reviewed for Indigenous education philosophies and frameworks. Levenson (2024).</i>	59
4.1	<i>Mālamapōki ‘i Hula Drama Hō ‘ike. De Aguiar (2024).</i>	89
5.1	<i>Manaia feeling safe, connected and loved. Leilani (2024).</i>	122
5.2	<i>Mo ‘oki ‘i Data Collection Process. Levenson (2024).</i>	125
5.3	<i>School is special because I like to do centers. Makoa (2024).</i>	127
5.4	<i>I like to see birds. I like to see the flowers on the playground. Kaiyah-Bella (2024).</i>	128
5.5	<i>I like to do art and to draw flowers. The feathers really think me chickens, like at the farm. Kai (2024).</i>	128
5.6	<i>School is special because I get to play outside with my friends. Honey (2024).</i>	129
5.7	<i>Morning Kilo (Observation). Kumu 1 (2024).</i>	131
5.8	<i>Keiki growing tall like the kalo. Ready to harvest. Mālamapōki ‘i mākua (2024).</i>	131
5.9	<i>Nurturing connections with the animals by feeding. Kumu 3 (2024).</i>	132
5.10	<i>Taking time daily in reverence to the Mauna. Amanda (2024).</i>	132
5.11	<i>Grayson participating in ‘Ulu Maika at Kanu Makahiki Games. Kuulei (2024).</i>	134
5.12	<i>Reya making ti leaf lei. Renee (2024).</i>	135
5.13	<i>Mālamapōki ‘i haumāna participate in inter-generational imu building. (2024).</i>	Kumu 2 135
5.14	<i>Hukihuki Makahiki game develops teamwork. Mālamapōki ‘i makua (2024).</i>	136
5.15	<i>Building Friendships at the farmer’s market. Mālamapōki ‘i makua (2024).</i>	138
5.16	<i>Freedom to express themselves. Kumu 2 (2024).</i>	140
5.17	<i>Hinae ‘a engaged in creative problem solving Kumu 3 (2024).</i>	140
5.18	<i>Community service - “Making my school playground nice”. Mālamapōki ‘i keiki, (2024).</i>	142

5.19	<i>Mālamapōki‘i Playground.</i> Ka‘enakai (2024).....	162
5.20	<i>Haumāna napping and playing outside.</i> ‘Ihiwai (2024).....	162
5.21	<i>Learning the safety rules.</i> Colton (2024).....	162
5.22	<i>Playing on the playground.</i> Kinsey (2024).....	163
5.23	<i>Painting on the outside easel and Hula Drama.</i> Kali‘a (2024). ....	163
5.24	<i>Mālamapōki‘i playground and ipu.</i> Lehiwa (2024).....	163
5.25	<i>Mass hula practice.</i> Ka‘enakai (2024).....	163
5.26	<i>Mālamapōki‘i keiki concentrating in the ‘Ulu Maika Competition.</i> Kumu 3 (2024).....	171
5.27	<i>Mālamapōki‘i keiki preparing for Hukihuki.</i> Kumu 3 (2024). ....	173
5.28	<i>Mālamapōki‘i keiki winning the race.</i> Kumu 3 (2024).....	173
5.29	<i>Mālamapōki‘i keiki challenging each other in Pā Uma.</i> Kume 3 (2024).....	174
5.30	<i>Mālamapōki‘i keiki engaged in Hākā Moa competition.</i> Kumu 3 (2024). ....	174
5.31	<i>Mālamapōki‘i keiki showing aloha to one another.</i> Kumu 3 (2024).....	175
5.32	<i>Mālamapōki‘i keiki petting Nugget.</i> Kumu 1 (2024).....	181
5.33	<i>Keiki Kilo Journal farm reflection.</i> Kai (2024). ....	181
5.34	<i>Mālamapōki‘i keiki engaged in Kilo.</i> Kumu 2 (2024).....	181
5.35	<i>Keiki Kilo Journal farm reflection.</i> Manaia (2024). ....	182
5.36	<i>Mālamapōki‘i keiki gathering eggs.</i> Kumu 3 (2024).....	182
5.37	<i>Keiki Learning in the environment.</i> Kumu 3 (2024).....	182
5.38	<i>Mālamapōki‘i keiki learning about baby pheasants.</i> Kumu 1 (2024). ....	183
5.39	<i>Keiki kilo journal, the pheasant house.</i> Kai (2024). ....	183
5.40	<i>Kalo plant poster</i> .....	185
5.41	<i>Kalo plant poster with real kalo</i> .....	185
5.42	<i>Mālamapōki‘i keiki making an entry in her kilo journal.</i> Kumu 3 (2024).....	186
5.43	<i>Keiki measuring a kalo leaf.</i> Kumu 3 (2024).....	186
5.44	<i>Completed observation in kilo journal.</i> Kaiyah-Bella (2024). ....	186
5.45	<i>String art project</i> Mālamapōki‘i keiki (2024). ....	186
5.46	<i>Visual Aids for teaching the story of Hāloa</i> .....	187
5.47	<i>Visual Aids for teaching the story of Hāloa</i> .....	187
5.48	<i>Pehea ke anila~ ?</i> Tasi (2024). ....	188
5.49	<i>Wa‘a building progress recorded in kilo journal.</i> Honey (2024).....	188
5.50	<i>Keiki kilo journal Hula Drama reflection.</i> Margi (2024). ....	192
5.51	<i>Keiki kilo journal Hula Drama reflection.</i> Manaia (2024).....	192
5.52	<i>‘Ohana Survey Responses by Question.</i> Levenson (2024). ....	195

6.1	<i>Mālamapōki ‘i keiki kilo spectacular cloud formations. Kumu 4 (2023).</i>	207
7.1	<i>Former Mālamapōki ‘i keiki continue to build on their hula foundation, maintaining the cultural practice they began at Mālamapōki ‘i. Kumu 2 (2024).</i>	217

## List of Tables

3.1	Culturally Relevant Strategies.....	85
5.1	Analysis of Keiki Mo‘oki‘i Captions .....	126
5.2	Mākua ‘Āina Theme Captions .....	130
5.3	Mākua Culture Theme Captions .....	133
5.4	Mākua Friendship Theme Captions .....	137
5.5	Mākua Creative Expression Photo Captions.....	139
5.6	Community Photo Captions .....	141
5.7	Summary of Mākua Perspectives on Mālamapōki‘i .....	148
5.8	Summary of Kumu and Ho‘okumu Perspectives on Mālamapōki‘i .....	158
5.9	Open Coding Categories for Memories of Past Haumāna .....	161
5.10	Final Coding of Past Haumāna Data .....	164
5.11	Observation Alignment with Nā Honua Mauli Ola .....	166
5.12	Coding for PACT - Lei Piko Observation with Evidence.....	170
5.13	Coding for Makahiki Games Observation with Evidence .....	176
5.14	Coding for PACT Kāpala Observation with Evidence .....	178
5.15	Coding for Mālamapōki‘i Classroom Observations with Evidence .....	188
5.16	Coding for Hula Drama Observation with Evidence .....	192
5.17	Interview Questions and Follow-up Questions .....	194
5.18	Thematic Analysis of the ‘Ohana Data Set with Supporting Quotes .....	204
6.1	Common Indigenous Assessment Themes.....	209
6.2	Common Themes as Manifested in Mālamapōki‘i’s Framework.....	212
7.1	Mapping of Themes to Mission, Vision, and Values of Mālamapōki‘i.....	225



# Chapter 1

## Introduction

“E kupu mai ana, oho a lau. No nā mea ma lalo, he mea māmalu.

Pā mai ka lā, iho ka ua. Ulu nō.

Sprouting forth until leaves form. A protector for all things below.

The sun shines, and the rain falls. Indeed Growth.

A baby grows and becomes a young child. For these young children, we provide a caring place. A nurturing and loving environment. Where children will grow and prosper”

(KALO, 2016, p. 6).



Figure 1.1: *Mālamapōki ‘i keiki (children)*. Kumu 1 (2023).

This chapter lays the groundwork for the research study by introducing the key research question and addressing the need for the study. The site of the research will be detailed, followed by a historical overview of Mālamapōki‘i, the focus of this study. The importance of the research and its potential outcomes will be explored. Finally, a brief overview of the thesis is provided to guide the reader.

### **Overview of Research Study**

Although I am not Indigenous, my mo‘opuna are, and our piko are braided together, binding us in a relationship of deep responsibility, love, and continuity. These connections shape my commitment to ensuring that Indigenous children receive an education that nurtures their ancestral knowledge, strengthens their cultural foundations, and honors their ways of being. As a non-Native Hawaiian researcher conducting a study informed by Indigenous methodologies, I approach this research guided by ‘Ōiwi principles and Indigenous-centered frameworks. I do not claim the identity of an Indigenous researcher. Instead, I acknowledge the privilege and responsibility of working closely with the Mālamapōki‘i community. My connection has developed through established relationships rooted in mutual respect, reciprocity, and shared purpose in supporting Indigenous education.

Undertaking research is a serious endeavor that I do not enter lightly. G.H. Smith (1992) identified “models by which culturally appropriate research can be undertaken by non-Indigenous researchers” (p. 8). The second model is of interest to me as a researcher; it is the whangai (adoption) model. In Hawaiian, the concept is hānai, meaning to feed, nourish, and adopt. In this model, the non-Indigenous researcher is an integrated part of the community, with permanent relationships more profound and broader than the research. Hānai is much more than a simple adoption. Through feeding and nourishing someone, a connection is made, a relationship formed, and you become part of each other. The concept of *hānai*, while deeply meaningful in Hawaiian culture, is referenced here not as a claim to

Indigenous identity, but as a way to describe the relational commitments formed through years of collaboration. These relationships carry responsibilities that extend beyond the research context. My involvement has been guided by ongoing learning, active participation, and accountability to the community, always recognizing that being part of this community is a privilege rather than an entitlement. Although I am not Native Hawaiian, I am an integral part of the Mālamapōki‘i community:

The kuamo‘o (backbone) of Hawaiian culture is mo‘okū‘auhau. We perceive the world genealogically – everything is relational. In its narrowest sense, mo‘okū‘auhau refers to biological lineage, but as an ‘Ōiwi theoretical and philosophical construct, it stands for relationality. Mo‘okū‘auhau includes intellectual, conceptual, and aesthetic genealogies; even more important, mo‘okū‘auhau is chronologically plural, extending in vertical, horizontal, and diagonal directions through time. And in terms of intellectual endeavors, mo‘okū‘auhau refers to the worldview we have inherited as ‘Ōiwi, which informs how we conceive, reason about, and understand thought and artistic production. An intellectual mo‘okū‘auhau refers to a person’s genealogy of knowledge – how specific knowledge has been generated, learned, or passed on. (Brown, 2016, p. 27)

The kuamo‘o (backbone) of Hawaiian culture is mo‘okū‘auhau, a genealogical and relational worldview central to Native Hawaiian identity. While mo‘okū‘auhau traditionally refers to biological lineage, it also encompasses relational and intellectual genealogies that shape how knowledge is created, shared, and understood. As a non-Native Hawaiian researcher, I recognize that I do not have mo‘okū‘auhau in the traditional sense. However, my work with Mālamapōki‘i is driven by a deep sense of kuleana (responsibility and privilege) and ‘i‘ini (yearning) to support and uplift Indigenous educational practices. This

commitment comes from seeing the powerful impact of Mālamapōki‘i’s work and the meaningful relationships I have been fortunate to build within the community. While I do not claim an Indigenous identity, my research is grounded in a sincere dedication to honoring and amplifying Indigenous voices in education.

This introductory chapter serves as a gateway into the research study, offering readers a comprehensive understanding of its underlying elements. At the core of this investigation lies the Mālamapōki‘i Family-based Early Childhood Education (ECE) Program, an innovative initiative operating within the broader framework of the Kanu o ka ‘Āina Learning ‘Ohana, a nonprofit Native Hawaiian serving organization. The relationship between KALO and Mālamapōki‘i is expanded on later in this chapter. By exploring the historical roots and evolutionary trajectory of Mālamapōki‘i and its parent organization, readers will grasp the fundamental principles that have shaped their identity and mission over time. Moreover, this chapter clarifies the research question, delineating the central inquiry driving the subsequent investigation. Additionally, the layout of the research thesis is outlined, providing readers with a roadmap of the flow and structure of the forthcoming chapters, thereby facilitating a coherent understanding of the study’s sequence and organization.

### **Key Research Questions**

The research question central to this study is: “How does the early learning framework at Mālamapōki‘i reflect Indigenous philosophies, standards, and best practices?” This inquiry is fundamental in understanding the operational framework and practices at Mālamapōki‘i, which has its roots deeply embedded in rich cultural practices and values. The study aims to explore whether these foundational elements continue to sustain a visible and influential role in the current operation of Mālamapōki‘i.

A critical component of this research involves examining the facilitators and barriers, or the supports and constraints, that impact implementing Indigenous teaching methods within the Mālamapōki‘i context. The investigation will conduct a comprehensive analysis of the Mālamapōki‘i framework and practices, focusing on their braiding of Indigenous philosophies and practices within various educational components of the Mālamapōki‘i framework. The examination areas include programming and pedagogical approaches. The investigation will also delve into instructional methods and assessment strategies. Through this analysis, the study seeks to uncover the extent to which Indigenous values and practices are present and actively guiding and shaping the educational experience at Mālamapōki‘i. Sub-questions will be explored through talk story sessions and interviews to complement the overarching research question, exploring the alignment of the early learning framework at Mālamapōki‘i with Indigenous philosophies, standards, and best practices. These questions will examine aspects such as the braiding of modern and Indigenous knowledge, barriers to implementing Indigenous philosophies, and examples of enrichment through interactions with Indigenous communities. Participants will also discuss how their experiences at Mālamapōki‘i have influenced cultural values and practices and the role of Indigenous philosophies in various educational aspects of the program. These discussions will actively foster a comprehensive understanding of the program’s relationship with Indigenous principles. This process will highlight the program’s strengths and identify areas for improvement.

### **Study Rationale**

The quality and effectiveness of preschool programs depend on the implementation of early childhood education frameworks. Qualitative research can provide educators with the data needed to address pressing challenges faced by early childhood educators by providing insight into daily operations, parent engagement, strategies focused on Indigenous children,

and cultural acknowledgment (Jarvie, 2012).

The establishment of Mālamapōki‘i, deeply embedded in robust cultural practices and values, presents a significant research opportunity. Over the past two decades, Mālamapōki‘i has undergone significant transformations. It operates in a dual realm, one dictated by governmental regulations and performance expectations and another deeply embedded in a rich cultural heritage encompassing Hawaiian values, epistemologies, and philosophies. This research is focused on evaluating the congruence between the early learning framework at Mālamapōki‘i and traditional Indigenous philosophies and standards.

Existing assessment structures at Mālamapōki‘i reflect two critical deficiencies. This has, in part, contributed to the significance and relevance of this study. While the program consistently administers student assessments to gauge individual progress and learning outcomes, there is a notable absence of comprehensive and consistent evaluations of the program itself. The sole attempt at program evaluation occurred in 2018 when an external evaluation firm conducted a longitudinal analysis of student performance data. This analysis concentrated on keiki-focused and program-focused inquiries, assessing the cognitive and social-emotional readiness of children who had attended the program for at least one year, as well as the effectiveness and compliance of the program itself. This assessment’s main aim was to measure students’ current skill levels and track developmental progress over time.

These questions delved into students’ cognitive and social-emotional development, measuring their kindergarten preparedness and annual progress. Additionally, the program-focused questions centered on the effectiveness and compliance of the program itself. The compliance focus included staff adherence to licensing requirements and staff meeting qualification standards set by the licensing agency. The effectiveness measures included collaboration between preschool and kindergarten staff and the ongoing progress toward the

implementation of a staff evaluation tool. These areas of focus bring attention to the second deficiency within the Mālamapōki‘i evaluation framework: the reliance on Western influences and its exclusive focus on assessing cognitive and social-emotional skills through standardized measures such as the Peabody Picture Vocabulary Test, Expressive Vocabulary Test, Teaching Strategies Gold, PELI, Waterford, Preschool Math Common Core Assessment, Scholastic Kindergarten Readiness, and the Social Skills Improvement System (SSIS) Rating Scales.

While these student assessments provide valuable insights into individual progress, they primarily offer a limited perspective on the program’s overall performance, concentrating mainly on short-term student academic outcomes. These assessments prioritize academic metrics, overlooking critical aspects of Indigenous education. Neglected areas include cultural identity and connections, community engagement, and contribution. They also overlook inter-generational engagement, understanding and application of Indigenous knowledge systems, and language retention and revitalization. The student assessment framework does not acknowledge the importance of cultivating values and practices integral to the Indigenous community. Incorporating these Indigenous measures into assessments can offer a more holistic understanding of education’s impact. There is a need for an evaluation process that honors cultural practices and knowledge. This research study provides a broader evaluation, encompassing the multifaceted dimensions inherent in Indigenous philosophies and practices, and is better aligned with Indigenous principles while assessing the program’s effectiveness accordingly. In an interview with Pat Bergin, a past Mālamapōki‘i administrator, she openly discussed the lack of cultural assessment in the program. She expressed regret that they did not have the needed cultural assessment tools and felt cultural assessment should be as critical as the more Western assessments. She thought both should have a place in assessing the keiki and the program (Bergin, 2024).

My involvement at Mālamapōki‘i has significantly evolved throughout my tenure. As a founder of KALO, I have actively participated with Mālamapōki‘i since its inception. Initially, my focus was on data collection and reporting; over time, my role expanded to include technical support, grant writing, and facilitating partnerships with other preschools. My involvement deepened in 2018 when circumstances required that I step in as director and provide classroom instruction. This journey underscores my growing engagement and dedication to the community of Mālamapōki‘i.

Early learning sets a foundation that can either promote or detract from Indigenous family and community traditions and practices. Once children enter school, they spend a significant amount of time with people other than their family; a lack of alignment between community values, traditions, and school practices can cause children to assimilate traits and traditions foreign to their culture and beliefs (Romero-Little, 2010). Kana‘iaupuni (2005) maintains that children are more successful when learning occurs in a culturally integrated setting, integrating Indigenous values and teaching approaches in a place-based environment. Strong ties between home, community, and schools are fundamental to effective Indigenous education. The purpose of this dissertation, *Braiding the Ropes of Pilina – Indigenous Practices in Early Childhood Education*, is to evaluate the framework and practices present at Mālamapōki‘i against Indigenous standards and best practices in early childhood education.

### **Site of the Research Study**

Mālamapōki‘i is an Indigenous Early Childhood Education program of Kanu o ka ‘Āina Learning ‘Ohana, also known as KALO. KALO started as a grassroots organization and was officially established in 2000 as a unique community-based, federally recognized Hawaiian nonprofit organization. KALO is dedicated to preserving the Hawaiian language, culture, and traditions while empowering the community. KALO’s mission is to promote sustainable



Hawaiian communities through Education with Aloha (EA) (KALO, 2020). Over the past twenty-five years, our educational movement has embraced Education with Aloha. To all who understand Education with Aloha, they see the kaona (hidden meaning) that EA is inherent in the philosophy which includes community-based and controlled education, the commitment to contribute to the larger movement and unite to establish, implement, and continuously strengthen Hawaiian education. With a vision to create an autonomous, holistic educational environment for Hawai'i's children, the aim is to instill in them the values that have empowered Hawaiians for generations. This vision involves engaging every member of the Hawaiian community in shaping their educational paths and preparing every child to succeed in the modern world with pride in their heritage and freedom from oppression.

KALO is a prime example of community-driven initiatives dedicated to addressing the unique needs of Hawai'i's educational landscape. Rooted in the spirit of cultural preservation and academic excellence, KALO has spearheaded transformative programs tailored to the specific needs of communities statewide. There were community concerns that the traditional public school system was failing Native Hawaiian students. Statistics from that time validate this concern; the educational landscape of Native Hawaiian students was bleak. The special education rate among Hawaiian students exceeded 18% compared to just 11% among non-Hawaiian students, indicating that the traditional system was not meeting native Hawaiian students' unique needs. Absenteeism was more prevalent among Hawaiian students, and standardized test scores were among the lowest in the state. Hawaiian students had the lowest graduation rates compared to other ethnic groups and were overrepresented in the subsidized lunch programs. Hawaiian students also have disproportionately higher grade retention rates than non-Hawaiian students (S. M. Kana'iaupuni & Ishibashi, 2003). These disturbing outcomes for Native Hawaiian students

prompted KALO to act. The state had recently established the New Century Public Charter School system, opening the way to charter Kanu o ka ‘Āina New Century Public Charter School (Kanu). Hawai‘i established charter schools with a promise of more autonomy to allow communities to design and implement educational environments reflective of community values, cultural practices, and unique educational needs. This pioneering K-12 institution serves as a beacon of culturally grounded education.

Acknowledging the significance of early childhood development and the need for more Indigenous early childhood education opportunities, KALO expanded its initiatives to include the creation of Mālamapōki‘i, an infant, toddler, and preschool program. This strategic move provided culturally enriching educational experiences to the community’s youngest members, laying a solid foundation for their future learning journeys.

Within Kauhale ‘Ōiwi o Pu‘ukapu, KALO’s Community Learning Destination, Kanu and Mālamapōki‘i seamlessly integrate into the broader educational ecosystem. This physical proximity fosters collaboration and synergy between the preschool and K-12 community of learners, creating a holistic and cohesive educational environment. Although Mālamapōki‘i is a private preschool and Kanu is a public school, this public/private partnership enhances the continuity and effectiveness of education from early childhood through adolescence in the community.

An additional element in understanding the research study site is an awareness of the landscape of preschools available in the community, which helps the reader grasp the early childhood educational resources available to families and understand Mālamapōki‘i’s place within the broader educational context. A search using the People Attentive to Children (PATCH) database shows seven other preschools within a twenty-mile radius of Mālamapōki‘i (“Find Child Care,” 2024). Of the seven schools, only two prioritize Hawaiian language and culture as foundational elements of their program. Firstly, Pūnana Leo O

Waimea, only a few minutes drive from Mālamapōki‘i, is part of the ‘Aha Pūnana Leo network. Pūnana Leo offers an immersive Hawaiian language and cultural experience for young children. The curriculum centers Hawaiian language acquisition in a supportive, ‘Ōlelo Hawai‘i only environment. This approach fosters language proficiency and instills a deep understanding and appreciation of Hawaiian culture, preparing children for lifelong learning within a culturally rich framework (“Kula Kamali‘i,” n.d.).

Secondly, Kamehameha Schools Preschool Waimea is an extension of the Kamehameha Schools; the school honors the legacy of Princess Bernice Pauhi Bishop, the school’s benefactor. Located in Waimea on Hawai‘i Island, just minutes away from Mālamapōki‘i, this preschool is committed to educating children of Hawaiian ancestry. Hawaiian cultural values and traditions are combined with early childhood education, creating a supportive educational environment. Hawaiian children are nurtured through the school’s curriculum with a focus on well-being (“Kamehameha Schools Preschools,” n.d.). Kamehameha preschools are available to students with Native Hawaiian ancestry only.

Hawaiian culture and language are not emphasized as integral parts of the remaining five schools in the area. The Montessori Education Center of Hawai‘i is a Montessori-based school. Children participate in self-directed learning experiences with hands-on activities as a focal point. The school serves children ages 2 to 8. The environment is nurturing and values diversity. Children set the pace for their own learning. Practical life skills, sensory-based learning, and early academic concepts are core aspects of the curriculum. This Montessori experience fosters independence and helps children develop a love for learning (“Montessori Education Center of Hawai‘i,” n.d.).

Small World Preschool, located in Waimea, is five minutes away from Mālamapōki‘i. Small World serves children ages 2 to under 6 in full or part-time programs. Age and developmental learning are emphasized, providing an environment fostering

physical, cognitive, emotional, and social development. The school promotes teacher- and student-directed learning styles, ensuring a balanced educational experience (“Smallworld Preschool Hawai‘i,” n.d.).

Waikoloa Baptist Keikiland in Waikoloa, about a 27-minute drive from Mālamapōki‘i, is a non-profit organization serving children aged 3 to 5 years. It combines a comfortable and safe learning environment with faith-based education, including daily prayers and Bible story learning. The curriculum is designed to develop the children’s physical, social, and intellectual needs (“Baptist Preschool — Waikoloa Baptist Keikiland,” n.d.).

The Cole Academy - Mauna Lani is 29 minutes from Mālamapōki‘i. The Cole Academy offers an early childhood education program for children aged 6 weeks to 6 years. This nationally accredited program focuses on preparing children for high-expectation kindergarten environments, offering academic, artistic, and social development. Enhancement programs include Sign Language, Foreign Languages, Hawaiian culture, and Music (“The Cole Academy,” n.d.).

Ka Hale O Na Keiki Preschool aims to develop a lifelong love of learning in children with a Montessori-based curriculum emphasizing freedom, individualism, and creativity, considering a child’s education as part of a larger community and family process. The school offers a variety of activities, including music, movement, science, and pre-reading skills, focusing on helping children develop a lifelong love of learning (“KHONK Preschool,” n.d.). Understanding this broader context not only helps to identify educational resources but also situates Mālamapōki‘i within a distinct niche, emphasizing its commitment to Hawaiian language and culture as foundational elements of its program. This awareness sets the stage for the research study.

The founding of Mālamapōki‘i was an extension to Kanu o ka ‘Āina New Century

Public Charter School founded by KALO in 2000. At that time, no published Hawaiian standards for students or schools existed. Both Kanu's and Mālamapōki'i's founding philosophies were heavily influenced by the Alaska Standards for Culturally-Responsive Schools adopted by the Assembly of Alaska Native Educators in February 1998, four years before the Nā Honua Maui Ola Hawai'i guidelines for Culturally Healthy and Responsive Learning Environments were published.

The Alaska Standards for Culturally Responsive Schools were developed to give Indigenous communities a way to evaluate their impact on student wellbeing. The standards provide guidelines in five areas, including standards for students, educators, curriculum, schools, and community. The standards clearly indicate that cultural knowledge, traditions, and practices must be present in all aspects of the educational system. The standards are not inclusive, and the guide encourages communities to modify and adapt the standards to fit their unique needs. KALO used these guidelines and adapted them to fit the founding philosophies of Mālamapōki'i (Alaska Native Knowledge Network, 1998).

Comparing this to the founding principles of the Mālamapōki'i framework, there are notable similarities. Both emphasize the importance of cultural heritage in education, integrating local languages and traditions into the curriculum, and fostering a strong sense of community and cultural identity among students. Mālamapōki'i also focuses on developing a deep understanding of Hawaiian culture and language, similar to how the Alaska standards advocate for grounding education in local cultural heritage. Family and community engagement in the educational process is central to both the Alaskan standards and the Mālamapōki'i founding framework. This acknowledges that education continues outside the classroom, involving extended family and the community.

Names have significant meaning in 'ōlelo Hawai'i. To understand the meaning of Mālamapōki'i, we first look at mālama, which means to take care of. Next, we examine

pōki‘i, which refers to younger brothers and sisters or closely related younger cousins. It is an endearing term. The use of pōki‘i in the name is significant. It shows the familial nature of the school’s educational philosophy that family is central to a keiki’s learning, and the school is an extension of that learning.

### **History of Mālamapōki‘i**

The history of Mālamapōki‘i is presented to provide insight into the challenges, opportunities, and changes that have transpired over the last twenty-two years, shaping their unique approach to early childhood education and their endeavors to imbed Indigenous knowledge and ways of knowing. Mālamapōki‘i has navigated various educational paradigms and regulatory landscapes, underscoring the school’s perseverance, resilience, and adaptability in integrating Indigenous practices within its framework. Understanding this evolution is crucial to appreciating the current practices at Mālamapōki‘i and their impact on the community it serves.

### **Mālamapōki‘i 2002-early 2008**

Founded in 2002, KALO established Mālamapōki‘i in the recognition that the early childhood years from birth to the age of 8 are when children develop foundational skills for life and understanding of the world around them. Another critical aspect of these early years and the initial Mālamapōki‘i program is forming relationships between the keiki, their ‘ohana (family), and the larger school community.

The framework of Mālamapōki‘i at this time was innovative in its approach to language development. Understanding that infants are capable of learning two languages from birth, the program integrated both the Hawaiian and English languages into its early education curriculum. Mālamapōki‘i founders carefully structured this bilingual approach; one kumu (teacher) would communicate with each child in English while another would interact in ‘ōlelo Hawai‘i (Hawaiian Language). This methodology not only facilitated

proficiency in both languages but helped the children switch between languages seamlessly, reflecting a deep understanding and skill (KALO, 2001).

Furthermore, the early curriculum of Mālamapōki‘i was heavily centered on the importance of connections and relationships. It incorporated ‘Ōlelo No‘eau, or Hawaiian wise sayings, particularly those highlighting the attributes of Waimea and North Hawai‘i. This inclusion was more than an educational tool; it was a means to instill a profound sense of place and a deep love for ‘āina (land) in the hearts of the keiki. Additionally, bilingual books were created and used as a significant part of the curriculum. These resources were unique because they were place-based, focused on Waimea, and enriched the educational experience with local relevance and cultural significance. The founding framework of Mālamapōki‘i focused on a bilingual language approach, promoting the use of Hawaiian and English in the classroom. ‘Ohana and community engagement were central to making connections and developing relationships, a critical part of the model. The place-based curriculum accentuated the significance of place in Hawaiian learning environments being relevant to daily activities (KALO, 2001).

### **Mālamapōki‘i 2008-2018**

From 2008 to 2018, Mālamapōki‘i underwent significant changes and adaptations. In 2008, the program faced challenges due to Hawai‘i state licensing requirements and available facilities, which limited the number of students Mālamapōki‘i could serve in the existing facilities. The licensing restraints mandated that the program function more as a play group program where parents accompanied their children to the program, participating along with their keiki in classroom activities. This model was not sustainable and did not reach a large participant base. KALO suspended the program as it sought an adequate facility that would meet licensing requirements and allow for the expansion of its student capacity and the ability to implement a preschool learning environment (Bergin, 2024).

In 2010, Mālamapōki‘i reopened and transitioned to a new facility in Pu‘ukapu in Waimea on Hawai‘i Island at Kauhale ‘Ōiwi o Pu‘ukapu. With this move, the program underwent a significant curriculum change, adopting a Montessori approach. It was challenging to find qualified, culturally grounded kumu. The availability of a qualified Montessori-trained kumu and the administration’s desire to prepare keiki for kindergarten led to the shift in curriculum. It was at this time that Mālamapōki‘i established a more formal preschool environment. Western standardized tests were implemented at this time (Bergin, 2024). Teachers and administrators found the new approach aligned well with the Indigenous values of Mālamapōki‘i. A grounded theory investigation by Schonleber (2014) highlighted the congruence between the Montessori method and Indigenous values, suggesting that this approach could help Indigenous educators maintain their language, culture, and values while preparing their young for modern society.

Although the shift was to a Montessori curriculum that addressed individualized learning, life skills, sensory exploration, language development, and mathematics, Hawaiian values and practices were still incorporated into the daily school routine. It blended Montessori best practices with the Creative Curriculum for Preschool, aligned with Hawai‘i Early Learning Standards (HELDS). This period also saw a formal adoption of a mission, vision, and core values.

The restructured program served children in multi-age groupings, though it did not offer infant and toddler programs at the new facility. The framework was designed to represent the unique learning styles of Native Hawaiian children, fostering a direct connection to their cultural identity, traditional customs and practices, language, and land. This change brought more focus to early childhood theories, standards, practices, and assessments, introducing several standardized assessments to gauge students’ levels of language and math skills (Mālamapōki‘i, 2010).



## **Mission, Vision, and Values**

The Early Childhood Learning Framework at Mālamapōki'i is intricately designed to embody its mission, vision, and values, creating a holistic and culturally rich educational environment. The framework aims to provide children from Waimea and neighboring communities with immersive, culturally driven, and family-oriented learning experiences. It is dedicated to nurturing confident individuals who deeply understand their culture, language, and place, integrating this awareness into every aspect of their learning.

The powerful imagery of the framework's vision of a sprouting seed shows the program's dedication and commitment to the growth of each keiki as they are nurtured and provided the needed elements to be successful in the learning environment. The framework provides for growth academically, emotionally, and socially. The school community is guided by five 'Ōlelo No'ēau that are braided into daily activities and shape the behavior of students and teachers, ensuring that learning is developmentally appropriate and ingrained with Indigenous philosophies and practices. The Mālamapōki'i framework involves the larger school community to nurture keiki to flourish in the changing world and be prepared for the next phase of their education.

## **Mission Statement**

Mālamapōki'i provides children of Waimea and neighboring communities with opportunities to immerse themselves in a culturally driven, family-oriented, community-based, developmentally appropriate learning environment. At Mālamapōki'i, our commitment centers on aiding children in their development into self-aware, confident individuals deeply knowledgeable about their culture, language, and place. Integrated with a curriculum that centers on early childhood developmental theories, standards, and practices, Mālamapōki'i incorporates the values and traditions of the Hawaiian people into daily activities and provides a safe, nurturing place of learning for children, their parents,

and the community (KALO, 2016, p. 3).

### **Vision Statement**

E kupu mai ana, oho a lau. No nā mea ma lalo, he mea māmālu.

Pā mai ka lā, iho mai ka ua.

Ulu nō.

Sprouting forth until leaves form

A protector for all things below

The sun shines, and the rain falls.

Indeed Growth

A baby grows and becomes a young child.

For these young children, we provide a caring place.

A nurturing and loving environment

Where children will grow and prosper (KALO, 2016, p. 6)

### **Values**

Mālamapōki‘i embraces values that are rooted in ancient Hawaiian values based on five

‘Ōlelo No‘eau that guide our school community:

“Aloha kekahi i kekahi

Love one another”

“Mālama i kou kuleana

Take care of your responsibilities”

“Mahalo i ka mea loa‘a

Be thankful for what we have”

“Kōkua aku kōkua mai

Give help, receive help”

“Kūlia i ka nu‘u

Strive to reach the summit/highest” (KALO, 2016, p. 6)

### **Mālamapōki‘i 2018-Present**

The framework of Mālamapōki‘i from 2018 onwards saw a notable shift, with the Montessori curriculum being replaced. This change introduced a culturally rich program that is more closely aligned with the unique needs and heritage of the keiki. The curriculum continues interweaving with Hawai‘i Early Learning Developmental Standards, providing a research-based structure outlining developmental expectations. This approach addresses the diverse developmental needs of each child. The mission, vision, and values of the program did not change.

The Hawaiian language and culture are introduced and practiced in the classroom daily. Routine activities, including morning circle time, immerse the children in the language and culture, facilitating the natural assimilation of greetings, responses, and inquiries. The program emphasizes place-based education and cultural practices, enabling children to understand their community and their place within it. Beyond academic learning, this curriculum instills a sense of identity and belonging. Furthermore, the framework continues incorporating the five core values: Aloha, Mālama, Kōkua, Mahalo, and Kūlia (KALO, 2018). These values are taught and exemplified within the program, shaping the behavior and conduct of the children. The current approach is holistic, merging cultural identity with developmental learning.

### **Significance of the Research**

The significance of this work goes beyond answering the research question, “How does the early learning framework at Mālamapōki‘i reflect Indigenous philosophies, standards, and best practices?” The framework for this research will be a catalyst for change if needed and a tool for continued evaluation of the early learning framework at Mālamapōki‘i to facilitate

the retainment of cultural integrity for Mālamapōki'i's founding values and philosophies.

This research is necessary because we must determine if colonized ideas infiltrate our thinking and alter our practices to satisfy arbitrary regulations imposed by a government that does not embrace Indigenous epistemologies. Meyer (2003) concludes that due to Hawai'i's history of colonization, it is consistent that educational patterns neglect Indigenous practices and epistemologies. She states, "We are now in trouble because I believe we are no longer listening. We listen, instead, to the view that intelligence is something found in national standardized tests" (p. 5). People of Hawaiian ancestry make up only one-fifth of the population of Hawai'i, a colonized nation that is now part of the United States of America. Mainstream school curricula and educational policymaking often overlook our culture, failing to place it at the forefront of academic considerations (Meyer, 2003).

This research on the early learning framework at Mālamapōki'i and its alignment with Indigenous philosophies, standards, and best practices can contribute significantly to the broader area of Indigenous early childhood educational research. First, it can provide insight into how Indigenous values and beliefs can be integrated into the early learning frameworks in a way that promotes cultural integrity and respect. This research can also highlight the challenges faced by Indigenous communities in the face of colonialism and the need for a decolonized approach to education. It will also provide insight into how outside influences, such as government regulations and standardized testing, influence the braiding of Indigenous values and practices.

The framework developed through this research study could be a blueprint for other Indigenous communities. It could help them assess and enhance their early learning systems, making education more culturally relevant and engaging for Indigenous students. Additionally, findings could highlight to policymakers how crucial it is to involve

Indigenous voices in shaping educational policies. Ultimately, this study will support Indigenous sovereignty and self-determination in education by putting Indigenous knowledge and values at the heart of early learning frameworks and evaluation.

### **Potential Outcomes**

The research at Mālamapōki‘i is poised to yield significant outcomes that extend far beyond the immediate answers to the research question. It stands to deepen our understanding of how early childhood education frameworks can incorporate Indigenous philosophies and practices, thereby shaping the identity and cultural connections of young Hawaiian keiki. This study is timely and necessary, potentially serving as a benchmark for evaluating and inspiring educational approach changes.

Moreover, I envision this research as a starting point rather than a conclusion. It aims to provide a robust framework that will drive continual evaluation and improvement in the educational approach at Mālamapōki‘i. When this process of reflection and adaptation is ongoing, it will ensure that the Mālamapōki‘i program remains responsive and responds to the evolving needs of the community it serves.

Furthermore, a broader application of this research study could open the discussion about developing a more universal and culturally centered curriculum framework for Early Childhood Education in Hawai‘i. By examining Mālamapōki‘i’s approach, the analysis may identify effective strategies and potential challenges in maintaining cultural integrity within educational settings. This could lead to broader implications for policy formulation, curriculum development, and teacher training programs, ensuring that Indigenous perspectives are included and central in early childhood education.

Overall, the outcomes of this research could have far-reaching impacts, influencing not just Mālamapōki‘i but the broader field of Indigenous education, potentially guiding future research and influencing educational policy and practice. The commitment to ongoing

evaluation and adaptation signifies a dynamic research approach that continuously seeks to improve and refine educational practices in line with Indigenous values and philosophies.

### **Overview of Thesis**

“I ka ‘ōlelo no ke ola, i ke ‘ōlelo no ka make. Life is in speech; death is in speech. Words can heal; words can destroy” (Pukui, 1983, p. 129).

The use of ‘ōlelo Hawai‘i or Hawaiian words is an integral part of this study. Hawaiian words convey deep meaning and cultural significance. To ensure clarity and understanding for all readers, each Hawaiian term will be thoroughly explained upon its initial mention. A comprehensive glossary will also be provided, offering detailed definitions and explanations for all Hawaiian terms used.

### **Chapter One – Introduction**

This chapter provides an introduction and sets the foundational background of my research topic, outlining the study’s significance in the field of Indigenous education. The research questions guiding the entire study are introduced, followed by follow-up question topics. The thesis chapters are provided to highlight the clear and logical layout of the study, with each chapter building upon the previous one to create a cohesive and comprehensive investigation of the research question.

### **Chapter Two - Methodology**

Chapter Two presents the thesis research framework, including the methodology and selected methods. An outline of the research design, including the qualitative methods used for data collection and analysis and the rationale behind the chosen approach, is presented. This is where theory links to research, providing a bridge between the conceptual underpinnings and the practical execution of the study. The integration of theory enhances the research design, study findings, and reliability.

### **Chapter Three - ECE Indigenous Philosophies and Frameworks**

This chapter explores literature investigating Indigenous education's significance and place in early childhood educational philosophies and frameworks. We will examine Indigenous education's historical and cultural background, delving into the struggle for Indigenous children to receive a culturally appropriate education. Additionally, this chapter explores the role of traditional knowledge and practices in contemporary educational settings.

#### **Chapter Four - ECE Indigenous Assessment Models**

In Chapter Four, the focus transitions to an in-depth examination of Indigenous assessment models. This chapter provides an extensive literature review, uncovering the variety and uniqueness of assessment approaches in Indigenous educational contexts. It critically evaluates the effectiveness and adaptability of these models, emphasizing how they are tailored to meet the educational needs and cultural values of Indigenous communities. Through this analysis, the chapter highlights the significance of culturally responsive assessments and their potential impact on improving educational outcomes in Indigenous settings.

#### **Chapter Five - Data Collection and Analysis**

Chapter Five offers a comprehensive exploration and critical commentary on the research data collected from various sources. These include informal observations, checklists, talk story and mo'oki'i sessions, interviews, and assessments of written materials, artworks, portfolios, and performances. In this chapter, the data is presented and thoroughly analyzed to identify critical patterns and themes that emerge. Importantly, it includes a reflective analysis where I, as the researcher, interpret these findings, commenting on their significance and implications about the central research questions and objectives, thereby deepening the understanding of the overarching research topic.

#### **Chapter Six - Findings**

Chapter Six presents the culmination of the research journey, summarizing the study's

principal findings, insights, implications, and recommendations. It provides a comprehensive overview of the key findings derived from the data analysis, offering insights into the broader significance of the research study by critically examining the implications of the study's outcomes. Moreover, it acknowledges the limitations of the study.

## **Chapter Seven - Recommendations and Conclusion**

The concluding chapter, Chapter Seven, presents recommendations for further inquiry and potential avenues for future research, aiming to inspire ongoing exploration and development within the field. This chapter strives to contribute to the advancement and innovation of Indigenous Early Childhood Education by providing actionable insights and promoting future research.

### **Chapter Summary**

In summary, this chapter has provided a comprehensive overview of the research journey, beginning with my positioning as a non-Native Hawaiian researcher and the unique perspective I bring to this study. It delves into the rich and evolving landscape of Mālamapōki'i, a site where this research is being conducted, highlighting the shifts in its educational framework over time and its deep-rooted cultural significance. The chapter also outlines the pivotal research question, which explores the reflection of Indigenous philosophies in Mālamapōki'i's early learning framework. This inquiry is underscored by its potential to drive continuous evaluation and change, signaling its long-term significance beyond the immediate research findings. Furthermore, the chapter sets the stage for the thesis, providing an overview of its structure designed to facilitate a coherent and meaningful exploration of these themes.

The forthcoming Chapter Two delves into the intricate methodology that underpins this study, a chapter that serves as the backbone for this exploration. This chapter



methodically delineates the procedures, techniques, and analytical tools, ensuring a robust and rigorous approach to our research questions. Emphasizing methodological rigor, I lay out the qualitative methods that guide the data collection and analysis. This chapter clarifies the methodological choices and the rationale behind these choices, thereby offering the reader a transparent view of the research process. In doing so, Chapter Two stands as a testament to the meticulous and systematic approach that is fundamental to the integrity of this study.

## Chapter 2

### Methodology and Methods

“Ka mo‘opuna i ke alo – A vision of legacy which places the grandchild as the focal point from which one addresses the actions of the present in preparation for the future” (Kawai‘ae‘a, 2002, p. 11). See Figure 2.1.



Figure 2.1: Me with my mo‘opuna. De Aguiar (2024).

#### Methodology Overview

This chapter provides an overview of the research paradigm guiding this study, including a detailed discussion on the ontology and epistemology that shape my understanding of Indigenous knowledge systems, emphasizing the importance of a culturally grounded research process. The methodology’s axiology, or ethical considerations, are explored, stressing accountability and respect for community knowledge. The Indigenous Standpoint Theory that guides the research project is examined, emphasizing relationships, respect, and cultural sensitivity. Braiding the Ropes of Pilina Methodology is introduced, along with the various methods of data collection that will be utilized throughout the research.

A research paradigm comprises the beliefs and assumptions upon which research is based and should guide researchers’ actions. These broad principles provide a framework

for this research. Wilson (2008) identifies the four parts of a research paradigm as ontology, epistemology, axiology, and methodology. He stresses that they are not four separate entities and suggests visualizing them as a circle. A circle illustrates that they are interconnected ideas that blend. Thus, a change in one affects the others (see Figure 2.2).



Figure 2.2: Indigenous research paradigm. Levenson (2022)

## Ontology

Ontology—the nature of reality, and epistemology—the nature of thinking or knowing, are based upon a relationship process that forms a mutual reality. The axiology—ethics or morals that guide, and methodology—the theory of how knowledge is gained, are based on maintaining accountability for these relationships (S. Wilson, 2008).

Wilson (2008) describes ontology as a set of beliefs about reality, such as determining what is real. Kovach (2010) states, “Ontology is concerned with the nature of being and reality” (p. 21). According to Meyer (2003), ontology:

is a synonym for the essence of what it means to be Hawaiian. It is tied to cosmology, belief structures and practices that uphold specific values, ways of understanding the world, and ways of engaging. So, when I say “Hawaiian

ontology,” I mean “the whole host of cultural beliefs, practices, and values that make up Hawaiian form and essence.” (p. 78)

### **Epistemology**

Epistemology, as defined in the Merriam-Webster dictionary, is the study or a theory of the nature and grounds of knowledge, especially concerning its limits and validity (“Epistemology: Definition & meaning,” n.d.). Epistemology focuses on understanding the nature of knowledge and the processes by which we acquire it. It investigates how individuals possess knowledge and examines the relationship between one’s beliefs about reality and cognitive processes. Epistemology raises essential questions about determining what is real, and how our cognitive mechanisms influence our perceptions of the world. Ultimately, it seeks to answer the fundamental question: “How do we know what is real?” (S. Wilson, 2008, p. 33).

Understanding Hawaiian epistemology (ways of knowing) was helpful in the selection of a research methodology. Meyer (2013) presents three methods of gaining knowledge: mind, body, and spirit. These methods are part of ancient systems globally. To Hawaiians, this triad is manaoia, manaolana, and aloha. The triad is not linear but happens concurrently, and the parts cannot be separated from the whole (Meyer, 2013). Meyer further asserts that this process is simultaneous, and the three components are beams of a hologram, each necessary to generate the entire picture.

### **Axiology**

Axiology, ethics, or morals that guide, are crucial in Indigenous methodologies. Porsanger (2004) argues that ethics in Indigenous research go far beyond ethics documents mandatory at most academic institutions. Ethics boards at some institutions privilege the Western notion of neutrality over the Indigenous ethical standards that demand researcher accountability and a built-in give-back to the community (Chalmers, 2017). Indigenous ethics must permeate the entire research process, from the idea’s conception to the

dissemination of findings and everything in between:

Indigenous methodologies tend to approach cultural protocols, values, and behaviors as an integral part of methodology. They are factors to be built into research explicitly, to be thought about reflexively, to be declared openly as part of the research design, to be discussed as part of the final results of the study and to be disseminated back to the people in culturally appropriate ways and in a language that can be understood. (L. T. Smith, 2021, p. 15)

Oliveira (2016) declares that researchers are responsible for reaching the standards of both their communities and academic institutions. I vividly remember an experience when my child was involved in a Native Hawaiian Charter School research project. The project was conducted by a researcher who claimed to adhere to Indigenous methodologies and values, emphasizing the importance of ethics in her work. However, as the project progressed, it became evident that these ethics were not truly integrated into the research process.

Despite promises to involve the community and share the findings in culturally appropriate ways, the researcher ultimately failed to do so. The results were never disseminated back to the Charter School community. This experience highlights the critical role that axiology plays in Indigenous research, as it showed that even when researchers claim to follow Indigenous ethics, their actions may not always align with their words, ultimately failing to meet the standards of both the community and academic institutions, as Oliveira (2016) pointed out.

This experience with my child's participation in the Native Hawaiian Charter School research project profoundly influenced my perspective as a researcher. It reinforced the significance of community accountability and the imperative for giving back throughout the research process. The disconnect between the project's proclaimed adherence to Indigenous ethics and the actual outcomes highlighted the urgency of ensuring that ethical principles

are not merely superficially acknowledged but are genuinely woven into every facet of the research journey.

As a result, I have made it a personal commitment to prioritize community accountability and giving back in my research endeavors. This means that I have actively engaged with the community, seeking their input and involvement in data collection, classification, and analysis. I have ensured that ethical protocols, values, and behaviors were not just mentioned but explicitly built into the research process, as suggested by L.T. Smith (2021). Most importantly, I am resolute in my dedication to disseminating my research findings back to the community in culturally appropriate ways and in a language that can be easily comprehended. This commitment stems from a profound respect for the Indigenous methodologies and values prioritizing community well-being and equitable knowledge exchange. My personal experience has solidified my belief that community accountability and giving back are ethical obligations and the essence of responsible and meaningful research. These principles are at the core of my research practice.

## **Methodology**

Methodologies provide a framework for conducting research that encompasses assumptions and worldviews. Therefore, the choice of methodology is crucial. Indigenous methodologies aim to ensure that Indigenous research is conducted respectfully and ethically and is beneficial from an Indigenous viewpoint (Chalmers, 2017). The methodology is of particular importance when undertaking Indigenous research. Before research begins, there must be an understanding of available Indigenous methodologies to guide the selection of an appropriate methodology for this research. Gibbs suggests that in the absence of Indigenous ethical research conventions, the integrity of the study could be jeopardized (Gibbs, 2003 as cited in Pidgeon & Riley, 2021). Kana'iaupuni (2008) stresses the need for indigenous peoples to be “involved with creation, discussion, and evolution of our own definitions and methodologies; that we participate in the production and documentation of

knowledge” (p. 69).

There are stark differences between Western and Indigenous research methodologies. Porsanger (2004) points out that Western methodologies often take knowledge and give little or nothing in return in contrast to Indigenous methodologies. These methods have disempowered Indigenous people, using them as passive objects rather than fully participating stakeholders in the research. Western methodologies have given power and control to the non-Indigenous world through the advancement of careers, economic gain, and the profitable use of Indigenous resources and knowledge. The landscape of Indigenous research, however, is beginning to change. More and more Indigenous communities are taking a proactive role in research in their communities:

Previously, research was done “to” and “on” Indigenous Peoples. However, Indigenous Peoples are resilient and have become much more involved with community engagement and consequently are more eager to provide direction than ever before. Indigenous communities are asserting their authority over their research and research outcomes. The ways in which research is conducted is changing. Indigenous communities have greater capacity and are creating the acceptable parameters on their own terms, rather than having an external arbitrary reference point. Indigenous Peoples are not allowing anyone to do it for them because they are demanding recognition for what they know. Seeing value in Indigenous Knowledges and Indigenous Knowledge systems while incorporating it into the research and dissemination ensures the research is relevant and able to affect change within Indigenous communities. (Bourassa et al., 2020, p. 7)

Another stark difference between Western and Indigenous methodologies is that in traditional Western research methodologies based on empirical theory, the researcher remains outside the research experience, relying on observation and measurements to draw

conclusions. This practice is foreign to Indigenous research methodologies. An Indigenous methodology requires that researchers work from an Indigenous perspective with cultural and ethical values and behaviors embedded in the research. According to Porsanger (2004), Indigenous research accepts non-Indigenous researchers and also points out that just because a researcher is Indigenous, they are not necessarily objective. The point is that there are various insider views and that, with this type of research, accountability and responsibility are critical components (Porsanger, 2004). Pidgeon and Riley (2021) suggest that Indigenous methodologies should be grounded in the four Rs of respect, relevance, reciprocity, and responsibility. Kovach (2010) defines methodology as encompassing both the knowledge system and methods; an Indigenous research framework aims to illustrate the unification of these aspects.

Smith (2015) asserts, Kaupapa Māori research is characterized by its Māori-centric nature, conducted by Māori, for Māori, and in collaboration with Māori. Rooted in many ingrained practices, values, beliefs, and perspectives on knowledge and our interconnectedness with the world, Kaupapa Māori approaches to research are deeply embedded. This method entails establishing connections with community consultants and extended family research groups (whānau) to identify pertinent research issues concerning Māori communities:

In practice all of these elements of the Kaupapa Māori approach are negotiated with communities or groups from ‘communities of interest.’ It means that researchers have to share their control of research and seek to maximize the participation and the interest of Māori. In many contexts research cannot proceed without the project being discussed by a community or tribal gathering, and supported. (L. T. Smith, 2021, p. 248)

Researchers often frame Indigenous problems as a deficit. Kanaʻaupini (2005) argues that although the deficit model brings to light the need for interventions and change,



it also can be misused and often overlooks “the expertise that exists in our communities and families, viewing instead, outside experts as the only ones capable of ‘fixing’ our problems” (p. 35). Ka‘akālai Kū Kamaka is a strengths-based approach that utilizes strategies “based on competencies, capabilities, and expertise” (Kana‘iaupuni, 2005. P.36). From a Hawaiian perspective, our capabilities are “grounded in the strengths of our family and community relationships. This view resonates with the idea that strengths are multilayered, reflecting individuals, families, and communities” (Kana‘iaupuni, 2005, p. 36).

Wilson (2008) acknowledges that Indigenous research must benefit the community; he asserts that “The Indigenous researcher has a vested interest in the integrity of the methodology (respectful) and the usefulness of the results if they are to be of any use in the Indigenous community (reciprocity)” (p. 77).

## **Theory**

As L.T. Smith (2021) stated, all research is coupled with theory, and research expands theory. Theory “helps make sense of reality” (p. 42). This work reflects the Indigenous Standpoint Theory. An Indigenous standpoint must be actively developed rather than merely reflecting personal experiences, and it doesn’t exist passively in everyday life, waiting to be uncovered. Instead, it promotes the incorporation of these experiences into a critical examination of established viewpoints and arguments. This approach represents a specific method of inquiry focused on unraveling and scrutinizing how social structures and knowledge practices are structured and manifested in everyday life from the vantage point of lived experiences (Nakata, 2007).

According to Foley (2003), an Indigenous Standpoint Theory must be flexible; the researcher must be Indigenous and well-versed in various theories, not to reproduce them but to be aware of their limitations. The research must benefit the community or broader Indigenous collective, and the community owns the knowledge. If possible, the researcher should record using the native language. The Indigenous Standpoint Theory serves as the

foundational perspective that profoundly influences my research project, Braiding the Ropes of Pilina – Indigenous Practices in Early Childhood Education. This theory informs and shapes the entire trajectory of my research in several crucial ways.

While I am deeply appreciative of the Indigenous Standpoint Theory and its principles, I acknowledge a deviation from the theory in one significant aspect: I am not Indigenous myself. However, my connection to the culture and involvement with the Mālamapōki'i program are profound and enduring. These ties have shaped my understanding and commitment to serving the keiki of Hawai'i, which I consider not just a research endeavor but a personal calling.

My journey into this research project has been driven by a strong sense of kuleana and a genuine desire to contribute to the community's well-being. My involvement with the Mālamapōki'i program has afforded me valuable insights into their Indigenous practices and the needs of Hawaiian keiki. This immersion has enabled me to build meaningful relationships within the community and comprehensively understand their unique cultural context.

While I may not be Indigenous, my connection to the culture and my passion for serving the keiki of Hawai'i serve as a driving force for this research. I recognize that my non-Indigenous researcher role necessitates heightened respect, humility, and cultural sensitivity. I aim to approach this study with the utmost integrity, acknowledging my position and utilizing it to amplify the voices and perspectives of the Mālamapōki'i community.

Furthermore, the Indigenous Standpoint Theory compels me to be acutely aware of existing theories and frameworks without simply reproducing them. Instead, it encourages me to critically assess these theories, recognizing their limitations and potential biases. This critical lens ensures that my research is conducted with the utmost integrity, authenticity, and cultural relevance, thereby enriching our understanding of Indigenous practices at

Mālamapōki'i.

The theory's emphasis on benefiting the Indigenous community and the broader Indigenous collective is central to my research purpose. It underscores the importance of conducting research that addresses real-world issues and challenges the Mālamapōki'i community faces. By aligning my research objectives with the well-being and self-determination of the community, I aim to make a meaningful and positive impact by evaluating their Indigenous practices.

The Indigenous Standpoint Theory also guides me in upholding the principle of community ownership of knowledge. I recognize that the knowledge generated through my research rightfully belongs to the Mālamapōki'i community. This means that decisions about how the knowledge is used, shared, and preserved will be made in collaboration with the community, respecting their autonomy and authority over their own cultural heritage.

Lastly, the theory encourages me, whenever possible, to record information and data using the native language of the Mālamapōki'i community, which is English and Hawaiian. This commitment to linguistic and cultural preservation ensures that the research process is inclusive and accessible to community members, fostering a sense of pride and connection to their cultural traditions.

The Indigenous Standpoint Theory is the guiding light of my research, infusing it with authenticity, cultural relevance, and a deep commitment to benefiting the Mālamapōki'i community. It is not just a theoretical framework but a set of ethical principles that shape every aspect of my research journey, ultimately contributing to a more comprehensive understanding of Indigenous practices and their impact on the community.

In determining the methodology for this research, I adopted four protocols. First, respect for Indigenous ways of knowing; second, relationships; third, responsibility to give back; and fourth, "insider" research and stakeholder participation.

## **Respect for Indigenous ways of knowing**

Respect for Indigenous traditions and ways of knowing are reoccurring themes of the methodologies and methods reviewed before developing my methodology (Kaomea, 2005; Pidgeon & Riley, 2021; Prochner, 2003). Kovach (2010a) stresses that Indigenous knowledge encompasses ways of knowing based on oral traditions. This concept has many names; storytelling and yarning are two. In Hawai‘i, the term is talk story. Research methodologies that embrace oral traditions show honor and respect for Indigenous ways of knowing. These conversational methodologies gather knowledge from oral sources and align with Indigenous paradigms (Kovach, 2010).

Oral traditions were identified as an effective means of perpetuating Indigenous knowledge: “Indigenous scholars have begun to realize the significance of Indigenous narratives and narrative forms to our identity and well-being as Indigenous people” (Kaomea, 2005, p. 79). Pidgeon and Riley (2021) indicate that “Indigenous research practices are based on respect for Indigenous ways of knowing and being, relevance to the community, reciprocity in research processes, and responsibility in the relationships between researchers and the community,” and further explain that “research partnerships with Indigenous communities are relationships with cultural expectations of responsibility, relevance, and respect for Indigenous knowledge, goals, and aspirations” (Pidgeon & Riley, 2021, p. 3).

## **Relationships**

Gaining the cooperation of community members can aid researchers in ensuring that they interview the appropriate stakeholders, include the applicable sites, and obtain all the available knowledge. Research may be misleading without this cooperation (Gibbs, 2003 as cited in (Pidgeon & Riley, 2021). Meyer (2013) discusses Indigenous worldviews concerning interconnectedness and stresses that relationship refers to the quality of connections within this view, stating that we evolve through the quality of our connections.

She calls for a “new old way” that melds Indigenous knowledge with classical views of science. Many Indigenous research frameworks utilize the conversational method based on oral traditions. This method is inherently relational and creates a strong bond between storyteller and listener. Meyer (2013) argues that the relationship between method, paradigm, and how the researcher aligns the processes with an Indigenous worldview makes a method Indigenous. Kovach (2010) states that dialogue is an effective way to co-create knowledge through conversation; this builds a level of trust and exchange that enriches the research experience because of relationships.

### **Give Back**

Western research methodologies have disempowered Indigenous people, who have been used as passive objects rather than full stakeholders in the research. Indigenous peoples who provide research knowledge often get little or nothing back (Porsanger, 2004). Research should do more than discover knowledge about the researched; it should, instead, discover knowledge for the researched (Hohepa, 2015). An Indigenous methodology requires that researchers work from an Indigenous perspective with cultural and ethical values and behaviors embedded in the research. As L. T. Smith explains:

Kaupapa Māori approaches to research are based on the assumption that research that involves Māori people, as individuals or as communities, should set out to make a positive difference for the researched. This does not need to be an immediate or direct benefit. The point is that research has to be defined and designed with some ideas about likely short-term or longer-term benefits. (p. 247)

One way this study will give back to the community is by creating a visual display of the keiki artwork and mākua photographs. This display will present the Mo‘oki‘i findings in an engaging format that will be showcased in the KALO facilities, providing a tangible and accessible representation of the research outcomes. This approach not only honors the

contributions of the community but also aligns with the methodological principles of reciprocity and responsibility that are central to Indigenous Standpoint Theory.

### **“Insider” research and stakeholder participation**

In Western research methodologies, the researcher works outside the experience, relying on observation to draw conclusions. This practice is foreign to Indigenous research methodologies (Porsanger, 2004). According to L. T. Smith (2021):

Most research methodologies assume that the researcher is an outsider, able to observe without being implicated in the scene; this is related to positivism and notions of objectivity and neutrality. Feminist research and other more critical approaches have made the insider methodology much more acceptable in qualitative research. (p. 156)

An interesting concept presented by L. T. Smith (2021) is that there are multiple ways to be an insider and an outsider in Indigenous settings. She explains that a researcher with many insider ties can still be viewed as an outsider while conducting research. For example, L. T. Smith shares an experience from one of her early research projects, in which she identified many indicators that she was being viewed as an outsider during the research process even though she was part of the community and had close ties to the participants. There is a lot to learn and internalize through this example. My role at Mālamapōki‘i has evolved over the years and may place me in a similar situation. I have been involved in many aspects of Mālamapōki‘i, including grant management and reporting in the early years to a more substantial role in leadership changes. Now, as the director, it is conceivable that these roles may place me as an outsider in this insider research project, a status that requires a deliberate mindset:

Insider research has to be ethical and respectful, as reflexive and critical as outside research. It also needs to be humble. It needs to be humble because the

researcher belongs to the community as a member with a different set of roles and relationships, status and position. (L. T. Smith, 2021, p. 158)

Following this advice has grounded me and helped keep things in perspective as I practice ha‘aha‘a (humility): “E noho iho i ke ʻōpū weuweu, mai ho‘oki‘eki‘e – Remain among the clumps of grasses and do not elevate yourself. Do not put on airs, show off, or assume an attitude of superiority” (Pukui, 1983, p. 44).

Hohepa (2015) explains that the Kaupapa Māori framework, contrary to other approaches, treats bias as something that needs to be candidly discussed and exhibited, maintaining that acknowledging where you belong and what you belong to is part of your research whakapapa and an integral part of a Kaupapa approach to research. In an Indigenous qualitative content analysis study of Indigenous research methodologies published in 2021, researchers examined seventy-nine peer-reviewed articles. The findings indicated that Indigenous researchers were more likely than non-Indigenous researchers to acknowledge their cultural identity and relationship with the researched lands. Findings also suggest that in seventy-eight percent of the articles, partnerships, relationship building, and developing were included as an essential part of the article (Pidgeon & Riley, 2021).

### **Braiding the Ropes of Pilina Research Methodology**

As a non-Hawaiian researcher, I did not want to simply adopt an established methodology. It was important to me to develop an approach that was both personal and reflective of the aspects of Indigenous methodologies that resonated with me. At the heart of this process was the commitment to honoring relationships—recognizing that knowledge is not isolated but exists within connections between people, place, and culture. This understanding guided my methodological choices, ensuring that my research was not only rigorous but also respectful, reciprocal, and deeply attuned to the voices and experiences of the community. Braiding the Ropes of Pilina is based on Shawn Wilson’s (2008) *Research is Ceremony* and

Noelani Goodyear-Ka'ōpua's (2016) work *Reproducing the Ropes of Resistance: Hawaiian Studies Methodology*. This methodology views research as a way to raise our consciousness and is based on relationships. Relationships help the researcher comprehend and increase understanding, as “the methodology is simply the building of more relations” (S. Wilson, 2008, p. 79).

To illustrate the concept of relationships, Wilson (2008) shares a powerful dream/vision in which he saw himself as a single point of light surrounded by thousands of other points of light. He paints a picture of a thin line connecting the points of light as relationships are formed, creating a web of relationships (see Figure 2.3).

Pondering these concepts, I evaluated my foundational relationships. I asked myself: What are my connections? What relationships do I have that make this research significant to me? What are my relationships with the research topic?

Foundationally, my relationship with my research topic begins with the keiki. It isn't easy to describe. I have a strong 'i'ini (burning desire, yearning) to make the world better for all children. I know I have a kuleana to care for them and make the world a safe place where they can grow up embracing who they are. I know it is a work for me to do. I had never considered this a relationship with a concept or idea.



Figure 2.3: *Web of relationships*. Levenson (2022).

The English word relationship does not evoke a strong emotional response. I think



of social media statuses that frequently change “in a relationship,” to “single,” then back to “in a relationship.” Thinking of the Hawaiian word for relationship, *pilina* gives me a clearer understanding of what being in a relationship means. To be *pili* (cling, to stick, adhere) with someone or something denotes a closeness and relationship that is not easily disrupted.

To delve deeper into my relationship with my topic, I looked closely at my relationships with my children. Connections have always been meaningful to me. I remember conversing with Dr. Manulani Meyer after a Hawaiian epistemology workshop and lamenting that my name had no connections. She asked what I meant, and I told her that when I asked why I was named Nancy, my parents said we liked the name. Manu looked at me and smiled – You have a daughter. Her name is your name. I have thought about that over the years and have drawn strength from the deep connection of her name and now my mo‘opuna’s (grandchild’s) name. My daughter’s name, *Hi‘ilei*, means to carry or tend a cherished child. My mo‘opuna’s name, *‘Ihiwaikekalīloaahi‘ilei*, shows strong connections to people and the *‘āina*. Literally, it means the long-awaited sacred waters of *Hi‘ilei*. Figuratively, it is full of connections to *Kawaihae* (*wai*) and *Waipio* (*Līloa*), to her aunties, who had a part in her name, and to the sacrifice of bringing her into the world. It speaks of her sacred (*‘ihi*) and cherished relationship with her family and that she was long awaited (*kali*); it shows her connection to her mother (*Hi‘ilei*) and, therefore, her connection to me. These connections and relationships are a big part of what motivates me to do this work (see Figure 2.4). The links don’t start or stop with my immediate family; they extend to all children. There is an *‘Ōlelo No‘eau*, *Kalo kanu o ka ‘āina*, which literally means taro planted on the land, and figuratively means Natives of the land from generations back (Pukui, 1983, p. 157). Rooted in this *‘Ōlelo No‘eau*, the *kuleana* I feel extends to those who came before, the current generation—including my children, and future generations.



Figure 2.4: *Foundational relationships*. Levenson (2022).

To braid the ropes of pilina, this research will use the strands of respect, reciprocity, and responsibility. Wilson (2008) points out that “respect, reciprocity, and responsibility are key features of any healthy relationship and must be included in an Indigenous methodology” (p. 77). Wilson compares traditional languages to a ZIP file, saying traditional words “contain huge amounts of information encoded like a ZIP file within them” (S. Wilson, 2008, p. 13). To better grasp the concepts of respect, reciprocity, and responsibility, I looked to the Hawaiian language. Since I am not well-versed in ‘ōlelo Hawai‘i (Hawaiian Language), I used online resources and reached out to people within my circle who have a firm grasp of the language to select Hawaiian words that would expand my understanding of these concepts.

The concept of respect, deeply embedded in the Hawaiian culture as ‘ihi and hō‘ihi, carries profound meanings. ‘Ihi translates to sacred, and hō‘ihi, signifying the act of treating something with reverence and respect, encapsulates a profound understanding of respect as a spiritual and sacred practice or ceremony. What I find particularly resonant and compelling about this perspective is its profound recognition that respect is a sacred entity. In the context of my research methodology, this insight holds immense significance. It calls for the approach to research to be imbued with a sacred essence, a reverence for the process, the

participants, and the knowledge being sought. It underscores the necessity of honoring and upholding all the intricate relationships woven into the research fabric. In essence, this perspective guided me to embark on this journey with a mindful, sacred approach, where respect is not just a formality but an integral part of the process, ensuring that my research was conducted with the utmost reverence and mindfulness.

In my research journey, the concepts of reciprocity represented by pāna‘i and ho‘oikaika have played a pivotal role. Pāna‘i, which encompasses the idea of payback, reward, or reciprocation, whether positive or negative (Pukui & Elbert, 1986), serves as a poignant reminder of the potential consequences of conducting research in a manner that lacks ethical integrity or cultural sensitivity. It underscores the need not to approach research with pono ‘ole (wrong) practices, as such actions can lead to detrimental repercussions within the community. On the other hand, ho‘oikaika, as defined by the University of Hawai‘i Hilo website, signifies making relationships strong in a reciprocal sense (“ho‘oikaika,” n.d.). This beautifully illustrates the transformative power of a relational methodology in research. Throughout my study, I have strived to foster solid and reciprocal relationships with the community, recognizing that these bonds enrich my study and empower and uplift all parties involved. In this spirit of reciprocity, disseminating research results to the community and providing evaluation methods for future use must become integral to my research journey. By giving back to the community, I aim to reciprocate the trust and knowledge shared with me, ensuring that the legacy of our collaborative efforts continues to strengthen and flourish.

The profound Hawaiian concept of responsibility, encapsulated in the word kuleana, delves into the intricate dynamics of reciprocal relationships between individuals and the objects or aspects they hold responsibility for (Pukui & Elbert, 1986). This notion has been a driving force in shaping the trajectory of my research journey. To me, kuleana embodies the essence of accountability and stewardship in research. It signifies a duty to the research itself and the intricate web of relationships that forms the foundation of the research process. This

perspective has steered my research methodology and methods profoundly, guiding me to approach each aspect of the study with a deep sense of kuleana towards the knowledge sought and the individuals and communities who generously contribute to it. Just as kuleana underscores the reciprocal nature of responsibility, I have strived to reciprocate the trust and knowledge bestowed upon me by being diligent, respectful, and accountable in my research pursuits. This approach ensures that my research endeavors are ethically grounded and deeply interconnected with the community, ultimately leading to a more meaningful and impactful research outcome.

Throughout the research process, Wilson's (2008) set of questions centering around accountability to relationships that an Indigenous researcher should ask, combined with the questions posed by L.T. Smith (2021), formed a solid accountability framework to keep my kuleana to this project in perspective. It is vital to ask probing questions about the relevance of the research, the value to the community, possible adverse outcomes, and the researcher's accountability to all the research relationships.

Wilson's questions include:

- How do my methods help build respectful relationships between the topic I'm studying and myself as a researcher?
- 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 form a stronger relationship with the idea that we will share?
- What is my role as a researcher in this relationship, and what are my responsibilities?
- Am I being responsible in fulfilling my role and obligation to the other

participants, to the topic, and all of my relations?

- What am I contributing or giving back to the relationship? Is the sharing, growth, and learning that is taking place reciprocal?

(S. Wilson, 2008, p. 77)

L.T. Smith's (2021) questions include:

- Who defined the research problem?
- For whom is this study worthy and relevant? Who says so?
- What knowledge will the community gain from this study?
- What knowledge will the researcher gain from this study?
- What are some possible negative outcomes?
- How can the negative outcomes be eliminated?
- To whom is the researcher accountable?
- What processes are in place to support the research, the researched and the researcher? (p. 226)

Noelani Goodyear-Ka'ōpua (2016) uses the powerful imagery of 'aho, single cords, that when twined together, form a rope that holds together the growing field of Hawaiian studies research. Drawing from Haunani Trask's poem "Sons," she states that when the cords are braided together, they form ropes of resistance (Goodyear- Ka'ōpua, 2016). She extends an invitation for "new generations of practitioners to consider and extend what it means to do Hawaiian studies. What other 'aho exist that we may take up and reproduce for future generations?" (p. 2). Drawing on Goodyear-Ka'ōpua's concept of braiding strands together, Braiding the Rope of Pilina Methodology adds three 'aho: hō'ihi, Pāna'i/ho'oikaika, and kuleana.

As Yuen (2022) asserts, "Making ka'ā (thread) and kaula (rope) is an important cultural art that gets little recognition these days. In times past, the art of the kaula was

functional, symbolic, and bound together many aspects of Hawaiian culture” (Yuen, 2022, para 1). Anciently, kaula was a foundational aspect of Hawaiian culture. Hawaiians were skilled in building many things using kaula; for example, kaula was used to lash hale (houses) and wa‘a (canoe) (UH Maui College Professional Development, 2020). Kaula was also used to attach items and pull and lift things.

According to Lei Ishikawa, gaining a deep understanding of Hawaiian culture goes beyond mere observation or study; it necessitates active engagement in cultural practices. This custom of active participation, often involving hands-on activities, is called Hana No‘eau (UH Maui College Professional Development, 2020). One prominent example of Hana No‘eau is the art of kaula making, a traditional practice deeply rooted in Hawaiian culture. Kaula, or cords, are created using various materials, with plant fibers commonly used in the intricate process. This practice not only results in producing functional items but also carries profound cultural significance. A well-known ‘Ōlelo No‘eau encapsulates the essence of Hana No‘eau: “ma ka hana ka ‘ike,” which can be translated as “In working, one learns.” (Pukui, 1983, p. 227). This wisdom emphasizes that knowledge and understanding of Hawaiian culture are acquired through active engagement and hands-on experiences.

My connection to kaula is unique; it is through the ritual of braiding my hair daily. It is part of my identity, a connection to the culture I embrace and love. One day, while standing in line at a grocery store, a beautiful Hawaiian kupuna lightly tapped my shoulder; when I turned around, she said, “Baby, you have such beautiful Hawaiian hair.” In my way, braiding my hair each morning is a ceremony. It is a time of calming, organization, and preparation for the day. Kovach (2009) contends that within research, “conceptual frameworks make visible the way we see the world” (p. 41) and are always part of research, whether visible or not:

The rationale for explicit representation of one’s conceptual framework is that

it provides insight into a researcher's beliefs and knowledge production, in general, and how those beliefs will impact the research project. The content and form of the conceptual framework itself assists in illustrating the researcher's standpoint, thus giving the reader insight into the interpretative lens that influences the research. (Kovach, 2010, p. 41)

In an interview with Kumu Kūwalu Anakalea, a Kumu Hula of Waikaunu, under the tutelage of Dr. Taupōuri Tangaro, we explored the significance of hair in Hawaiian culture. She articulated that we needed to start with a discussion about mana. Mana is a critical and intricate aspect of Hawaiian culture that affects individuals' identities, responsibilities, and relationships within the past, present, and future. In a Hawaiian worldview, mana is described as a spiritual power, a force, or energy in all living and nonliving things. This concept encompasses the belief that everything, from rocks to fruits, leaves, and human beings, possesses mana. Mana can be inherited from ancestors and acquired through one's actions in life. Individuals inherit mana from their ancestors, going back many generations, but also have the responsibility not to lose it. Additionally, individuals acquire mana through their actions, which is added to their "mana bank" and passed on to future generations. This process of holding and passing on mana is influenced by personal choices and behaviors, shaping the legacy of mana for future generations (Anakalea, 2024).

Mana resides within our bones, enduring even after an individual's passing, thus signifying the sacred nature of bones. Accordingly, they are treated with reverence and safeguarded. Due to their internal location within our bodies, our bones protect the mana they contain. However, our ancestors also placed elements outside of our bodies. Our hair, for instance, serves as an external ka waihona or vessel for mana. It symbolizes a reminder of the sacredness of our mana (Anakalea, 2024).

As we mature and acquire knowledge and wisdom, it is not solely confined to our

brains and na‘au (Intuition or inner being, often referred to as the ”gut” or emotional center) but finds a repository in our bones and hair. Consequently, there are appropriate moments for refraining from cutting our hair and other times when it is acceptable. A relevant illustration emerges during the rigorous training of a hula dancer, where the knowledge gained is deposited into the waihona represented by her hair. Mana is intricately intertwined with hair. During this period, it is ill-advised that hair be cut. Chants, dances, etiquette, and protocols that have been learned may slip from memory. After completing the learning process, individuals can choose to cut their hair. Our hair embodies the mana of our forebears, offspring, and descendants, forging a connection across time – past, present, and future. They impart a fragment of their mana that lingers with us. This connection persists even in the sorrow of a child’s loss, with their mana enduring within our hair. Braiding, intertwining three strands, symbolizes this continuum, merging past, present, and future. In this braid, generations preceding and succeeding are united, creating a timeless pilina (Anakalea, 2024). This braiding of generations combined with the mana within my hair is what solidifies my connection with kaula and braiding my hair. Strength from generations past, present, and future provides a peaceful, calming meaningful experience as I braid my hair each day.

The process of joining three strands will forge the conceptual framework for my methodological approach, titled Braiding the Ropes of Pilina. The strands representing hō‘ihi, ho‘oikaika, pāna‘i, and kuleana, intertwined with the past, present, and future will become the rope of pilina (see Figure 2.5.)



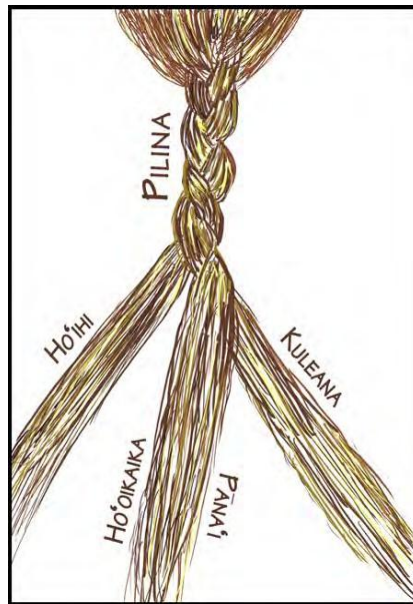


Figure 2.5: *Braiding the rope of pilina*. Levenson (2024).

### **Braiding the Ropes of Pilina Research Methodology Process**

The strand of Hō‘ihi encompasses preparatory tasks, transparent communication, and cultural sensitivity in research methods. The preparatory tasks include respecting the research process by being prepared by completing preliminary tasks such as background research, identifying co-researchers and stakeholders, crafting talking points, developing observation guidelines, and preparing for informal interviews, mo‘oki‘i, and talk story sessions.

Transparent communication requires obtaining informed consent from research participants, with an emphasis on clearly conveying the research goals, potential outcomes, and how their data will be used. Additionally, engaging in ongoing consultations with local stakeholders addresses any concerns or insights that arise during the research process. This collaborative approach builds pilina with stakeholders.

Incorporating cultural sensitivity into research methods is crucial to ensure that the research process honors and aligns with the cultural values of the participants. Ensuring that

the methods employed, such as talk story sessions, mo‘oki‘i activities, and informal interviews, are conducted with cultural sensitivity and deep respect for the participants’ perspectives, values, and beliefs is paramount. This respect is essential for creating a harmonious and culturally appropriate research environment. One way this is accomplished is by following the tradition of ho‘okupu, or ceremonial gift-giving, at research data-gathering events. This traditional practice, dictated by ho‘ihi (Hanohano, 2003), involves offering small gifts, such as books or gift cards, to participants. Additionally, food will be served at appropriate gatherings, further reinforcing the cultural respect and reciprocity inherent in the research process.

The Ho‘oikaika and Pāna‘i strand incorporates attention to relationships and value to the community. Ongoing attention to relationships is reciprocal, as it helps overcome obstacles and ensures the research progresses smoothly. It acknowledges the importance of reciprocity in sustaining fruitful research collaborations and keeps the lines of communication open. This focus on relationships naturally extends to the broader goal of ensuring that the research brings tangible value to the community. As the research progresses, the emphasis on reciprocity and relationships underpins the commitment to delivering outcomes that benefit the community. Wilson (2008) acknowledges that Indigenous research must benefit the community; he asserts that “the Indigenous researcher has a vested interest in the integrity of the methodology (respectful) and the usefulness of the results if they are to be of any use in the Indigenous community (reciprocity)” (p. 77). The approach will function as a driver for transformation, and an ongoing assessment tool for the Mālamapōki‘i early learning framework, facilitating the preservation of cultural authenticity in alignment with Mālamapōki‘i’s founding principles and beliefs. This aligns with the principle of reciprocity, as the research outcomes should be helpful and relevant to the community’s needs and aspirations. Research findings will be disseminated to the stakeholders after the research.

The ethical framework of this methodology places a profound emphasis on accountability in all relationships. This commitment extends to relationships with stakeholders, co-researchers, the place, and the Mālamapōki'i program, emphasizing the need for diligent attention to the care and nurturing of all relationships. It underscores the intricate interplay between relationships in all facets of life and the importance of striking a balance between the responsibilities inherent in the research endeavor and maintaining and honoring one's personal family and spiritual connections.

Goodyear-Ka'ōpua (2016) stresses that kuleana extends beyond the conclusion of a research project, using the metaphor of building an ahu (altar), asserting that master builders would not abandon the ahu after its completion because they know kuleana exists before and extends after the actual project, just as a researcher's kuleana does not end after finishing a paper or publishing a book or article. An ethical Indigenous researcher is concerned with what happens after the project's completion, what implications the dissemination of the findings may have on the community, and how the energy from the project can be channeled to generate positive social change. Thus, kuleana is a critical component of Indigenous methodologies, tying directly into the responsibility of disseminating findings in a manner that benefits the community. Becoming an active part of the lāhui, or community, is a vital element of the research process and is tied to the welfare of the community (Goodyear-Ka'ōpua, 2016).

This research methodology requires sustained effort in maintaining relationships, gathering data, and analyzing it to present to the community in a way that brings everything together. Kovach (2010) speaks of the required personal preparation by the researcher as the centering or grounding needed throughout the research process. The Hawaiian concept that our bodies contain three piko or umbilical cords, provides grounding connections that, if maintained and aligned, contribute to the understanding that the knowledge of the past is foundational to continuing to develop our legacy for future generations (Kawai'ae'a,

2002).

In alignment with this insight, my research journey was significantly enriched by my commitment to the Hawaiian concept of the three piko, or umbilical cords. These piko symbolize essential connections that, when maintained and aligned, serve as a grounding force throughout the research process. By recognizing the significance of these connections, I found myself deeply rooted in the understanding that our ancestral knowledge is the cornerstone upon which we build our legacy for future generations. This alignment with the three piko strengthened my connection to the research and allowed me to approach it with a profound sense of purpose and responsibility. It ensured that I honored the wisdom of the past while actively contributing to the development and preservation of our cultural heritage, ultimately playing a pivotal role in the success of my research endeavor.

### **Data Collection Methods and Sources**

This section presents broadly the methods engaged and refers to relevant literature. Methods are further detailed in the data analysis section alongside the various data sets. According to Snyder (2019), “Building your research on and relating it to existing knowledge is the building block of all academic research activities, regardless of discipline” (Snyder, 2019, p. 333). A literature review is an essential method for this research. Using literature review as a methodology establishes a strong base for progressing knowledge and promoting the development of theories (Snyder, 2019). Literature review search terms have included Indigenous epistemology, Indigenous early learning, Indigenous Standards and Best Practices, Indigenous methodology, and Indigenous methods. Online databases such as ERIC, JSTOR, and professional journals and dissertations were primary sources. Relevant literature reviews were reviewed to find additional sources to review.

A qualitative research design was used to collect and analyze data. In line with the Indigenous Standpoint Theory, qualitative research aims to uncover the lived reality and attributed meanings of the research participants (Mutch, 2013).

According to Porsanger (2004), research is about power and control. Chilisa (2020) explains how power issues manifest in research:

In the context of research, it enables scholars to interrogate power relations that arise between researchers and the researched, for example, when choices are made about the literature to be reviewed, the theoretical frameworks, research questions, or techniques of gathering data (for example, tests). (p. 53)

Western academic research traditionally looks at Indigenous research topics from a deficit model, seeking to fix a problem. This form of research gives power and control to the outsiders, not the Indigenous world. Qualitative approaches are known for giving prominence to Indigenous voices and mitigating power disparities (Kennedy et al., 2022). In qualitative research, achieving total elimination of researcher bias is unattainable; thus, it becomes paramount to delineate the reflexive procedures. This commitment aims to ensure the promotion of culturally safe, ethical, and exemplary practices in qualitative research (Kennedy et al., 2022). Reflectivity is inherent in qualitative research. Rossman and Rallis (2003), as referenced by Kovach, assert:

Accentuate the reflectivity of qualitative research. It is an approach, they argue, that demands that researchers be continually aware of their own biases as a means of constantly locating themselves in the research. (Kovach, 2010, p. 26)

Reflexivity in research involves acknowledging one's active and subjective role as a participant to enhance understanding rather than striving for absolute objectivity. It differs from reflection, which is the natural process of reflecting on data and drawing conclusions. Reflexivity entails actively questioning one's thought process and recognizing how personal perspective influences conclusions. Qualitative research is interpretive, with the researcher situated within the research. Therefore, reflexivity is essential for addressing potential biases

and ensuring accuracy in insights (Burnam, 2023).

My selection of data collection techniques is influenced by Carol Mutch’s (2013) Three Es: Experiencing, Enquiring, and Examining. In the figure below, the three Es are modified to more closely align with The Braiding the Ropes of Pilina Methodology (see Figure 2.6). These modifications involve transforming the Three Es into ‘Ike, Nīnau, and Kilo. ‘Ike has layered meanings encompassing seeing, knowing, feeling, and examining. Nīnau is to question or inquire. Kilo means to watch closely or examine.

Co-researchers in this project include various stakeholder groups from the Mālamapōki’i community, encompassing past and present members such as kumu (teacher), mākua (parents), haumāna (students), and ho‘okumu (founders/administrators). This diverse assembly offered distinct viewpoints, enriching data triangulation.



Figure 2.6: *Data Collection Methods*. Levenson (2023).

### ‘Ike

Tools utilized for gathering ‘Ike data encompass informal observations, a method integral to the research process. These observations meticulously recorded detailed descriptions, sub- sequentially used during analysis to establish a comprehensive understanding of the Indigenous practices at Mālamapōki’i. Observations were conducted across various settings, including classroom environments, parent-child interactions, and engagements at cultural

events such as the Makahiki games and Hula Drama, an authentic assessment performance.

Another method employed for 'ike observations involved the use of checklists. These checklists serve as structured tools to capture identified Indigenous practices observed within the educational environment efficiently. They enabled researchers to swiftly record pertinent observations, facilitating systematic documentation of culturally significant activities and behaviors.

## **Nīnau**

Data collection methods within the Nīnau category were selected in alignment with the methodology's relationality and are all oral-based tools. Kovach (2010) stresses that Indigenous knowledge encompasses ways of knowing based on oral traditions. This concept has many names; storytelling and yarning are two. In Hawai'i, the term is talk story. Hanohano (2001) describes "Talk Story" as a community or group conversation where each person shares their viewpoint:

No one person may dominate the conversation or story, and each is accorded the time needed to share their thoughts fully. . . This is how talking story works. Anyone can jump into or out of the conversation at any time or decide not to speak, but they must always be respectful of the other's point of view. Sometimes- times the discussion is slow and methodical, and sometimes it might be fast and chaotic. However, the objective for all involved in talking story is to reach agreement and work towards a common understanding regarding the matter under discussion. We can disagree without being disagreeable. Being confrontational and openly disagreeable with another person's view is frowned upon. (Hanohano, 2003, p. 88)

I adopted an innovative conversational approach called mo'oki'i, particularly suited for Hawaiian-focused research. This approach, developed by Noekeonaona Kirby, provides

unique benefits for capturing and conveying mo‘olelo through visual storytelling. The Mo‘oki‘i method builds upon the Photoyarn method, initially developed by Jessa Rogers, which is heavily influenced by the Western research method of Photovoice. Photovoice is a qualitative method where participants take photos that the researcher analyzes. Rogers (2017) developed the Photoyarn method “in keeping with Indigenous research principles relating to Indigenous control and ownership of data and the research process” (p. 2). This method includes yarning circles to aid participants in controlling, categorizing, and analyzing their own data.

Mo‘oki‘i was explicitly selected to engage participants as co-researchers in collecting, categorizing, and analyzing their own data. Co-researchers included mākuā, keiki, and kumu. Chilisa (2020) maintains, “The research process is informed by a relational ethical framework that moves away from conceiving the researched as participants to seeing them as co-researchers” (p. 171). The mo‘oki‘i method aims to give voice, through photos and images, to all participants, including the most critical stakeholders in this research, the keiki, who would otherwise likely be minimally involved as co-researchers.

Involving children in research from an early stage holds significant value, fostering a sense of ownership and sustained engagement throughout the project. However, research involving keiki must be meticulously designed to provide a safe, supportive environment that respects their developmental stages, ensures their well-being, and safeguards their rights. This necessitates the development of appropriate and ethical methods for child participatory research. In preparation for their involvement, engaging with children informally is essential, along with establishing rapport and ensuring they are comfortable with the research activities. As part of this preparation, an original story was crafted and read to the children, presenting the research concept and their role in a manner tailored to the comprehension level of preschool-aged participants (see Appendix F). This approach lays the groundwork for their participation and empowers children to actively contribute to



the research process, fostering a sense of inclusion and agency.

Interviews serve as another data collection method within the Nīnau category. Qualitative interviews were chosen to foster relationship-building, a crucial aspect of my research methodology. According to Mutch (2013), qualitative interviews necessitate the establishment of a rapport between the interviewer and the interview participant. A guide for conducting interviews was created and utilized to assist in engaging with stakeholders during the interview process (see Appendix B).

Co-researcher photographs and keiki-created images from mo‘oki‘i activities were used as an impetus for qualitative interviews to gather more specific data and gain a more comprehensive understanding. Interviews with selected mākua and kumu were informal or semi-structured, allowing for organic conversations with participants from each stakeholder group.

## **Kilo**

Kilo methods centered around analyzing documents and student work. With a thematic analysis approach, this qualitative data from curriculum documentation, such as lesson plans and student work, uncovered patterns, themes, and insights that provided a valuable understanding of Indigenous practices and experiences within the Mālamapōki‘i learning environment (Mutch, 2013). Student hō‘ike (performance) was utilized to gather evidence. From a Hawaiian standpoint, hō‘ike is a natural assessment form. Hō‘ike is much more than performance. Hō‘ike denotes seeing, knowing, and experiencing and is a good learning indicator. Co-researchers in this work include stakeholder groups in the Mālamapōki‘i community. Participants consist of past and present kumu, mākua, haumāna, and ho‘okumu. This diverse group will provide unique perspectives and contribute to data triangulation.

## **Chapter Summary**

This chapter comprehensively explores the research methodology “Braiding the Ropes of Pilina” employed in this study. One of the central themes emphasized throughout this

chapter is the pivotal role that establishing and nurturing relationships, both within the research process and with the research participants, plays in the methodology. These relationships are considered integral to the Indigenous research approach, where respect, reciprocity, and responsibility are paramount.

Additionally, this chapter elucidates the profound connection between the chosen methodology and the methods implemented, underscoring their Indigenous design, which seamlessly braids Indigenous knowledge and values throughout the research process. This braiding further emphasizes the importance of relationships.

Furthermore, this chapter establishes a strong linkage between the methodology, methods, and the Indigenous Standpoint theory. It clarifies how the Indigenous Standpoint theory informs and influences the research approach, serving as the study's philosophical underpinning. This synthesis highlights the research's Indigenous sensitivity and underscores the significance of adopting an Indigenous Standpoint as a foundational aspect of the research journey, wherein relationships are at its core.

The study utilized several distinct data sets to gather insights into the Indigenous practices at Mālamapōki'i, each contributing unique perspectives and findings. The Mo'oki'i Data Set was broken down into two activities. The Keiki Mo'oki'i Data Set involved 19 participants aged 3-5, who engaged in a creative activity designed to capture their experiences and perceptions of their school environment. This data was thematically analyzed, highlighting key themes important to the youngest participants in the study. The Mākua Mo'oki'i Data Set included 18 participants, consisting of current mākua, providing a broader generational perspective on the school's impact and cultural significance. Mākua contributed rich qualitative data that were categorized and analyzed to understand their views on cultural education and community values. The Mākua Data Set consisted of 5 participants, through talk story sessions and interviews, mākua contributed rich qualitative data that were categorized and analyzed to understand their views on the school's impact on

their keiki's cultural education. The Kumu and Ho'okumu Data Set consisted of 6 participants, including five past and current kumu and one po'okumu, focusing on the educational practices and philosophies at Mālamapōki'i. This data set emphasized the importance of family involvement, cultural connection, and the braiding of Hawaiian values into daily practices. The Past Haumāna Data Set gathered insights from 6 haumāna, who were past students of Mālamapōki'i, through a talk story session that provided data on their memories and experiences at the school. The Observation and Document Review Data Set encompassed six distinct observations, including two PACT activities, Makahiki games, two classroom observations, and a year-end hō'ike. The observations were augmented with a structured document review of internal documents, lesson plans, kilo journals, and photographs to thematically analyze Indigenous practices at Mālamapōki'i. Finally, the 'Ohana Data Set captured insights from 12 families of current students, with data gathered through surveys designed to assess the status of Indigenous practices within the home. This set provided critical data on the cultural practices that families maintain. Each of these data sets was crucial in building a comprehensive understanding of the Indigenous practices at Mālamapōki'i and the broader community's involvement in cultural education.

## Chapter 3

### ECE Indigenous Philosophies and Frameworks

“Kala kahiko i au wale ai ka lā.

A reply to one who asks about something that took place a long time ago” (Pukui, 1983, p. 336).



Figure 3.1: *Map of Australia, New Zealand, and Hawai‘i, areas reviewed for Indigenous education philosophies and frameworks.* Levenson (2024).

This chapter provides background information detailing Hawaiian’s resistance to educational oppression and colonization. An understanding of this resistance sets the context for understanding how and why Indigenous frameworks have been developed. Indigenous epidemiologies and philosophies are explored in relationship to Indigenous early childhood education approaches and frameworks.

In this chapter, I explore Indigenous early childhood education approaches and frameworks in New Zealand, Australia, and Hawai‘i. While Indigenous education across the broader Pacific offers valuable insights, New Zealand and Australia were selected to be part of this study because of their solid relationships with Hawai‘i. Collaboration between New Zealand and Hawai‘i led to the creation of ‘Aha Pūnana Leo preschools throughout the State of Hawai‘i. Australia was a key player in the development of the Coolangatta Statement which

ignited Hawai‘i’s quest to reclaim Indigenous educational rights. The inclusion of philosophies and frameworks from multiple countries allows for comparative analysis and identification of common threads.

### **Reclaiming Indigenous Education**

It is important to know the history of education in Hawai‘i to understand our struggles to extend Indigenous education rights and the current landscape of Indigenous education. Although the illegal overthrow of the Hawaiian Kingdom happened 131 years ago, in 1893, it caused rippling effects that are still felt today. Laws were enacted with the aims of suppression and colonization (Kukahiko et al., 2020).

Prior to the overthrow, a public education system was established by King Kamehameha III in 1840. ‘ōlelo Hawai‘i was the primary medium for delivering instruction to students (“History of Hawaiian education”, n.d.):

Throughout the 1800s, Hawaiians became prolific writers chronicling the history, traditions, culture, politics, and current local and world events that are found in over 125,000 pages of Hawaiian language newspapers. These Native language writings represent the largest collection of indigenous language written literature in the Pacific and are evidence of the reports of very high literacy rates among Hawaiians at the time. (Kawai‘ae‘a et al., 2007, p. 197)

As mentioned in the thesis introduction, a traditional Hawaiian saying emphasizes that language brings life or death. In 1896, the illegal government of Hawai‘i enacted an English-only law mandating that English was the official language to be used in educational settings. This law eliminated funding for Hawaiian language schools, effectively isolating Hawaiian students from their culture and traditional knowledge systems. For ninety years, the law remained. After undaunted efforts by a core group dedicated to Hawaiian language preservation, the State legislature reversed the law in 1986, paving the way for Hawaiian

Language Immersion schools to be established and funded as public schools (Kawai‘ae‘a et al., 2007). Prior to the reversal of the English-only law, work had begun to revitalize Hawaiian education. The process was slow. In 1978, Hawai‘i held a Constitutional Convention, the third since 1950. At that convention, the Constitution’s Article on Education was renumbered from Article IX to Article X. Section 4 was added to Article X, mandating the State to provide Hawaiian education programs in public schools. Article X promotes using community resources as a vital component for implementing Hawaiian culture, history, and language in public classrooms (“HI Const. art. X, sec 4”, 1978). While this was progress, it did not address providing classroom instruction in ‘ōlelo Hawai‘i. In 1983, the grassroots organization ‘Āha Pūnana Leo was created with the intent to revive ‘ōlelo Hawai‘i. Today, ‘Āha Pūnana Leo is a thriving organization that played a crucial role in reversing the English-only law.

Another igniting force in the quest to reclaim Indigenous education rights is the Coolangatta Statement. A task force commissioned by the National Organizing Committee of the 1993 World Indigenous Peoples’ Conference on Education (WIPCE) was tasked with presenting a framework to facilitate the discussion of Indigenous peoples’ education rights. Members of the task force were from America, Aotearoa, Australia, and Canada. The task force met in Coolangatta, New South Wales, Australia. The statement was adopted in 1999 in Hilo, Hawai‘i as part of the World Indigenous Peoples’ Conference on Education (“The Coolangatta Statement on Indigenous Rights in Education,” 1999). Adopting the Coolangatta Statement inspired Hawai‘i educators who attended the Hilo, Hawai‘i WIPCE event. The Coolangatta Statement outlines the fundamental rights of Indigenous people; section 2 focuses on education rights:

2.2.4 Self-determination in Indigenous education embodies the right of  
Indigenous people:

- To control/govern Indigenous education systems;
- To establish schools and other learning facilities that recognize, respect and promote Indigenous values, philosophies and ideologies;
- To develop and implement culturally inclusive curricula; To utilize the essential wisdom of Indigenous elders in the education process;
- To establish the criterion for educational evaluation and assessment;
- To define and identify standards for the gifted and talented; To promote the use of Indigenous languages in education;
- To establish the parameters and ethics within which Indigenous education research should be conducted;
- To design and deliver culturally appropriate and sensitive teacher training programs;
- To participate in teacher certification and selection;
- To develop criterion for the registration and operation of schools and other learning facilities; and,
- To choose the nature and scope of education without prejudice (“The Coolangatta Statement on Indigenous Rights in Education”, 1999, p. 61)

The charter school movement reached Hawai‘i in 2000, providing additional opportunities to implement culture-based education. Community educators looked to the charter school movement as a step towards achieving self-determination and gaining control of Indigenous education in Hawai‘i. Originally, 12 Native Hawaiian communities were granted charters to operate community-controlled schools and implement educational programs to achieve their unique visions and missions. Currently, 17 Hawaiian-focused charter Schools operate in the State of Hawai‘i. Over the years, Indigenous early childhood

education opportunities have also increased with the implementation of Pūnana Leo Hawaiian medium programs across the state, Indigenous preschool programs attached to Hawaiian-focused charter schools, and private culture-based programs.

In May 2014, Indigenous youth from Aotearoa, Australia, North America, Europe, and Hawai'i built on the Coolangatta Statement to craft a Declaration of Indigenous Youth that proudly declares, "We stand carrying the future of our history while remaining grounded in the knowledge taught to us by our ancestors of old. As we voyage forward in time, we will not forget who we are: native youth of the world" (World Indigenous Peoples Conference on Education, 2014, **poster**). Part 3 of the declaration specifically outlines education and Indigenous knowledge rights:

- We affirm that all indigenous peoples have an equal right to a quality education at all levels;
- We affirm the right to learn and perpetuate our culture, to have control over how those things are taught, and to provide education through native language and a cultural lens;
- We affirm the right to establish and manage our own schools and education system in our own language;
- We affirm the right to build educational facilities and programs to educate other cultures about what is unique to our own;
- We advocate that indigenous knowledge/education systems be given value and weight equal to those of the Western world;
- We support the transmittance of indigenous knowledge as a part of the educational legacy of native peoples, including but not limited to song, chant, dance, arts, crafts, and navigation (World Indigenous Peoples Conference on Education, 2014, **poster**).



This declaration by Indigenous youth showcases their resilience, determination, and commitment to cultural preservation and provides bright hope for the future of Indigenous education. The challenges of the past shape the landscape of Indigenous education today. Although strides have been made on the Indigenous education front, according to L.T. Smith (2017), significant challenges remain: “While some progress continues to be made about access to and quality of education for indigenous peoples in the Pacific, resulting in an improvement of their overall well-being, a more extensive effort has yet to be launched” (p. 165).

The historical context of outlawing the use of the Hawaiian language in education through the English-only law of 1896 shows the motivation behind the current trend to reclaim Indigenous education. Through the Coolangatta Statement and The Declaration of Indigenous Youth, Hawai‘i’s efforts are connected to wider global initiatives. The historical background and current landscape of education in Hawai‘i provide crucial context for understanding the operational environment of Mālamapōki‘i.

### **Indigenous Epistemology and Educational Philosophies**

Culture is a shared way of being, knowing, and doing. Kana‘iaupuni and Kawai‘ae‘a (2008) maintain that all education is culture-based:

What is Indigenous Education? This question seems a simple one, and it is clear that to understand the impact of culture-based education, we must be able to articulate and understand the approaches and philosophies used by indigenous educators. The benefits of doing so are critically important to the field of education; namely, to be able to promote, share, and develop culturally responsive educational strategies, learning approaches, and systems that presumably benefit all children, especially indigenous children. Perhaps even more important, however, is that we as indigenous peoples are involved with

the creation, discussion, and evolution of our own definitions and methodologies; that we participate in the production and documentation of knowledge. (p. 69)

An essential aspect of this research examines the Mālamapōki'i framework and philosophies through the lens of Hawaiian epistemology and educational philosophies, acknowledging that Indigenous education encompasses the knowledge presented and how it is transmitted to the learner. Meyer (2013) presents an Indigenous worldview that opens the way for Indigenous epistemology:

An Indigenous world view thus begins with the idea that relationships are not nouns, they are verbs. This basic notion of relationality, dynamic coherence, interdependence and mutual causality helps us see the context of an idea and people, tangible or not, and respond appropriately. The hard part of this notion is that you can't weigh verbs, well not really. Relationship as verb infers the intentional quality of connection that is experienced and remembered. Here we begin our walk into Indigenous epistemology; into the simultaneity of the unseen and seen. We are entering a wide-open field of knowledge production and exchange with priorities in practice, relevance, context, consciousness, and shared common sense. It is knowledge through experience, individual or collective, and a way of being via site-specific familiarity through years, generations, and lifetimes. In this way, patterns emerge collapsing time into space and all unknowns into mystery and story. It is knowing shaped by purpose and knowledge prioritized by function. Finally, it is an understanding that has endured for a reason. (p. 98)

Meyer (2013) presents three methods of gaining knowledge: mind, body, and spirit. These methods are part of ancient systems globally. To Hawaiians, this triad is manaoia

(mind), manaolana (body), and aloha (spirit). The triad is not linear but happens concurrently, and the parts cannot be separated from the whole (Meyer, 2013). Meyer (2013) began to understand that the process was simultaneous and identified the three components as beams of a hologram, each necessary to generate the entire essence, purpose, and form, calling this phenomenon “holographic epistemology” (p. 94). Meyer described the mind component as the meaning derived from thought and reflection. This process links what is known to new patterns and generates new understanding. Mind allows us to look at old problems with new understanding and find solutions. She identifies the role of the body in Indigenous epistemology as foundational, explaining that outside experiences are felt through our senses; it is knowledge gained because we have encountered things, knowledge gained from direct experience. The third component of the trilogy is spirit, which represents life’s spatial, non-physical, and cultural dimensions. It is important to remember that these three elements are inseparable. Indigenous early childhood education philosophies should reflect the interconnectedness of mind, body, and spirit in the learning process. The mind component involves providing opportunities for critical thinking and problem-solving. The body component entails offering direct hands-on experience to the keiki, and the spirit component represents the cultural and spiritual aspects of gaining knowledge. These elements, which emphasize the interconnectedness of thought, direct experience, and cultural dimensions, provide a lens for studying the Indigenous practices at Mālamapōki‘i.

In a study by Kawakami and Aton (2001), two crucial components were pinpointed to identify critical elements for Hawaiian learning: authentic environments and experience-based learning. The study involved 16 Hawaiian educators; data was gathered through an outline of talking points used in conversations with participants. Key findings of the study indicate that “programs must exist within the Hawaiian context and must capitalize on cultural ways of learning, knowing, and making sense of the world. Activities must be grounded in authentic Hawaiian environments and must be experience-based” (A.

Kawakami & Aton, 2001, pp. 61-62). These findings suggest a supporting question to consider for this study of the Mālamapōki‘i framework: “How are experiences grounded in Hawaiian ways of learning and knowing?”

Learning environments must accommodate a variety of learning styles. Jean Beniamina (2010), a Ni‘ihau educator, describes the Hawaiian learning style Tēnā as a “wholesome way of learning passed down from generations before me, continues with my generation and into the future” (p 10). Validating the author’s belief that we all practice tēnā, often without realizing it, I recognized that although the term tēnā is new to me, the concepts are a normal part of the way I personally learn and teach. Tēnā is a multi-step process that is not specific to age. In Step 1 – Accompanied, a keiki learns a task by watching, then, trying to complete the task accompanied, repeats by completing different similar tasks. Finally, the learner extends the task to include other aspects, such as preparation or follow-up tasks. Step 2 – Partially Accompanied: this step is presented when the keiki is accustomed to the environment and the task. For example, if in step 1, the task was to get water for Tutu (grandmother), the task in step 2 might be to get water for the animals. Step 3 – Unaccompanied is best described by an ‘Ōlelo No‘eau or Hawaiian proverb, “Ma ka hana ka ‘ike – in working one learns (Pukui, 1983, p. 497). A keiki is given more complex tasks based on previous knowledge and experiences during this step. These tasks are completed without adult oversight. Step 4 – Mentoring Others is the culminating phase where the haumāna becomes the kumu. This requires applying skills and facilitates passing knowledge from one generation to the next. (Beniamina, 2010). One aspect of this learning style is that it requires the learner to be “tēnā-ed” out of their comfort zone as they move to the next step. This learning type occurs in real situations and circumstances and produces meaningful outcomes. A supporting question to be investigated in this study is “Do the activities at Mālamapōki‘i follow the pattern of tēnā?”

From an Indigenous worldview, land is central to Indigenous knowledge and a

critical education component. Dr. Amy Parent, Noxs Ts'aawit, a Nisga'a from the Nass Valley of northwestern British Columbia teaches that Indigenous land-based education is:

a process that centres respect, reciprocity, reverence, humility and responsibility as values connected to the land through Indigenous knowledges—a very different view from the Eurocentric mindset, which has long understood land as a resource and object to serve human uses, much to the detriment of our living world. By its very nature, Indigenous land-based education has the capacity to create transformational opportunities for all Canadians to learn about the many ways in which our education, economic, social and political systems reinforce colonialism. (UNESCO, 2021, para. 3)

Hawaiian perspectives on 'āina align with the concepts presented by Dr. Parent. Pilini with the 'āina is central to creating a holistic approach to education that is deeply rooted in Indigenous worldviews. This concept places 'āina as a critical element of Hawaiian education. 'Āina is inseparable from Hawaiian philosophy and is more than a love for the land. It is about our reciprocal relationships with the 'āina. These relationships form the context for teaching and learning (A. Kawakami & Aton, 2001). As Porter and Cristobal (2018) explain:

Aloha 'āina is a sense of love and connectedness to the land; it is the inspiration and aspiration of a place- and culturally-responsive education. For Native Hawaiians, this traces back to the 'āina hānau (birthplace or source) of Indigenous physical, spiritual, and relational being. Prior to colonization and occupation, 'āina was not something that could be owned. Rather, it was something one belonged to (Kanahele 1986, 129). We assert that this relational love has great value beyond Indigenous communities; indeed, it has much to teach learners living in many homeplaces. CIPP has the potential to develop

sociopolitical consciousness for Native Hawaiian students, bridging awareness with action (Trinidad 2001, 188). It points to constructive ways to enact education for a more just and collaborative future. We need to be humble allies in sustaining and transforming our collective relationship to lands, seas, and other people. (Porter & Cristobal, 2018, p. 216)

Building on these ideas, Noelani Goodyear-Ka'ōpua (2013) further emphasizes the profound connection between aloha 'āina and the well-being of both the natural world and the Hawaiian people:

Aloha 'āina expresses an unswerving dedication to the health of the natural world and a staunch commitment to political autonomy, as both are integral to a healthy existence. Although it is often imperfectly translated to 'love for the land' and 'patriotism,' the aloha part of this phrase is an active verb, a practice rather than as merely a feeling or belief. (p. 32)

The dynamic relationship between the 'āina and Hawaiian culture is highlighted in these perspectives on aloha 'āina. Understanding this dynamic, reciprocal pilina with the 'āina is critical to the evaluation of Indigenous practices at Mālamapōki'i. Considering the importance of 'āina in Hawaiian epistemology, a supporting question for the study is “How does Mālamapōki'i incorporate 'āina as interconnected relationships with the world fostering love, respect, and stewardship in the lives of the keiki?”

### **Indigenous Early Childhood Education Approaches and Frameworks**

In this section, the literature reviewed explored approaches and frameworks implemented in Indigenous early childhood education programs. As Dr. Peter Hanohano (fondly remembered as Uncle Peter) asserts, “What has been lacking in the educational system in North America and Hawai'i is an education that honors traditional Native teachings and cultural values and beliefs while nurturing academic excellence” (Hanohano, 2003). This

literature review examines historical aspects of early childhood education and elements necessary in an Indigenous early education program. Indigenous peoples have long known and understood that the goal of early education is the child's total development: linguistically, cognitively, socially, culturally, physically, and spiritually. (Bang et al., 2018; Mahfouz & Anthony-Stevens, 2020; Romero-Little, 2010).

Historically, Indigenous early childhood education was an intrinsic part of daily life. In many countries, center-based early childhood education was born from the belief that Indigenous parents could not be trusted to raise their children correctly (Kaomea, 2005). Kaomea (2005) states that early childhood and social service agencies in Hawai'i view Native Hawaiian parents and families and their influence on their young children as a problem or detriment to be compensated for rather than a source of strength and knowledge to build upon and support.

Pre-primary schools were a means of social control and assimilation. Assimilation was the solution to the Indian problem. Education for Indigenous children was in the political and economic interest of colonial governments (Castagno et al., 2020; Maaka, 2019; Mahfouz & Anthony-Stevens, 2020; Prochner, 2003). Brayboy and Lomawaima attribute the assimilation of Native students to a long-term battle for power, in which education is stripped of Indigenous knowledge and ways of knowing (Brayboy & Lomawaima, 2018). In recent years, policymakers have identified early preschool as a strategy to close the gap between groups concerning school readiness. Close examination of the motivation behind implementing preschool earlier and earlier reveals that policymakers do not value Indigenous ways of knowing and preparing children for life and school (Romero-Little, 2010).

In Hawaiian culture, kūpuna (grandparents) often assume the care of young children; this multi-generational exchange is considered necessary for perpetuating Hawaiian culture

and traditions (Kaomea, 2005). Historically, Indigenous children were socialized and taught through Indigenous languages and epistemologies. Participation in significant community events helps teach children Indigenous ways as they observe and participate in cultural practice. These events are critical to child development and contribute to the development of self and collective identities (Romero-Little, 2010). The need for family and community involvement in early learning becomes apparent when it is understood that intergenerational learning is at the foundation of Indigenous education. It is in the early years that families set the foundation for children to learn to become successful and live congruently with their communities and the world. (Maaka, 2019; Mahfouz & Anthony-Stevens, 2020; Romero-Little, 2010). It is clear that “collaborating with Indigenous families in order to center and honor Indigenous knowledges and practices in schools is paramount to the educational success of students” (Bang et al., 2018, p. 9).

Early childhood approaches must support parents and communities in their endeavors to help children obtain and retain cultural knowledge. A community’s beliefs and traditions must be explicit to develop effective early childhood programs. Therefore, community involvement in developing Indigenous early childhood educational approaches is imperative. Educators have to make continuous efforts to break the barriers that exist between schools and their communities to effectively provide culturally responsive education (Castagno et al., 2020).

The literature emphasizes the importance of integrating Indigenous practices and knowledge into preschool programs, highlighting family and community relationships and engagement as essential components of culturally responsive education. Understanding these elements informed the data gathering and analysis phase of this study.

### **Māori Indigenous Early Childhood Education**

Māori initiatives have been at the forefront of Indigenous early childhood education reform. In 1977, Kara Puketapu introduced the philosophy of Tū Tangata - Stand Tall, emphasizing



the importance of preserving the Māori language and culture (Rei & Hamon, 1993). Through this philosophy, policies developed from within the Māori community led to the formation of Te Kōhanga Reo (Whāriki, 2017). This initiative was in response to growing concerns over language preservation. Consequently, a series of tribal hui (gathering) produced the idea of Kōhanga Reo, or language nests (McDonald & May, 2018). Te Kōhanga Reo National Trust was formally established in 1983 to act as trustee of the Te Kōhanga Reo movement (McMillan, 2020). With a mission to protect te reo (Māori language), the organization builds participation of mokopuna (young children) and Whānau (family and community) in Kōhanga Reo schools (“About Te Kōhanga Reo National Trust Board,” n.d.).

In 1996, the New Zealand Ministry of Education published *Te Whāriki: He Whāriki māta uranga mō ngā mokopuna o Aotearoa - Early childhood curriculum*. The vision of the curriculum is for all children that grow up in New Zealand to be “competent and confident learners, strong in their identity, language and culture” (Whāriki, 2017, p. 2). The name of the curriculum, Te Whāriki (woven mat), symbolizes integration:

The Whāriki or woven mat is used in this document as a metaphor for the ECE curriculum, in which four curriculum principles are interwoven with five curriculum strands. Together, these principles and strands give expression to the vision for children that is at the heart of Te Whāriki. (Whāriki, 2017, p. 10)

The four principles are 1.) Whakamana (empowerment), 2.) Kotahitanga (holistic development), 3.) Whānau Tangata (family and community), and 4.) Ngā Hononga (relationships). These curriculum principles are interwoven with the five strands of 1.) Mana Atua (wellbeing), 2.) Mana Whenua (belonging), 3.) Mana Tangata (contribution), 4.) Mana Reo (communications), and 5.) Mana Aotūroa (exploration). These concepts and principles set a theoretical foundation for the Te Whāriki framework and will be instrumental in the comparative analysis presented in later chapters.

The curriculum is not bound by traditional subject matter, but rather, all the parts of the programs contribute to the whole (Mutch, 2004). The framework has a bicultural focus acknowledging that children learn in different ways and providing opportunities for adults in their lives to provide this individualized learning (Whāriki, 2017).

Although the new curriculum was widely accepted as bicultural, the implementation of the curriculum encountered obstacles, primarily stemming from the early childhood educators lacking experience and self-confidence to integrate te reo Māori (Māori language) and tikanga Māori (Māori ways of doing) into the daily routine of the students. Additionally, some teachers lacked the motivation and desire to incorporate bicultural elements, which further hindered the effective implementation of Te Whāriki as a truly bicultural curriculum (Meade, 1997; Williams et al., 2023).

A group of researchers studied the implementation of Te Whāriki prior to 2017. The study included 12 participants from six different early childcare settings, inclusive of teachers and administrators. Findings from the study identify planning and intentional teaching as challenging aspects of implementing the curriculum (Cameron et al., 2023). The Te Whāriki curriculum was updated in 2017 to reflect a robust approach to bicultural practice, emphasizing language, culture, and identity. The learner outcomes were condensed to streamline local curriculum design and allow educators to determine what was important (Education Review Office, 2018). The principles and strands were not altered and provided consistency between the versions. With the revision, two pathways were provided, one bicultural and the other Indigenous, each employing their own pedagogy. Neither document is translated to the other. The documents make it clear that neither pathway is valued over the other:

Te Whāriki: He whāriki mātauranga mō ngā mokopuna o Aotearoa early childhood curriculum is for use by all early childhood education services; Te Whāriki a te Kōhanga Reo is for use in all kōhanga reo affiliated to Te Kōhanga

Reo National Trust. Kōhanga reo kaiako and whānau will find the refreshed document exemplifies the authenticity of the kaupapa, te reo Māori me ōna tikanga, and provides guidance for kaiako to support implementation that strengthens Māori-medium pathways for learning. Those in ECE services will find a greater emphasis on language, culture and identity and increased guidance on what it means to weave a bicultural curriculum. (Whāriki, 2017, p. 69)

Te Whāriki a te Kōhanga Reo includes the same principles and strands as Te Whāriki: He whāriki mātauranga mō ngā mokopuna o Aotearoa. Te Whāriki a te Kōhanga Reo also incorporates “four dimensions of human development: tinana, hinengaro, wairua and whatumanawa” (Whāriki, 2017, p. 10). Te Kōhanga Reo provided critical support for continued education by laying the foundation of Māori language and culture, “sparked the evolution of kura kaupapa Māori and wharekura, the natural progression from early years to Māori-medium primary and secondary education” (Tamati, 2021, p. 26).

In a manner akin to the establishment of Te Kōhanga Reo in the Māori community, Mālamapōki‘i was founded on principles developed within the Indigenous community, responding to the urgent need for language and cultural preservation. This initiative was formalized with the establishment of governing bodies that ensure the implementation of culturally relevant educational practices. The Mālamapōki‘i mission focuses on fostering the participation of young children and their families, creating a supportive environment for cultural education. The challenges faced by early childhood educators in implementing a bicultural curriculum, as noted in studies on Te Whāriki, resonate with those encountered at Mālamapōki‘i. Educators often grapple with the braiding of Indigenous languages and cultural practices into daily routines, highlighting the need for ongoing professional development and motivation. The 2017 updated Te Whāriki curriculum, with its emphasis on robust bicultural practice and streamlined learner outcomes, offers a model for

Mālamapōki'i to study and determine what aspects might fit within the existing framework.

### **Aboriginal and Torres Strait Islander Indigenous Early Childhood Education**

Like Hawaiians, Aboriginal and Torres Strait Islander children in Australia rank behind non-Indigenous learners in many key areas:

It is well-established that Aboriginal and Torres Strait Islander children in Australia experience increased developmental risk factors and poorer health and social outcomes compared to non-Indigenous children, including being less likely to be enrolled in and attend preschool and more than twice as likely to be considered developmentally vulnerable upon school entry. Furthermore, Aboriginal and Torres Strait Islander children are also largely over-represented in the child protection, youth justice and homelessness systems. (D'Aprano et al., 2023, p.1)

National agreements prioritize early childhood education and secure a commitment to provide Indigenous students with culturally appropriate, high-quality educational opportunities (Australian Government Department of Education, 2022). In 2019, all Australian Education Ministers outlined a vision for education in Australia in The Alice Springs (Mparntwe) Education Declaration. Building on past declarations, the Alice Springs Declaration puts forward two goals:

Goal 1: The Australian education system promotes excellence and equity.

Goal 2: All young Australians become:

- confident and creative individuals
- successful lifelong learners
- active and informed members of the community.

Achieving these education goals is the responsibility of Australian Governments and the education community in partnership with young Australians, their families and carers and the broader community. (Council of

Australian Governments Education Council, 2019, p. 4)

The declaration outlines 11 action areas to achieve all Australian governments' commitment to working with Australian families and the educational community to achieve educational goals. Two of these action areas are of importance to my research study. The first is the action area of strengthening early childhood education. The early years of learning are acknowledged as the building blocks for learning throughout life, and high-quality early learning experiences correlate to positive outcomes throughout the educational journey. To meet the needs of all Australian families, the Australian Governments continue to establish access to quality early learning (Council of Australian Governments Education Council, 2019). The second action area is supporting Aboriginal and Torres Strait Islander learners to reach their full potential: "Aboriginal and Torres Strait Islander cultures, knowledge and experiences are fundamental to Australia's social, economic and cultural well-being" (Council of Australian Governments Education Council, 2019, p. 16). The declaration stresses the need to embrace Aboriginal and Torres Strait Islander cultural identities and provide safe learning environments. Aboriginal and Torres Strait Islander students, their families, and the larger community must be actively involved with the educational sector in all aspects of the educational process. Aboriginal and Torres Strait Islander peoples should be represented at all levels in the education workforce. Engagement with the Indigenous community must be:

based on the principles of shared decision-making, place-based responses and regional decision-making, evidence, evaluation and accountability, targeted investment, and integrated systems. Australian Governments commit to empowering Aboriginal and Torres Strait Islander students to reach their potential and to ensuring the education community works to 'close the gap' for young Aboriginal and Torres Strait Islander peoples. (Council of Australian Governments Education Council, 2019, p. 16)

In Australia, National agreements prioritize early childhood education and secure a commitment to provide Indigenous students with culturally appropriate, high-quality educational opportunities (Australian Government Department of Education, 2022). The emphasis on culturally appropriate education and the active involvement of Indigenous communities outlined in the Australian context provides a framework that influenced my research process, directing the focus of the evaluation process of the Indigenous practices Mālamapōki‘i. This approach ensures that my research remains focused on understanding how cultural practices are embedded in the Mālamapōki‘i framework.

An early learning framework focused on intentional teaching and play-based learning was published in 2009 by the Commonwealth of Australia (Grieshaber, 2010). The current update to the framework was published in 2022. The purpose of *Belonging, Being, & Becoming: The Early Years Learning Framework for Australia* is to “support early childhood providers, teachers, and educators to extend and enrich children’s learning from birth to 5 years and through the transition to school” (p. 4). The framework further states:

Fundamental to the Framework is a view of children’s lives as characterised by *belonging, being* and *becoming*. From before birth children are connected to family, communities, culture and place. Their earliest learning, development and wellbeing takes place through these relationships, particularly within families, who are children’s first and most influential educators. As children participate in everyday life, they construct their own identities and understandings of the world. Educators engage children in learning that promotes confidence, creativity and enables active citizenship. They celebrate diversity with children and their families, and the opportunities diversity brings to know more about the world. Educators understand children may come from diverse backgrounds and acknowledge this in each child’s *Belonging, Being and Becoming*. (Australian Government Department of Education, 2022, 6,

emphasis original)

While the framework clearly emphasizes the importance of Indigenous knowledge and perspective, including spirituality, in a child's education, the document lacks specific direction as to how educators can effectively implement these practices into the curriculum. Jan Grajczonek from Australian Catholic University points out that continuing opportunities for teachers to develop their cultural knowledge is imperative for the successful implementation of the cultural and spiritual aspects of the framework (Grajczonek, 2012).

The framework's guidelines and principles can be effective in creating a dynamic, successful learning environment for Indigenous children if the framework is implemented in a culturally sound way utilizing cultural knowledge systems. Case studies documented in *The Australian Journal of Indigenous Education* (2015) showcase the successful implementation of The Early Years Learning Framework for Australia in five remote Aboriginal communities in the Northern Territory in Australia (Buxton, 2015). The goal of this project was to enhance preschool-aged children's literacy and number skills. The project sought to improve the transition to formal schooling by incorporating Indigenous ways of knowing, being, and doing into the project. Central to the project design was the inclusion of community Elders in a pivotal decision-making role. The role of the Elders ensured that local knowledge and traditions were respected and used to actively shape the learning experiences designed for the children. At the conclusion of the project, the Elders maintained that as a result of participating in the project, the students felt more confident in school, with the "pre-reading skills and attitudes necessary to engage with teaching in the formal classroom" (Buxton, 2015, p. 6).

The success of any framework serving Indigenous students hinges on the quality of those implementing the programs. Kitson and Bowes (2010) point out the significance of Indigenous educators in the early childhood setting. These educators "help children feel welcome and valued. Indigenous staff teach children about specific cultural practices and

provide culturally desirable comfort and educated role models and communicate effectively with Indigenous families” (p. 86). The importance of relationships in Indigenous education cannot be overstated. Strong relationships between educators, students, families, and the community are fundamental to creating an inclusive and supportive learning environment:

A centre is culturally relevant when staff members understand cultural expectations, relationships and the subtleties of communication, including non-verbal communication. It may be that this is only possible for teachers who are members of or accepted by the local communities. (Kitson & Bowes, 2010, p. 86)

This emphasis on relationships complements my relational methodology, which centers on the interconnectedness of individuals, communities, and the environment. By evaluating Indigenous practices at Mālamapōki‘i through this relational lens, I was guided by the understanding that education is not just an academic endeavor but a deeply relational one. This approach allowed me to explore how relationships are nurtured and sustained within the educational framework, ensuring that my research honors the cultural values and practices that are integral to the community.

This review of literature on the Australian framework provides a valuable comparative perspective that enhances my research through the understanding of similar challenges in early childhood education faced by Hawaiian and Australian Indigenous communities. A review of the Australian framework underscores the importance of governmental support and national frameworks. This can serve as a point of advocacy in Hawai‘i to lobby for a standardized framework.

### **Indigenous Early Childhood Education in Hawai‘i**

Connections to our past have been frayed, and there is no longer one authentic way to be Hawaiian...So because there is no one way to be Hawaiian, we instead have various evolving, emerging versions. Hawaiians are stuck living in two



worlds, working out a new, modern, postcolonial version of being Hawaiian.

(Hewett, 1998, p.11)

Since there is no one authentic way to be Hawaiian, there cannot be only one authentic early childhood education framework and philosophy. A comprehensive investigation of available Indigenous early childhood education philosophies and frameworks was warranted to explore how Indigenous knowledge and practices manifest in teaching and learning in early childhood settings in Hawai‘i.

### **Culture-based Education**

It has been argued that culturally relevant education is critical to educational success. Educators must help students make connections to their communities and beyond. It requires students to engage in critical thinking connected to real-world experiences (S. Kana‘iaupuni, 2013).

The 2010 study *Hawaiian Cultural Influences in Education* provided quantitative evidence “indicating that culture-based educational strategies positively impact student outcomes, particularly Native Hawaiian student outcomes” (S. Kana‘iaupuni et al., 2010, p. 1). The study was led by Kamehameha Schools in collaboration with Hawaiian organizations, charter schools, and the Hawai‘i Department of Education. The study focused on the relationship between culture-based education practices and student outcomes. Data was collected from teachers, students, and schools and analyzed using multilevel analyses. Results show that students taught by teachers grounded in cultural practices report higher levels of academic achievement and stronger connections and engagement in their communities and schools (S. Kana‘iaupuni et al., 2010).

An ethnographic case study was conducted involving seven leaders from Hawaiian-focused charter schools in Hawai‘i. The leaders represented schools serving a preschool to 12th-grade population. The leaders emphasized that an environment steeped in Hawaiian culture and ancestral knowledge connects students to their roots and makes them feel safe,

promoting a sense of belonging. Recommendations from the study include providing opportunities for teachers to learn to integrate Hawaiian culture, knowledge systems, and language into academic studies and providing student-centered learning environments that include community engagement. It was also suggested that school leaders have opportunities to broaden their skills in teaching academic skills through Native Hawaiian knowledge systems (K. S. Wilson, 2023).

Culture-based education is not a one-size-fits-all solution. There are many ways to deliver culture-based education, including immersion programs where instruction is delivered exclusively in the Indigenous language and programs where culture and language are central to the mission and vision of the program while instruction is provided in both the Indigenous language and the majority language.

### **Hawaiian Medium Early Childhood Schools**

The Kumu Honua Maui Ola Educational Philosophy Statement deems language as fundamental to maintaining and strengthening maui, which loosely translates to culture. Maui holds a deeper meaning, however, encompassing “worldview spirituality, physical movement, morality, personal relationships, and other central features of a person’s life and the life of a people” (W. H. Wilson & Kamana, 2001, p. 175). The Kumu Honua Maui Ola Philosophy centers around Maui Hawai‘i:

the unique life force which is cultivated by, emanates from, and distinguishes a person who self-identifies as a Hawaiian. If tended properly, this maui, like a well-tended fire, can burn brightly. If not, like a neglected fire, it can die out. Four major elements of an individual’s life-giving maui are identified in relationship to the parts of the body where they are tended. (‘Aha Pūnana Leo, 2009, p. 17)

The second element highlights the importance of language:

Ka ‘Ao‘ao ‘ōlelo – the language element found in the ears, the mouth, and the

tongue. Language can be used in many different ways and may be soft, rough, gentle, harsh, forthright, or secretive, but perhaps its greatest strength lies in its ability to transmit Maui to future generations. (‘Aha Pūnana Leo, 2009, p. 17)

Wilson (2001) attributes the language shift from Hawaiian to English to the forced closing of Hawaiian-medium schools at the turn of the twentieth century. Hawaiians fought to maintain the language through Hawaiian-medium Sunday Schools and Hawaiian-language Newspapers. Hawaiians are not alone in this plight. Romero-Little (2010) asserts that Pueblo leaders attribute Indigenous language loss by children to the implementation of Head Start preschool programs where English had a detrimental effect on their Native language, citing an example shared by a Pueblo grandfather about his grandson’s experience:

We spoke to him only in Keres at home and he was speaking it well. But then he went to Head Start. The first day he came back and told us in imperfect English, “Don’t speaky to me that way [Keres], speaky me Ing-gles.” “That little rascal didn’t want us to speak in Keres to him anymore!” (J.H. Suina, personal communication, 2010; Romero-Little, 2010, p. 12)

It is important that early learning centers prepare children to navigate the system they will enter after preschool. However, this must be done without deterring the child from learning and practicing their own culture. Relationality is an essential aspect of Indigenous life. Relationship building with Indigenous communities and not just parents is essential in creating an educational environment where children can embrace their culture and achieve academic outcomes (Bang et al., 2018). This perspective will guide observations conducted as part of this study.

There has been a renaissance of Indigenous language and culture in many Indigenous communities. In Hawai‘i, there is a movement to establish and expand Hawaiian-medium programs to include preschool through graduate studies (W. H. Wilson & Kamana, 2001). The population of native speakers of Hawaiian reached an alarming state in the early 1980s,

“with fewer than 50 native speakers of Hawaiian under the age of 18” (Kawai‘ae‘a et al., 2007, p. 183).

In 1982, the Hawai‘i Superintendent of Schools tried to exert control over the Hawaiian medium school on the island of Ni‘ihau, a small privately owned island just over 42 miles off the coast of Kaua‘i. The entire population of Ni‘ihau are native speakers. The teachers are all Native Hawaiian speakers from the community and “represent Hawai‘i’s last un- broken, viable Native Hawaiian language link to time immemorial” (Kimura, 2010, p. 42). The superintendent mandated that the Kaua‘i district office develop a plan to restructure the Ni‘ihau school. The head of the Hawaiian Studies Department at the University of Hawai‘i, Hilo, Dr. William (Pila) Wilson, proposed a plan to address the superintendent’s concerns. The plan would allow the school to be a Hawaiian medium school, arguing that the Ni‘ihau community had been conducting their lives through the Hawaiian language for thousands of years (Kawai‘ae‘a et al., 2007; W. H. Wilson & Kamana, 2001). The Hawai‘i Board of Education approved the Hawaiian language as an instruction medium for schools. However, it was at that time that the law forbidding education through the Hawaiian language was discovered. In January 1983, a grassroots organization was formed. ‘Āha Pūnana Leo, Inc. was dedicated to revitalizing the Hawaiian language. Despite the law forbidding the Hawaiian language as a medium for instruction, in 1984, Pūnana Leo opened its first Hawaiian-medium preschool in Kekaha, Kaua‘i. The name Pūnana Leo was chosen in honor of the work done in New Zealand that the Hawaiian program was modeled after. The name means language nest gathering. While the Mālamapōki‘i framework is not a Hawaiian-medium program, further research into the philosophies espoused by ‘Āha Pūnana Leo will be beneficial in identifying attributes of an Indigenous early childhood education framework.

The fight for Hawaiian education continued. In 1984, House Bill 2155 and Senate Bill 1938 were submitted in an attempt to allow Hawaiian language as a medium of

education. These bills did not pass. State Senators Clayton Hee and Charles Toguchi introduced Senate Bill 2463-86 to amend Act 47 to once again allow the Hawaiian Language to be used as a medium of education for Hawai‘i public schools. The bill passed on April 17, 1986 (Kawai‘ae‘a et al., 2007; Kimura, 2010; W. H. Wilson & Kamana, 2001).

‘Āha Pūnana Leo continues to serve the Hawaiian community. By 2018, they had served 6000 alumni in their Pūnana Leo preschool programs and Hi‘ipepe Infant Program. In 2023, they celebrated their 40th anniversary. With the introduction of the Niuolahiki Distance Learning Program, they serve students in Hawai‘i and around the world.

The history of Hawaiian Medium Early Childhood Schools is highly relevant to my research. The struggles faced by Hawaiian-medium schools highlight the broader issue of Indigenous language loss due to colonization and educational policies that favor the English language over Indigenous languages. These challenges provide valuable insights into effective strategies for integrating Indigenous practices into early childhood education, which is central to my research.

### **Culture-based non-Hawaiian Medium Early Childhood Schools**

Many Hawaiian-focused schools do not deliver all instruction in the Hawaiian language. Nevertheless, these schools are culture-based and serve large numbers of Hawaiian students. Culture-based education looks different in each community; however, these schools share grounding cultural values and practices. As part of a Kamehameha Schools research study, Hawaiian Cultural Influences in Education (HCIE), culture-based education is defined as “the grounding of instruction and student learning in the values, norms, knowledge, beliefs, practices, experiences, places, and language that are the foundation of a cultural group” (S. Kana‘iaupuni et al., 2010, p. 4). In the HCIE study, seven culturally relevant strategies used as best practices by teachers are identified (see Table 3.1; S. Kana‘iaupuni et al., 2010, p. 10).

Table 3.1: Culturally Relevant Strategies

Theme	Description	Best Practice
Pilina ‘Ohana	Family integration where parents are seen as a child’s first teachers	Active participation of family members in educational activities
Pilina Kaiāulu	Community integration informed by a Hawaiian sense of place	Using the community as a setting for student learning
Haku	Original compositions imbued with a person’s experience and spirit	Rigorous assessments accounting for a range of competency and skills
Hō‘ike	Performances requiring multilevel demonstrations of knowledge and/or skills	Rigorous assessments accounting for a range of competency and skills
Mālama ‘Āina	Land stewardship focusing on sustainability and a familial connection	Place-based and service-learning projects promoting community well-being
Kōkua Kaiāulu	Community responsibility embodying the Hawaiian value of lōkahi (unity, balance)	Place-based and service-learning projects promoting community well-being
Ola Pono	Values and life skills that synthesize Hawaiian and global perspectives	Career planning and preparation for global citizenship

Moreover, ‘Ohana engagement and practices play a vital role in Indigenous education. Research presented by Kana‘iaupuni and Else (2005) found that Hawaiian naming traditions contribute to a child’s well-being and success. They stated:

In this paper, we examine early influences of culture on child achievements. We focus on the effects of culture in the home environment on young children’s adaptation and school readiness. Specifically, we examine the cultural inputs of parents or primary caregivers – their practices, beliefs and knowledge, on the development of young children. We argue that cultural activities and participation can form an important mechanism for parent-child interaction and

learning that enhance the early educational experiences of children.

(Kana'iaupuni & Else, 2005, p. 3)

The findings from this analysis highlight the significance of parents or caregivers teaching their children about their Hawaiian names; for young children, this teaching is their introduction to their mo'okū'auhau, which shapes their identity and accompanies them throughout their lives. Additionally, Kana'iaupuni and Else (2005) suggest:

Within this context, naming may provide an important, culturally relevant teaching vehicle for parents and children to interact and engage with each other in ways that involve storytelling, history, oral pronunciation, and verbal reasoning. The end result suggested in this analysis is enhanced parental involvement and early learning opportunities for children through culture.

(Kana'iaupuni & Else, 2005, p. 19)

The findings from the Kana'iaupuni and Else (2005) study guided the formation of questions used in my 'Ohana Data Set. Questions inquiring about the naming practices of Mālamapōki'i families and the prevalence of teaching through storytelling were included in the survey to discover if and how these cultural practices are integrated into family life and passed down from one generation to another.

Culture-based non-Hawaiian medium early childhood schools play a crucial role in preserving and transmitting Hawaiian cultural values and practices. By actively involving parents and leveraging culturally significant traditions, language, places, and best practices, these schools foster a deep sense of identity and community and perpetuate Hawaiian ways of knowing. As Mālamapōki'i is a culture-based, non-Hawaiian medium school, this overview of culture-based education provided a foundational starting point for studying the Indigenous practices at Mālamapōki'i.

## **Chapter Summary**

The focus of this chapter centered on Indigenous philosophies and frameworks, providing a

background on the efforts to reclaim Indigenous education rights. The detrimental impacts of colonization are highlighted. The Coolangatta Statement and the Declaration of Indigenous Youth are cited as evidence that progress is being made. Early childhood philosophies and frameworks from Aotearoa, Australia, and Hawai‘i are explored. Challenges common to Indigenous frameworks centered around the need for ongoing professional development for teachers and the difficulty in braiding cultural practices into the daily routine. Both challenges surfaced in the data and are discussed more in Chapter Five.

Several common elements emerged from the literature: relationality and interconnectedness, cultural relevance, holistic development, and language preservation. The importance of relationships and interconnections resonates in the frameworks from New Zealand, Australia, and Hawaii. Relationships are prioritized by Indigenous approaches and include interactions between the teachers, students, parents, the community, and the ‘āina. The relational nature of these frameworks aligns closely with my *Braiding the Ropes of Pilina* methodology.

Cultural relevance was emphasized in frameworks from all three countries, with the inclusion of cultural practices, language, and community engagement deemed essential for providing a culturally grounded education. The involvement of elders was highlighted as crucial for passing cultural knowledge to the next generation. This connection between education and cultural relevance ensures that the educational experience is deeply rooted in the identity and values of the community.

Another common element in the Indigenous frameworks studied is their consistent aim for the holistic development of children. This holistic approach is evident in the Māori concept of Te Whāriki and the Hawaiian education philosophies which emphasize the braiding of mind, body, and spirit in learning. The Australian framework, *Belonging, Being, & Becoming*, similarly supports this holistic model by stressing a child’s overall well-being.



In a 2015 radio interview, Edward Doolittle asserted, “Culture is carried by the language” (*Without language, there is no culture. And aboriginal languages are in danger of dying.*, 2015). The importance of language as a carrier of cultural knowledge was emphasized by all three cultures. Whether it is through an Indigenous language medium education or integrated in a bilingual culture-based school, language plays an important role in delivering quality culturally infused education.

Chapter Four expands the frameworks to include assessment in Indigenous early childhood settings, exploring methodologies and tools used to evaluate the effectiveness of Indigenous frameworks. It delves into the tools used in Indigenous early childhood programs in New Zealand, Australia, and Hawai‘i. This chapter highlights the importance of culturally responsive assessment strategies that support the holistic development of Indigenous children.

## Chapter 4

### ECE Indigenous Assessment Models

‘E lawe i ke a‘o Mālama, a e ‘oi mau ka na‘auao.

He who takes his teachings and applies them increases his knowledge.”

(Pukui, 1983, p. 94).



Figure 4.1: *Mālamapōki 'i Hula Drama Hō 'ike*. De Aguiar (2024).

The previous chapter delved into the rich tapestry of Indigenous philosophies and frameworks that underpin Early Childhood Education. Building upon this foundation, Chapter Four explores the available literature on assessment practices, specifically within the context of Indigenous early childhood education programs in New Zealand, Australia, and Hawai‘i. Adding to the discussion on reclaiming Indigenous education in Chapter Three, which outlines the oppression that led to the revitalization of the Hawaiian language and the demand for cultural-based education in Hawai‘i schools, this chapter delves into Western influences on Indigenous assessment in an early childhood context. Next, the chapter examines culturally responsive assessments and standards, specifically in New Zealand, Australia, and Hawai‘i for the reasons discussed in Chapter Three.

Through this literature review, I developed a clear understanding of the Indigenous assessment models available in New Zealand, Australia, and Hawai‘i. I noticed that many concepts overlap between countries. Some of these common threads are used in the analysis

of the findings in Chapter Six.

### **Historical Context and Background of Assessment in Early Childhood Education**

Before colonization, Indigenous communities worldwide had deeply rooted cultural systems of education and assessment. These systems were often informal and centered around daily life, making them relevant to the learner and helpful in reinforcing community responsibility. Oral storytelling and songs were the primary way of passing knowledge from one generation to another (Cajete, 1994; Kamehameha Schools, n.d.; S. Kana'iaupuni et al., 2021). These traditional education methods were flexible and tailored to the learner's needs. As Kana'iaupuni (2021) explains:

Before Western contact, Native Hawaiians had a complex social class structure that governed economic, political, religious, cultural, and educational systems. Learners were schooled through a philosophy of “learning by doing,” which valued cultural knowledge in areas such as history, medicine, farming, navigation, fishing, hula, and genealogy. (p. 16)

This learning-by-doing philosophy shows the experiential nature of Indigenous education, where learning is embedded in daily practical and cultural activities. Through these activities, learners developed a deep connection to their heritage and community. This way of learning preserved cultural knowledge and made it relevant and applicable to daily life. Assessment in this context was naturally part of the learning process, focusing on the learner's ability to apply knowledge and skills in real-life situations, not through formal testing.

### **Colonial Influence and Western Education**

Historically, research and evaluation practices have significantly harmed Indigenous communities by discounting their values, history, and cultural ways of knowing (Meyer, 2003; L. T. Smith, 2021). Māori children were regarded as developmentally deficient and intellectually retarded. As Lesley Rameka (2021) asserts, “Traditional western assessment

served to further these Eurocentric power ideologies that marginalize non-European peoples and cultures, such as Māori, as backward, inferior, and deviant” (p. 1). In some communities, the belief that Indigenous people were inferior led to residential schools. Hawaiian ways of learning and knowing were eradicated with Western occupation and colonization. Hawaiian systems were replaced by Western systems with the goal of assimilation (S. Kana‘iaupuni et al., 2021).

### **Culturally Responsive Assessment**

The assessment models adopted by evaluators of Indigenous programs should be based on their way of life, beliefs, and experiences. These methods support the sovereignty and self-determination of Indigenous communities in that they recognize their right to perpetuate lifestyles, bodies of knowledge, and decision-making systems. Indigenous assessment approaches prefer the thoughts and opinions of community members, with an expectation that they participate actively in shaping the process. To ensure cultural responsiveness, respect, and value alignment with diverse stakeholders, including intended beneficiaries, there must be a sense of pili (closeness) between the evaluation practitioners and those being assessed or evaluated (“Evaluation With Aloha,” 2019). Assessment in Indigenous Early Childhood Education Programs provides a lens to determine if programs are culturally responsive and aligned with the Indigenous philosophies, values, and ways of knowing, aligning with the organization’s mission and vision.

### **Indigenous Standards and Best Practices**

Using authentic, reliable standards to evaluate the Mālamapōki‘i framework is essential to this research. Current early childhood education practices are often guided by Developmentally Appropriate Practice as outlined by the National Association for the Education of Young Children (NAEYC). The original position statement on developmentally appropriate practice was developed in the mid-1980s. The NAEYC National Governing Board adopted the current statement in April 2020.

Goldstein and Andrews (2004) argue that NAEYC developed these “best practices” with non-Indigenous children in mind and suggest that these guidelines are not necessarily best for Native Hawaiian children. Their study examines a kindergarten teacher’s practice from the perspective of Developmentally Appropriate Practice and Nā Honua Maui Ola Guidelines for Culturally Healthy and Responsive Learning Environments. Their findings indicate that Developmentally Appropriate Practice guidelines’ emphasis on the individual can create problems for Hawaiian children where family and community are central to well-being (Goldstein & Andrews, 2004).

As a note to their position statement, the National Association for the Education of Young Children acknowledges that their statement was guided by research and evidence that indicates culture matters in early childhood education. However, little research has been conducted with children other than white, middle-class children, suggesting there is a need for additional research (National Association for the Education of Young Children, 2020).

The use of best practices developed from a Western framework, such as those outlined by the NAEYC, often falls short in addressing Indigenous communities’ unique cultural contexts and values. This disparity underscores the necessity for Indigenous-specific assessment strategies that honor and incorporate Indigenous knowledge systems and cultural practices. The following sections describe how New Zealand, Australia, and Hawaii assessments are designed and implemented to support Indigenous values and educational goals.

### **Early Childhood Education Assessment in New Zealand**

In traditional Māori assessment, learning was assessed within the community through the enthusiasm and support received from those in the community who were stakeholders in the students’ learning. Knowledge development was shown through the many opportunities at Māori cultural events for learners to showcase their learning:

Kaupapa (philosophical) Māori assessment can be viewed as an assessment

approach that is derived from the Māori world, from a Māori epistemological perspective that assumes the normalcy of Māori values, understandings, and behaviors. The validity and legitimacy of Māori language, cultural capital, values and knowledge are a given. Kaupapa Māori assessment works to challenge, critique and transform dominant educational perceptions of the Māori child, the nature of learning, pedagogy, and culturally valued learning. (L. K. Rameka, 2021, p. 1)

This approach to assessment is based on Kaupapa Māori theory, which “attempts to provide a space outside assimilation, acculturation, exploitation, domination of Māori by Pākehā and Pākehā knowledge hegemony” (Wiremu, 2019, p. 405). It validates Māori cultural values and knowledge while actively working to reshape the educational landscape to better align with a Māori worldview. The Te Whatu Pōkeka: Kaupapa Māori Learning and Assessment Exemplar Project was conceived within this transformative framework. This kaupapa Māori assessment model challenges Western thinking in the assessment of Māori programs and children. This model provides a lens to evaluate the early learning framework at Mālamapōki‘i and prompted me to reflect on my observations and led me to select specific cultural activities and events for my observations. In this way, the study aims to mitigate the influences of the dominant educational constraints by ensuring the observations focus on culturally significant practices. This approach allows for a holistic view of how Indigenous practices are integrated at Mālamapōki‘i.

### **Te Whatu Pōkeka: Kaupapa Māori Learning and Assessment Exemplar Project**

In 2003, a small group of kaupapa Māori from whānau-centered (family/community-centered) programs met to develop the Te Whatu Pōkeka: Kaupapa Māori Learning and Assessment Exemplar Project. Over the next several years, the project was completed. The Te Whatu Pōkeka assessment framework considers broad assessment goals while focusing more specifically on goals of education for Māori. Consequently, this assessment model is

designed to be positive, building on children's strengths and interests while facilitating on-going learning for each child. It aims to strengthen the place of Māori in the world, encompassing all dimensions of children's learning, including te taha tinana (physical well-being), hinengaro (mental and emotional well-being), wairua (spiritual, a living soul), and whatu- manawa (seat of emotions, heart, mind). The framework provides information to teachers that facilitates program improvement for Māori children. Whānau are actively involved; the model acknowledges experiences beyond the center's walls, understanding both the learning occurring and the cultural and historical backgrounds of the children (New Zealand Ministry of Education, 2009).

Although each of the five participating centers had its own unique philosophies and distinctive programs, there were clear links to the unified principles of the project. The project's main objective was the cultural braiding of Māori practices, values, and knowledge into the learning and assessment framework. Reflection was vital to the project; educators were encouraged to reflect on how their assessment methods incorporated Māori ways of knowing. Documentation practices complemented the reflection practices as educators articulated their understanding of cultural practices in developing assessment models. Key components of the project included the development of assessment frameworks, professional development for participating educators to enhance their cultural understanding, and community involvement to foster strong connections between the schools, families, and the community. The project promoted holistic assessment practices considering the child's overall development and well-being:

Kaupapa Māori assessment cannot be restricted to the individual child within the early childhood centre context but must be viewed through the lens of whānau, hapū, and iwi. Whānau are intrinsically involved in the child's learning and therefore must be intimately involved in the assessment process of Te Whatu Pōkeka. Embedded within the notion of Whānau are concepts of rights

and responsibilities, obligations and commitments, and a sense of identity and belonging. The role of kaiako as the expert, with the power to judge and classify children, must be redefined as that of a contributing Whānau member. Teaching and assessment must be perceived and recognised as a collaborative activity where Whānau and kaiako both have a valued contribution. (New Zealand. Ministry of Education, 2009, p. 54)

Kaupapa Māori assessment challenges traditional Western notions, which often focus on individual children in isolation. From a Kaupapa Māori perspective, a more holistic and community-oriented approach is called for. This collaboration between kaiako (teachers) and whānau ensures that assessment practices are culturally responsive and reflect the collective aspirations and values of Māori communities. This focus on the whole rather than the individual prompted me to change my classroom observations to whole-class observations rather than the observation of individual keiki as I originally planned.

### **The Best of Both Worlds Preschool**

Driven by frustration over the rate of Māori educational underachievement, the Best of Both Worlds Bilingual Preschool was established to provide academic support for Māori children. The school, located in Papakura, South Auckland, serviced a population of mostly Māori and other Pacific Islands families predominantly from low socio-economic communities (“Best of Both Worlds,” 2015): “They believed that by exposing children to the ‘best of both worlds,’ including all aspects of Māori worlds and western worlds, children would be better prepared to succeed in the education system, or in spite of the education system” (L. Rameka, 2010, p. 1). In its early stages, the Best of Both Worlds Bilingual Preschool primarily utilized assessment approaches adapted from other centers. These assessments did little to capture children’s learning and mainly served to show compliance with outside agency requirements. The center participated in two projects funded by the Ministry of Education. In 2002, the Kei Tua o te Pae project aimed to support teachers in developing



quality assessment and learning practices. Participants reflected that participation in the Kei Tua o te Pae felt like conforming to existing practices and guidelines rather than creating tools that reflected what was important to them. In 2003, the center participated in Te Whatu Pōkeka: Kaupapa Māori Learning and Assessment Exemplar Project, another project funded by the Ministry of Education (L. Rameka, 2010). Their participation in the project allowed the Best of Both Worlds Preschool to refine its kaupapa and the practical implementation of Māori customs. Through this, educators could articulate their understanding of kaupapa Māori early childhood education and assessment.

Best of Both Worlds explored several assessment frameworks, with strong Māori foundations as part of the project. They determined that pūrākau (traditional Māori narratives) can provide culturally authentic behavior models:

Traditional Māori narratives are rhetorical in that the telling is a means of preserving moral and historical messages and values. They are part of Māori symbolism, culture and world views, and include philosophical understandings and thinking, cultural norms, and behaviours fundamental to Māori views of self and identity. (L. Rameka, 2016, p. 392)

Eventually, the Māui-tikitiki-a-Taranga narrative emerged as the focal point for developing the center's assessment framework. Māui was a mentor and inspiration for the center. His characteristics flowed naturally into an assessment model (L. K. Rameka, 2021). The Best of Both Worlds framework is built around eight facets of Māui's character:

- Mana: identity – pride – inner strength
- Manaakitanga/aroha: caring – sharing – kindness – supporting others – being a friend
- Whakakata: humour – fun
- Tinihanga/whakatoi: cunning – trickery – cheekiness

- Pātaitai/kaitoro: testing – challenging – questioning – curiosity – exploring – risk-taking
- Arahina/māiatanga: confidence – self-reliance – leadership – perseverance – self-assurance
- Māramatanga: developing understandings – working through difficulty – lateral thinking
- Ngā hononga: tuakana–teina – ako – whanaungatanga (New Zealand.

Ministry of Education, 2009, p. 60)

The Māui-narrative-inspired assessment framework developed by The Best of Both Worlds Preschool provides a compelling example of culturally grounded narratives woven into early childhood education assessment frameworks. Their framework highlights the potential for traditional stories to be foundational in assessment practices. Although the assessment model at Mālamapōki‘i does not include mo‘olelo (Hawaiian traditional stories), the influence of Māui permeates Mālamapōki‘i and the broader K-12 community, as acts of Māui’s heroism are observed on campus:

These animations remind me of “Maui, the Hawaiian Supah Man” song. In Braddah Iz’s version, we learn a few things about the kupua Maui, who had the ability and skill to utilize the power of the seasons and the sun’s movements to increase his knowledge and intellect of the earth. Through the verses of the song, we hear: Maui was mischievous, he fished the islands out of the sea, he made an aho niu (kula) that he used to slow down the sun so that his mother’s kapa could dry, and he brought warmth to the people by capturing the ‘alae and forcing the secret of fire from her. Like Maui, we can develop and build our relationship with the environment around us so that she can help us reach our

most significant potential. Like you and me, Maui weathered personal and physical challenges. He had to make individual adjustments and sacrifices when things didn't always go his way. Like you and me, he evaluated the relationships he valued and worked hard to maintain them. As I walk around campus, I am grateful for the acts of Maui's heroism I see. It comes in the form of our Mālamapōki'i as they stretch and bend their minds to understand its atmosphere and movement. It comes in the form of Papa 'Ie'ie as they work hard to improve the practice of writing detailed sentences. I see it in Hui Me Kāleo Ho'okupu as they lay out their documentation process that will tell our new story that we describe this coming year. Lastly, for now, we all witnessed it as we watched our graduating class of 2023 come together and plan to show their love and support for our founding 'ohana, the kūpuna, and the many families that call Waipi'o home. Let us answer the call of the sun. Let us move like him and mimic his fluidity so that we, too, can develop and build our relationships with the environment around us so that she can help us reach our most significant potential. E Kū Ha'aheo kakou!!! (Bertelmann, 2022, p. 2)

This practice of using mo'olelo like the story of Māui is discussed further in the recommendations chapter. The literature on using traditional stories, or mo'olelo, as a framework for assessment in early childhood education, is notably sparse, particularly within the context of Hawaiian educational systems. While there is evidence of using mo'olelo to communicate assessment findings (A. J. Kawakami et al., 2007) and teach cultural practices and values (Taira & Maunakea, 2023), the practice of mo'olelo as an assessment framework has not been widely explored or documented as a formal assessment framework in Hawai'i. Another implementation of the Māui narrative, however, was uncovered in the literature review. Fujikane (2016) contends that using the Māui Mo'olelo

in research practices challenges Western practices and helps decolonize research. Although a comprehensive dive into the topic of mo‘olelo as an assessment framework is beyond the scope of this current research, it highlights a significant opportunity for further investigation.

### **Te Whāriki Assessment Indicators**

Te Ara Poutama is a framework designed by the Education Review Office under the Ministry of Education. This framework draws on research indicating effective early childhood education practices. The Education Review Office expects this framework to guide planning and improvement at center-based early childhood education facilities. The framework closely aligns with New Zealand’s Te Whāriki curriculum (Education Review Office, 2020). The framework encompasses two types of indicators: outcome and process. The outcome indicators are closely tied to the Te Whāriki learning outcomes and offer flexibility for each center to adapt the framework to their community needs. The Ministry of Education published a series of books highlighting exemplars of assessments documented through narrative methods and portfolios (Dreaver et al., 2007b). The exemplars present learning stories that provide narratives illustrating a child’s growth and learning. Follow-up questions give practical insight into the process and how it documents learning. An example of an exemplar documented in the Exploration book is presented here to illustrate the level of detail and depth of the analysis of the learning stories, providing a comprehensive understanding of student progress and development through meticulously narrated and contextualized observations:

**Exploration through play - Negotiations during block work.** Hannah and Charlotte and Rebecca were working on really complex block structures. Other resources were being added such as cars and wooden people. Hannah sorted through all the people and chose the girls to put on her work. Charlotte also went to put some of the people on her structure but noticed that Hannah had taken most of the

girls. Hannah counted hers and told them that she had 6. Charlotte and Rebecca found they had only 2 each. Everyone counted Hannah's. Charlotte then told me that it wasn't fair that Hannah had most of the girls. Hannah told me that she wanted all the girls. They sorted out what was left and could not find any more girls in the basket. Charlotte and Rebecca then suggested a "swap." The children then swapped people until everyone was satisfied.

**What learning was going on here?** I was really interested in the complexity of the block structures, but then I became more interested in how the children were going to sort out the minor problem of not having what they each wanted. Although they told me their problem, I did not want to sort it out for them, as I knew that they were capable of working through this situation themselves. And I was right! I think that children often do a better job of conflict resolution than we as teachers ever can, and I am reminded of this nearly every day. Charlotte and Rebecca and Hannah worked out a satisfactory resolution to their problem, one where each still had something they wanted. They had negotiated a good result. I think they are great role models to be able to do this.

**What's happening here?** Three children are each building their own block structure, complete with cars and wooden people. The children need to work out a satisfactory way of distributing the available girl figures between them.

**What does this assessment tell us about the learning (using an Exploration/Mana Aotearoa lens)?** This is an example of three children negotiating and compromising as they work alongside each other. It is a common occurrence in play in an early childhood centre that there are not enough resources to go around when several children want to play at the same activity. In this case, Charlotte and Rebecca solve the problem by suggesting a "swap," and they allocate the valued figures to everyone's satisfaction.

**How might this documented assessment contribute to Exploration/Mana Aotearoa?** This assessment highlights and documents the process of conflict resolution and negotiation. The teacher comments that the three children are “great role models.” The documentation becomes a public document that can be referred to by teachers and children on other occasions when things are “not fair.”

**What other strands of Te Whāriki are exemplified here?** Equitable opportunities are a goal in the Contribution/Mana Tangata strand of Te Whāriki, and aspects of fairness are also a dimension of that strand. The children count the block people in order to establish whether they have been allocated evenly; this stratagem demonstrates a meaningful and purposeful use of numbers, which is a feature of the Communication/Mana Reo strand (Dreaver et al., 2007a, p. 6)

The relevance of this example to my research is significant. Despite extensive literature review on Indigenous assessment models in Hawaiian education, there is a notable lack of documented frameworks that use such detailed and comprehensive exemplars for assessment purposes. The detailed observation and analysis presented in this example from the Exploration book underscore the potential for similar methodologies to be developed and applied within Hawaiian educational contexts. By documenting children’s interactions and problem-solving strategies in such a detailed manner, educators can gain a deeper understanding of student progress and development, which is currently missing in existing frameworks in Hawai‘i. The example is from the Exploration (Mana aotūroa) outcome; below is a summary of all five outcomes.

The five learning outcomes are:

- Wellbeing (Mana atua)

- Keeping themselves healthy and caring for themselves (te oranga nui)
- Managing themselves and expressing their feelings and needs (te whakahua whakaaro)
- Keeping themselves and others safe from harm (te noho haumaruru)
- Belonging (Mana whenua)
  - Making connections between people, places and things in their world (te waihanga hononga)
  - Taking part in caring for this place (te manaaki i te taiao)
  - Understanding how things work here and adapting to change (te mārama ki te āhua o ngā whakahaere me te mōhio ki te panoni)
  - Showing respect for kaupapa, rules and the rights of others (te mahi whakaute)
- Contribution (Mana tangata)
  - Treating others fairly and including them in play (te ngākau makuru)
  - Recognising and appreciating their own ability to learn (te rangatiratanga)
  - Using a range of strategies and skills to play and learn with others (te ngākau aroha)
- Communication (Mana reo)
  - Using gesture and movement to express themselves (he kōrero ātinana)
  - Understanding oral language and using it for a range of purposes (he kōrero ā-waha)
  - Enjoying hearing stories and retelling and creating them (he kōrero paki)
  - Recognising print symbols and concepts and using them with

enjoyment, meaning and purpose (he kōrero tuhituhi)

- Recognising mathematical symbols and concepts and using them with enjoyment, meaning and purpose (he kōrero pāngarau)
- Expressing their feelings and ideas using a range of materials and modes (he kō auaha)
- Exploration (Mana aotūroa) Playing, imagining, inventing and experimenting (te whakaaro me te tūhurahura i te pūtaiao)
- Moving confidently and challenging themselves physically (te wero ā-tinana)
- Using a range of strategies for reasoning and problem-solving (te hīraurau hopanga)
- Making sense of their worlds by generating and refining working theories (te rangahau me te mtauranga) (Whāriki, 2017, pp. 24–25).

The process indicators are organized into five domains to assess the quality of early childhood education. The first domain, He Whāriki Motuhaka - The learner and their learning, focuses on fostering play-based contexts supported by caring partnerships; incorporating the identities, languages, and cultures of children, parents, and whānau; ensuring equitable learning opportunities through a responsive curriculum aligned with Te Whāriki; valuing and integrating Te reo Māori and tikanga Māori; employing intentional and culturally responsive pedagogy; and enhancing children's mana and learner identities through effective assessment practices (Education Review Office, 2020). This domain is evident in my study through data collection methods such as keiki kilo journals and mo'oki'i activities that captured how cultural elements and 'ōlelo Hawai'i are interwoven into daily practices at Mālamapōki'i.

The Whakangungu Ngaio - Collaborative Professional Learning and Development Builds Knowledge and Capability centers on supporting children's learning and



development through leaders, kaiako, and others with culturally relevant knowledge and expertise. It emphasizes leaders and kaiako working collaboratively to develop professional knowledge and expertise to design and implement a responsive and rich curriculum for all children. Children's learning is further enhanced by leaders and kaiako engaging in professional learning and development opportunities that contribute to ongoing and sustained improvement and by working as a professional learning community (Education Review Office, 2020). In theory, this domain is supported by Mālamapōki'i, however, in practice, it surfaced as one that could be strengthened at Mālamapōki'i, as kumu identified a lack of cultural knowledge as a barrier to integrating cultural practices.

The domain of Ngā Aronga Whai Hua - Evaluation for Improvement emphasizes creating coherent organizational conditions that enable managers, leaders, and kaiako to conduct and utilize evaluation for improvement and innovation. It focuses on building capability and collective capacity to use evaluation, inquiry, and knowledge building to sustain improvement and innovation. Additionally, it highlights the importance of engaging in deliberate, systematic internal evaluation processes and reasoning to promote valued outcomes for all children (Education Review Office, 2020). This domain is not fully realized in the current framework at Mālamapōki'i and warrants further study. Including a systematic approach to assessment could lead to data-driven decisions made to inform change and could lead to more culturally responsive outcomes for the keiki.

The Kaihautū - Leadership Fosters Collaboration and Improvement domain addresses the collaborative development and enactment of the service's philosophy, vision, goals, and priorities, recognizing te Tiriti o Waitangi / the Treaty of Waitangi as foundational. It emphasizes the importance of relational trust for enabling collaboration and sustained improvement. Leaders ensure access to professional learning and development to build capability and effectively plan, coordinate, and evaluate curriculum, teaching, and learning to promote equitable outcomes for all children. They also develop, implement, and

evaluate systems, processes, and practices that promote ongoing improvement (Education Review Office, 2020). These guidelines bring focus to leadership more than previous indicators have: “By making leadership practice explicit, the guidelines provide direction on how leaders can ensure their practices focus on what is most important for high-quality early childhood education in Aotearoa New Zealand” (Thornton, 2021, p. 2). I feel that this domain is important to the continued growth of Mālamapōki‘i. The data shows that kumu and po‘okumu collaborate to maintain the cultural vision of the school. However, the formal planning, coordinating, and evaluation of the curriculum is not evident in the Mālamapōki‘i framework.

The final domain, Te Whakaruruhau - Stewardship Through Effective Governance and Management, highlights that the learning and well-being of children are the primary considerations in decision-making. It emphasizes that children’s learning and development are supported through responsive partnerships, including networked relationships between services, agencies, and the wider community. Additionally, it underscores outcomes for children and their Whānau are promoted by effective systems, processes, and internal evaluation (Education Review Office, 2020). I see this domain manifested at Mālamapōki‘i in many ways. The decision to include the daily piko ceremony and the incorporation of mo‘olelo, oli, mele, and hula signifies that the leadership at Mālamapōki‘i recognizes the holistic nature of education and prioritizes the well-being of the keiki, aligning with the Te Whakaruruhau domain.

New Zealand offers robust examples of Indigenous assessment models that support and enhance the educational experiences of Māori children, bringing their cultural identity and well-being to the forefront of their learning journey. Exploring assessment frameworks that value and incorporate cultural knowledge within non-Indigenous language medium schools provided valuable insights and usable strategies for evaluating the Indigenous practices at Mālamapōki‘i.

## **Early Childhood Education Assessment in Australia**

Assessment in early childhood education in Australia espouses principles and practices that support the “Belonging, Being & Becoming: The Early Years Learning Framework for Australia” (EYLF) prescribed by the Australian governments. Assessment largely upholds a holistic framework deeply responsive to culture. This gives broad directions to enacting integrated assessment strategies, supportive and inclusive of each child’s learning journey (Australian Government Department of Education, 2022). The EYLF regards development holistically; children’s learning is intertwined, and physical, social, emotional, cognitive, and spiritual learning cannot be separated. Respectful relationships are key to understanding children and their families. Relationships help build a culturally safe environment where authentic assessment can happen (“Introduction,” 2023). This framework places importance on culturally responsive assessment practices. To incorporate the Aboriginal and Torres Strait Islander perspectives and the knowledge systems of cultural groups represented within the learning community, educators are encouraged to involve Aboriginal families and community leaders as co-designers of assessment practices (“Aboriginal and Torres Strait Islander perspectives,” 2023).

Assessment is a dynamic, continuous process in Australian early childhood settings. It combines observation, documentation, analysis, and planning of children’s learning experiences with reflection. The EYLF provides numerous strategies for educators to get complete and meaningful information about children’s development and progress. These strategies include observation and documentation to capture children’s learning journeys. These include anecdotal records, learning stories, photos, and work samples. Documentation is one essential tool in making children’s learning visible and communicating this to families and other stakeholders.

Formative assessment strategies involve repeatedly gathering and analyzing information to inform teaching practices and planning. It helps gauge children’s present

understandings, skills, and interests and sets up learning experiences suitable for them. Summative assessment strategies are used at particular periods in time to provide an overview of children's achievements and development at that specific point in time. This type of evaluation is vital for tracking children's learning milestones and making transition reports when children move to formal schools (Australian Government Department of Education, 2022). Children's views and opinions are an integral part of the assessment process. Children participate in self-assessment activities that make their involvement in compiling their learning stories real and meaningful indicators of their progress. The importance of collaboration with families and the broader community is another essential attribute of principles-based assessment practices. Teachers work collaboratively with families to build an understanding of children's learning and development outside the educational setting to gain a holistic understanding of each child (Cohrssen et al., 2020).

Reflection is a crucial part of the assessment cycle. This is done by repeatedly reflecting on the effectiveness of assessment practices and the consequences these have on children's learning. In this way, through reflective practice, the assessments improve and stay relevant and responsive to the needs of each child (Australian Government Department of Education, 2022).

The Early Years Learning Framework for Australia describes five broad learning outcomes that are the basis upon which educators ground their assessments of children's progress in the early years of education. These outcomes encompass holistic development in children, not forgetting that children learn and develop in different ways (Australian Government Department of Education, 2022).

Learning Outcome 1: Children Have a Strong Sense of Identity. This outcome emphasizes that children should feel safe, secure, and supported. The statement details how positive relationships, supportive settings, and environments help children gain self-awareness, autonomy, and the development of a positive self-image. Children demonstrate

this outcome when they express feelings, engage confidently in activities, and show awareness of their own and others' identities and cultures. Some key elements include:

- Developing knowledgeable and confident self-identities.
- Building resilience and agency.
- Interacting with others with care, empathy, and respect.

#### Learning Outcome 2: Children Are Connected With and Contribute to Their World.

This learning outcome takes cognizance of the child's relationships with his community and environment. It helps children derive a sense of belonging, engage with and contribute to their social and physical worlds. Children demonstrate this learning outcome by participating in group activities, respecting others, and looking after their environment. It enjoins:

- A sense of belonging to groups and communities.
- Knowledge of the rights and responsibilities required for active community participation.
- Respect for diversity and the environment.

Learning Outcome 3: Children Have a Strong Sense of Well-being. This outcome emphasizes the critical effect of physical and emotional well-being. It helps children self-regulate and build up healthy routines for life. Children demonstrate this learning outcome through active physical playing, making healthy choices, and showing self-control and resilience. Here are some of the key elements:

- Take increasing responsibility for their health and physical well-being.
- Demonstrate appropriate social and emotional behaviors.
- Self-regulation of emotions and behavior.

Learning Outcome 4: Children Are Confident and Involved Learners. This learning outcome deals with engaging children and making them persistent learners. It focuses on the development of creative problem-solving and critical thinking skills. Children

demonstrate this outcome when they seek out new ideas, participate in play-based learning, and transfer knowledge to new situations. The key elements include:

- Developing dispositions for learning such as curiosity, cooperation, and confidence.
- Exhibiting creativity, commitment, enthusiasm, persistence, imagination, and reflexivity.
- Applying various skills and processes such as problem-solving, inquiry, experimentation, hypothesizing, researching, and investigating.
- Transferring and adapting what they learn from one context to another.

Learning Outcome 5: Children Are Effective Communicators. Outcomes describe the child's growing ability to communicate effectively, including verbal, non-verbal, and digital literacy. Through this practice, children can express themselves confidently, using communication as an active process. Children demonstrate this outcome when, for example, they tell stories and retell experiences, engage in conversations, use digital technologies, and explore books and other texts. The critical aspects include:

- Verbal and non-verbal interaction with others for a variety of purposes.
- Deriving meaning from various texts.
- Expressing ideas; creating meaning using a variety of media.
- Beginning to understand how symbols and pattern systems work.

These flexible universal outcomes recognize diversity in children's development and learning styles. They provide a framework for educators to observe, document, and support children's learning in holistic and culturally responsive ways.

Australia provides rich examples of culturally responsive models of assessment that support the educational experiences of Indigenous children by addressing their cultural identity and well-being while engaging them in learning. The EYLF approach is holistic, emphasizing community involvement and continual reflection, creating a dynamic, inclusive environment for assessment. These insights are particularly relevant for the review

of Indigenous practices at Mālamapōki‘i. While the Australian EYLF framework emphasizes the inclusion of Aboriginal and Torres Strait Islander perspectives, its approach often remains at a surface level. This observation informed my critical analysis of how deeply Indigenous culture is embedded within the Mālamapōki‘i framework. Consequently, my study seeks to move beyond surface-level inclusion, striving for a holistic braiding of Native Hawaiian cultural practices throughout the educational process at Mālamapōki‘i, ensuring that these practices are not just acknowledged but deeply woven into the fabric of the educational experience.

### **Early Childhood Education Assessment in Hawai‘i**

Hawai‘i has not adopted a formal assessment model for early childhood education. However, several sets of guidelines, including Nā Honua Mauli Ola, Nā Hopena A‘o, and The Hawaiian Indigenous Education Rubric, provided valuable cultural benchmarks that were adapted for use in the coding and analysis of the data collected in this study. These guidelines do not specifically target early childhood education; however, they provided a foundational framework for evaluating the Indigenous practices at Mālamapōki‘i and answering my research question.

### **Nā Honua Mauli Ola – Hawai‘i Guidelines for Culturally Healthy and Responsive Learning Environments**

In 2002, the Native Hawaiian Education Council (NHEC) adopted Nā Honua Mauli Ola – Hawai‘i Guidelines for Culturally Healthy and Responsive Learning Environments (NHMO Guidelines). Ke Kumu Honua Mauli Ola, loosely translated as Foundations of Cultural Identity, is the guiding philosophy behind the guidelines (Kawai‘ae‘a, 2002). Kumu Honua Mauli Ola was developed in 1998 by a multi-generational group of native and second-language speakers of ‘ōlelo Hawai‘i to provide a theoretical template for the direction of Hawaiian language medium education (‘Aha Pūnana Leo, 2009). The NHMO guidelines can be used as a lens for delivering culturally cognizant education (Kawai‘ae‘a, 2012).

The NMHO guidelines were developed over many years with input from various stakeholders gathered at eight statewide community meetings facilitated by a fourteen-member team. These standards call for a shift from teaching about Hawaiian culture to teaching through Hawaiian culture and language. Kana'iaupuni (2005) agrees that the guidelines set a foundation for learning through the Hawaiian language and culture.

The NMHO guidelines preface (2002) speaks of a vision of legacy, Ka mo'opuna i ke alo, which “places the grandchild as the focal point from which one addresses the actions of the present in preparation for the future” (p.11 ). This focus on 'ohana through creating a legacy for grandchildren aligns with the relationality of my methodology. The guidelines are appropriate for schools and communities to examine and care for their learners' educational and cultural welfare, thus leaving a legacy for their posterity (Kawai'ae'a, 2002).

The NHMO Guidelines are comprised of sixteen points that provide a framework for student-centered learning environments and support the entire learning community, including strategies for five groups: learners, educators, schools/institutions, families, and communities. The comprehensive guidelines provide valuable guidance in developing this research when applied to each group. The guidelines were updated in 2014 and again in 2024. Nā Honua Mauli Ola II and III are built on the original guidelines and introduce nine pathways (Kawai'ae'a et al., 2024). As the original guidelines were instrumental in the founding of Mālamapōki'i, each guideline is present here and mapped to the corresponding pathway from the latest edition.

### **Nā Honua Mauli Ola Guidelines**

1. He ho'ohui pū i nā 'ao'ao o ka mo'omeheu, 'o ka hana ku'una, ka 'ōlelo, ka mō'aukala, a me ke kuana'ike, i loko o ke a'o kā'oko'a 'ana e hānai a ho'omōhala aku i ka na'au, ke kino, ka no'ono'o, ka launa



kanaka, a me ka pili ‘uhane o ka honua ho‘ona‘auao i mea e kupu a‘e  
ai ka mauli a me ka mana.

Incorporate cultural traditions, language, history, and values in meaningful holistic processes to nourish the emotional, physical, mental/intellectual, social and spiritual well-being of the learning community that promotes healthy mauli and mana. [This guideline maps to the ‘Ike Ola Pono: Wellness Pathway.]

2. He ho‘omau i nā hana e mau ai ka ‘ike ku‘unana Hawai‘i, nā loina Hawai‘i, a me ka ‘ōlelo Hawai‘i, i mea e ola ai ka mauli o ke kanaka a e puka mau ai ka honua ho‘ona‘auao holo‘oko‘a.

Maintain practices that perpetuate Hawaiian heritage, traditions, and language to nurture one’s mauli and perpetuate the success of the whole learning community. [This guideline corresponds to the ‘Ike Na‘auao: Intellectual Pathway.]

3. He ho‘omau i ke aloha a mahalo i ka ‘ike ku‘una o ka lāhui, me ka ‘imi ‘ana i mau ala hou e pill ai me ka ‘ike o nā lāhui a kuana‘ike ‘ē a‘e.

Sustain respect for the integrity of one’s own cultural knowledge and provide meaningful opportunities to make new connections among other knowledge systems. [This guideline aligns with the ‘Ike Kuana‘ike: Worldview Pathway.]

4. He ho‘oulu i ke aloha ho‘ona‘auao, mai ka lā hiki a ka lā kau, me ka ‘imi ‘ana i ke kūlana po‘okela o ka hana a‘o, alaka‘i a no‘ono‘o.

Instill a desire for lifelong exploration of learning, teaching, leading, and reflecting to pursue standards of quality and excellence. [This guideline

pertains to the ‘Ike Ho‘okō: Applied Achievement Path.]

5. He ho‘olako i na honua palekana e maika‘i ai ka na‘au, ke kino, kano‘ono‘o, ka launa kanaka, a me ka pili ‘uhane o ke kaiaulu holo‘oko‘a.

Provide safe and supportive places to nurture the physical, mental /intellectual, social, emotional, and spiritual health of the total community.

[This guideline corresponds with the ‘Ike Ola Pono: Wellness Pathway.]

6. He ho‘oulu i ka ho‘omaopopo ē, i loko nō o ka loliloli mau o ka mo‘omeheu a hana ku‘una e kū nei, ua pa‘a ia kahua ma muli o ka ‘ike i ka hana a me ke ‘ano o ka wā i hala. He ‘ike ia e kōkua mai ana i ke kanaka ma ka wā e hiki mai ana.

Foster understanding that culture and tradition, as constantly evolving systems, are grounded in the knowledge of the past to address the present and future. [This guideline integrates with the ‘Ike Kuana‘ike: Worldview Pathway.]

7. He ‘ōlelo Hawai‘i i mea e pi‘i ai ka mākau ‘ōlelo a me ka mākau ho‘oka‘a‘ike, ma nā pō‘aiapili like ‘ole o ke ola.

Engage in Hawaiian language opportunities to increase language proficiency and effective communication skills in a variety of contexts and learning situations. [This guideline relates to the ‘Ike Na‘auao: Intellectual Pathway.]

8. He hana ka‘awale a he hana alu like paha me ka po‘e o ke kaiaulu ma ka ho‘omau i nā hana ku‘una pili i ka ho‘ona‘auao e mau ai ka ‘ike ku‘una a me nā kumu waiwai like ‘ole ma loko o ka honua ho‘ona‘auao.

Engage in activities independently or collaboratively with community members to perpetuate traditional ways of knowing, learning, teaching, and leading to sustain cultural knowledge and resources within the learning community. [This guideline correlates the ‘Ike Ho‘okō: Applied Achievement Path.]

9. He ho‘ohana i nā ano like ‘ole o ka loiloi ‘ana i ka hopena o ke a‘o ‘ana, a na ia ho‘ohana ho‘i e hō‘ike mai i ka maika‘i me ka ‘ole o ke a‘o ‘ana o ka honua ho‘ona‘auao.

Utilize multiple pathways and multiple formats to assess what has been learned and honor this process to nurture the quality of learning within the community. [This guideline supports the ‘Ike Honua: Sense of Place Pathway.]

10. He ho‘oulu i ke aloha ‘‘ōlelo, aloha mō‘aukala, aloha mo‘omeheu, a me ke aloha kuana‘ike Hawai‘i, e mau ai ka Hawai‘i ma kona ‘ano iho nō hekū ho‘okahi.

Support lifelong aloha for Hawaiian language, history, culture, and values to perpetuate the unique cultural heritage of Hawai‘i. [This guideline complements the ‘Ike Na‘auao: Intellectual Pathway.]

11. He ho‘oulu i ke aloha ‘ōlelo, aloha mō‘aukala, aloha mo‘omeheu, a me ke aloha kuana‘ike Hawai‘i, e mau ai ka Hawai‘i ma kona ‘ano iho nō hekū ho‘okahi.

Promote personal growth and development to strengthen cultural identity, academic knowledge and skills, pono decision making, and the ability to contribute to oneself and family, and local and global communities. [This guideline resonates with the ‘Ike Ola Pono Wellness Pathway.]

12. He ho‘omōhala i ka ho‘omaopopo i ka ‘ōlelo Hawai‘i, ka mō‘aukala, a me ka mo‘omeheu Hawai‘i, ma o ke kuana‘ike ‘ō‘iwi. Pēlā e ‘ike ‘ia ai kaminamina aloha o ke kanaka iā ia iho, i kona ‘āina, i kona kaiaulu, a i ka honua holo‘oko‘a.

Develop an understanding of Hawaiian language, history, culture, and values through an indigenous perspective to foster a sense of self, place, community, and global connection. [This guideline reflects the ‘Ike Kuana‘ike: Worldview Pathway.]

13. He mahalo i ke kuana‘ike Hawai‘i a me kona waiwai i loko o nā kuana‘ike ‘ē he nui o ka honua. He mea ia e ‘oi a‘e ai ka ‘ike o ke kanaka nona iho, no kona ‘ohana, a no nā kaiaulu o kona ‘āina a ma kahi ‘ē.

Promote respect for how the Hawaiian cultural worldview contributes to diversity and global understanding to enhance one’s sense of self, family, and local and global communities. [This guideline is consistent with the ‘Ike Kuana‘ike: Worldview Pathway.]

14. He ho‘olālā i nā hopena a‘o e ulu ai ka pilina ma waena o nā kānaka, nā hanauna, nā wahi, a me ke kaiapuni. He mea ia e pili ai ke kuana‘ike o ke kanaka me kona wahi, me ka ho‘omaopopo i ko ka po‘e o waho.

Plan for meaningful learner outcomes that foster the relationship and interaction among people, time, space, places, and natural elements around them to enhance one’s ability to maintain a “local” disposition with global understandings. [This guideline reflects the ‘Ike Ho‘okō: Applied Achievement Path.]

15. He mālama i ka honua ho‘ona‘auao holo‘oko‘a me ke kaiapuni ma ke

kāko‘o ‘ana i ka ho‘oona‘auao, i ke kuleana kahu, i ke ō o nā  
kumuwaiwai, a i ka pilina ‘uhane.

Engage in experiences that Mālama the entire learning community and the environment to support learning and good practices of stewardship, resource sustainability, and spirituality. [This guideline fits with the ‘Ike Ho‘okō: Applied Achievement Path.]

16. He ho‘oulu i ka ‘ao‘ao ‘auamo kuleana o ke kanaka no ka wā i hala,  
ka wā ‘ānō, a me ka wā e hiki mai ana, i mea e mōakāka ai nā pahuhopu  
o ke ola, a e ‘olu ai ke kanaka, kona ‘ohana, kona kaiaulu, a me nā  
kaiaulu ‘ē a‘e o ka honua.

Cultivate a strong sense of kuleana to one’s past, present, and future to enhance meaningful purpose and to bring about joy and fulfillment for oneself and family, and local and global communities [This guideline ties into the ‘Ike Ola Pono Wellness Pathway.] (Kawai‘ae‘a, 2002, p. 18)

The document highlights some ways the guidelines can be applied, several of which are particularly interesting to this research. Although the guidelines are not specifically an assessment framework, the intended use of the guidelines relevant to this study includes:

- Review of school practices, goals, and policies;
- A means to devise teacher evaluation tools;
- Adapting practices for a cultural context;
- Orienting new teachers; and,
- Evaluating educational programs (Kawai‘ae‘a, 2002).

Recognizing the guidelines contained in Nā Honua Maui Ola emphasis on integrating cultural traditions, language, history, and values into educational practices informed my decision to use these guidelines as a lens for evaluating the cultural depth of

Mālamapōki‘i’s practices. These guidelines were valuable in setting the criteria to evaluate the Mālamapōki‘i Early Learning Framework to review the school’s mission, vision, and cultural practices. For example, the NHMO’s focus on holistic development—encompassing emotional, physical, mental, social, and spiritual well-being—paralleled the holistic assessment approach seen in New Zealand’s Te Whāriki model, which I used as a comparative benchmark. The pathways outlined in the updated NHMO guidelines (2024) provided a structure for assessing how well the Mālamapōki‘i framework supports cultural identity, community involvement, and holistic development.

The findings chapter will present a more detailed discussion of the guidelines and how they informed the evaluation process. This will include an in-depth review of which guidelines were selected as criteria for the evaluation and the impact these guidelines had on shaping our understanding and assessment of the Indigenous practice at Mālamapōki‘i.

### **Nā Hopena A‘o (HĀ)**

Nā Hopena A‘o (HĀ ) is a policy of the Hawai‘i Board of Education. The Nā Honua Maui Ola guidelines were one of thirteen learner outcome models studied in conjunction with the creation of Nā Hopena A‘o. The policy contains life-long learning outcomes intended for everyone as “students of Hawai‘i, to believe, understand, model and become” (Qina‘au, 2016, p. 2). The six learning outcomes include:

- A Strengthened Sense of Belonging. He pili wehena ‘ole – A relationship that cannot be undone.
- A Strengthened Sense of Responsibility. Ma ka hana ka ‘ike, ma ka ‘imi ka loa‘a – In working one learns, through initiative one acquires.
- A Strengthened Sense of Excellence. ‘A‘ohe ‘ulu e loa‘a i ka pōkole o ka lou – There is no success without preparation.
- A Strengthened Sense of Aloha. E ‘ōpūali‘i – Have the heart of a chief.

- The Strengthened Sense of Total Well-being. Ua ola loko i ka aloha – Love is imperative to one’s mental and physical welfare, and
- The Strengthened Sense of Hawai‘i. ‘O Hawaii i ku‘u ‘āina kilohana – Hawai‘i is my prized place (Hawaii State Department of Education, 2015, p. 2)

A statement prefaces each outcome and offers eight indicators. The outcomes are adaptable for age groups and are appropriate benchmarks for the keiki at Mālamapōki‘i. Many Hawaiian-focused charter schools, including Kanu o ka ‘Āina New Century Public Charter School (Kanu), utilize Nā Hopena A‘o outcomes. As most keiki matriculate from Mālamapōki‘i to Kanu, determining the extent to which the outcomes are integrated into the Mālamapōki‘i framework provided valuable insight into the transition between schools.

My study was shaped by the understanding that the braiding of HĀ outcomes at Mālamapōki‘i would facilitate a smoother transition for students moving between these two educational environments. The adaptability of these outcomes for different age groups made them appropriate benchmarks for evaluating the extent to which Mālamapōki‘i’s framework nurtures a sense of belonging, responsibility, excellence, aloha, well-being, and connection to Hawai‘i. This informed my analysis of whether Mālamapōki‘i was preparing students not only academically but also culturally and emotionally for their educational needs.

### **The Hawaiian Indigenous Education Rubric (HIER)**

The Hawaiian Indigenous Education Rubric (HIER) is a tool that helps to understand the depth of culture-based education in a classroom. Teachers can use HIER to evaluate practices, develop culturally relevant strategies, and inform action research projects. This tool may be helpful in the future assessments of changes in culture-based practice at Mālamapōki‘i. A diverse research group, including curriculum developers, educators, and university professors from Kamehameha Schools, ‘Aha Pūnana Leo, Hawai‘i Department of Education, and the

University of Hawai‘i at Hilo and Mānoa, developed the rubric. HIER aims to formulate teaching practices and principles from a Hawaiian perspective (S. M. Kana‘iaupuni & Kawai‘ae‘a, 2008).

The HIER evaluates the use of the five critical elements of culture-based education: language, pedagogy, curriculum, leadership, and assessment. The elements are rated using a scale of none, emerging, developing, and enacting. The first level, none, would indicate a classroom dominated by non-Indigenous practices such as teacher-focused, individually oriented, English-only speaking learning environments that rely on standardized testing. The enacting level signifies “a fully implemented Hawaiian Indigenous education.” It would include the use of ‘ōlelo Hawai‘i (Hawaiian Language), be community and family-based, and embrace spiritual and cultural values and knowledge (S. M. Kana‘iaupuni & Kawai‘ae‘a, 2008, p. 77).

Since this tool is designed for teachers to evaluate their practice and the extent to which cultural braiding occurs in their classrooms, it was not used in this study. The focus of this research was on evaluating the Mālamapōki‘i framework from a broader research perspective rather than from an action research perspective where teachers evaluate how cultural practices are central in their classrooms.

This review of Indigenous assessment practices in Early Childhood Education in Hawai‘i, as exemplified by frameworks such as Nā Honua Maui Ola and Nā Hopena A‘o (HĀ), represents a robust foundation for evaluating the Indigenous practices at Mālamapōki‘i. While the HIER framework was not utilized in this study due to its focus on teacher-led evaluation of classroom practices, the use of HIER may be highly relevant for future studies aiming to assess the depth of cultural within educational settings like Mālamapōki‘i.

## **Chapter Summary**



This chapter introduced New Zealand, Australian, and Hawaiian tapestries of rich Indigenous philosophies and frameworks regarding early childhood education assessments. In this review of literature, ample evidence is shown with regard to historical contexts and the influence of colonialism on education for Indigenous communities. Traditional Indigenous methods of assessment that were embedded in everyday life and cultural practice were replaced with Western education systems that too often marginalized the Indigenous ways of knowing. This underlines the imperative for communities to reflect more closely on assessment models currently in place and to take back control of education and assessment practices. Reflecting on the similarities and differences between the assessment models in New Zealand, Australia, and Hawai‘i, as highlighted in this literature review, provided a critical foundation for my evaluation of the Indigenous practices within the Mālamapōki‘i framework.

The Te Whāriki model from New Zealand, which centers on Māori perspectives and uses learning stories as a holistic assessment method, contrasts with Australia’s approach, which, while inclusive of Aboriginal and Torres Strait Islander perspectives, does not embed culture as deeply into its framework. In Hawai‘i, guidelines such as Nā Hopena A‘o and Nā Honua Maui Ola are not formal assessment models but serve as cultural benchmarks for evaluating educational environments, designed by Native Hawaiians for Native Hawaiians. These reflections were used as a comparative lens to analyze and understand the cultural foundation at Mālamapōki‘i.

The comparative analysis of assessment models from New Zealand, Australia, and Hawai‘i has been instrumental in shaping the methodological framework of this study. While existing frameworks from New Zealand and Australia provide a solid foundation for culturally responsive assessment for early learning programs, there is a lack of early childhood assessment models in Hawai‘i. The insights gained from this chapter laid the groundwork for building a data collection framework influenced by the solid principles of

Indigenous assessment gleaned from the New Zealand and Australian models. By identifying common themes in the models and adapting Indigenous frameworks such as Nā Honua Maui Ola and Nā Hopena A‘o to the early childhood context, this study provides a unique contribution to the body of knowledge on culturally responsive education in Hawai‘i, offering a model that could inform future practices both locally and in other Indigenous contexts. The subsequent chapter, Data Collection and Analysis, presents the data collection methods used to gather and analyze data for evaluating the Indigenous practices at Mālamapōki‘i. It provides a detailed discussion of the selected guidelines and their impact on shaping the framework for assessing Indigenous practices at Mālamapōki‘i.

## Chapter 5

### Data Collection and Analysis

“Manaia is my sister’s keiki; she was adopted two and a half years ago. Words cannot describe how thankful we are for Mālamapōki‘i. It makes her feel safe, connected and loved. She’s been through a lot, and this ki‘i (picture) shows how far she’s come and how happy she is.” - Leilani



Figure 5.1: *Manaia feeling safe, connected and loved.* Leilani (2024).

The previous chapter reviewed the literature on the assessment of Indigenous early childhood education programs, delving into complex aspects that shape early childhood education across New Zealand, Australia, and Hawai‘i. The review highlighted Western influences that altered traditional Indigenous assessment methods. A foundation for a robust data collection framework has been gleaned from the literature reviewed in the previous two chapters. Building upon these insights, the data in this chapter will be presented and analyzed to explore the experiences and perspectives of stakeholders in this research.

The selection of data collection methods for this study was informed by the principles of the Indigenous Standpoint Theory (Foley, 2003), which is evident in the way

stakeholders were engaged as co-researchers in the gathering and categorizing of the data. Following the principles of the theory, this research was conducted in culturally sensitive and ethical ways that were deeply contextualized in the cultural context and value system of the Mālamapōki‘i community. This theory guided the construction and maintenance of respectful relationships within the community, which fostered respect and cultural sensitivity. Culturally appropriate data collection methods included engaging participants as co-researchers through mo‘okiki activities; talk story sessions; informal interviews; and keiki kilo journals. These methods ensured that the voices and views of keiki, kumu, and other stakeholders were placed at the core of this research. This approach ensured the collection of rich, qualitative data while respecting this community’s cultural values and practices.

### **Data Collection**

To gain a comprehensive understanding of the Indigenous practices at Mālamapōki‘i, data were collected from various stakeholder groups, including past and present mākua, current keiki, past haumāna, current and past kumu and po‘okumu, and current ‘ohana members. The data were organized into distinct sets: the Mo‘oki‘i Data Set, which focused on current mākua and keiki; the Mākua Data Set, which included information from both current and past mākua; the Kumu Data Set, which captured insights from past and current kumu and po‘okumu; the Past Haumāna Data Set, which was dedicated to gathering data from past haumāna; the observation and document review data set, which incorporated observational data and document reviews; and the ‘Ohana Data Set, which included information from current ‘ohana members. Each data set provides unique perspectives, contributing to a comprehensive understanding of the Indigenous practices at Mālamapōki‘i.

A vital component of the *Braiding the Ropes of Pilina Methodology* is the modified Three Es framework for data collection, which was outlined in Chapter Two. The three Es

were transformed into ‘Ike, Nīnau, and Kilo, representing observing, inquiring, and examining. This framework is visible in the data collection throughout the observations, talk story sessions, interviews, and document reviews conducted during this study. It was utilized to gather data in a culturally respectful and responsive way, another crucial aspect of my methodology.

Community accountability and involvement in the research study are evident in the wide variety of respondents from the community representing current haumāna, past haumāna, current mākua, past mākua, current kumu, past kumu, and administrators. The participants’ contributions were unique and provided diverse insights, which were instrumental in addressing the research question. This diversity provided a holistic view of the community’s thoughts and insights about the practices at Mālamapōki‘i.

Assessment models reviewed from New Zealand, Australia, and Hawai‘i influenced the selection of data collection methods. Mo‘oki‘i and talk story methods were influenced by the holistic nature of New Zealand’s Te Whāriki, capturing the broad cultural context of the Mālamapōki‘i community. The involvement of kumu, mākua, and keiki as co-researchers precipitated from an understanding of the Nā Hopena A‘o and Nā Honua Maui Ola guidelines that are deeply rooted in Hawaiian values that emphasize relationality and communal responsibility.

### **Mo‘oki‘i Data Set**

Mo‘oki‘i is a data collection method that allows participants to tell a mo‘olelo via imagery. A mo‘oki‘i activity conducted on Tuesday, January 23, 2024, with 19 participants aged 3-5, represents a unique approach to engaging participants as active co-researchers in a study about the Indigenous practices at their school. This method involved keiki as active participants in collecting and categorizing their own data. Mo‘oki‘i was selected to give a voice to the keiki. Their creation of collages and their accompanying dictated captions

provided a rich, qualitative insight into their perceptions and feelings about what makes their school a special and inviting place for them. This inclusive approach ensures that the perspectives of the youngest stakeholders are heard and valued, offering a deeper understanding of their experiences in the educational setting. Data were collected, categorized, and thematically analyzed. Figure 5.2 charts the flow of the mo‘oki‘i data collection process.

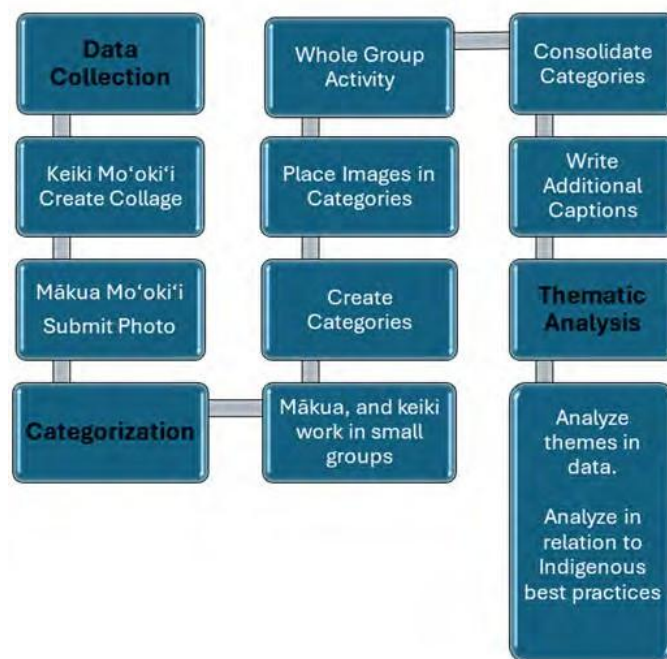


Figure 5.2: *Mo‘oki‘i Data Collection Process*. Levenson (2024).

### Keiki Mo‘oki‘i

To initiate the process, an original story was presented to the preschool haumāna in an engaging manner that was suitable for a young audience, thus setting the stage for the research questions engagingly and suitably for the young audience.

Following the story, the keiki participated in an art project where they created collages using various materials. These collages served as a visual medium through which the children could express their thoughts and feelings related to the research questions. To complement their artwork, the keiki also dictated captions to the kumu, providing verbal

insights into their perspectives.

The analysis of the data gathered from this activity employed qualitative methods, specifically thematic analysis. This approach involved examining the children's dictated captions to identify recurring themes and patterns. By categorizing these responses, the study uncovered the key factors the keiki valued and associated with a positive and appealing school environment.

### Keiki Mo'oki'i Data Presentation

Through the thematic analysis of the keiki's captions, three key themes were identified: play-based activities, outdoor activities, and friendship. Table 5.1 highlights the results of the coding process.

Table 5.1: Analysis of Keiki Mo'oki'i Captions

<b>Key:</b> 1 = Play-based Activities, 2 = Outdoor Activities, 3 = Friendship	
<b>Caption</b>	<b>Theme</b>
Playing with toys	1
School is special because I like to do centers	1
Playing in the kitchen	1
I like playing	1
Eyes help me see so much stuff	1
We teach squares	1
It helps to playing centers that I love.	1
That everyone gets to play with toys	1
And we also eat food	1
I like to art, and to draw flowers. The feathers really think me chickens like at the farm	1
Playing with the sand box	1
I like to draw	1
I like to see birds I like to see flowers	2
Me Honey and Kaiyah-Bella playing dogs outside in the grass	2
Me playing in the play yard.	2
Rain makes me put my boots on and jump in puddles	2
We see Feathers on the ground	2

We can see everything I like flowers in the garden The flowers smell good	2
Rolling in the grass	2
What is special about Mālamapōki‘ i is we run around out there	2
I like to play outside	2
I love going to school because I love it All my friends playing base	3
All my friends playing base (tag)	3
Love and make me happy and so fun.	3
We come to school with our backpack and to make silly.	3
School is special because I get to play with my friends	3
I like to play with my friends outside.	3
I like to be happy	3
I like to play with friends	3

**Play-based Activities** (13 mentions): This theme was the most frequently mentioned. The keiki’s comments highlighted a strong preference for play, emphasizing activities such as playing with toys and engaging in play-centered learning. This theme underscores the vital role the keiki place on play in creating a positive and engaging school experience. See Figure 5.3 for an example of a play-based activities collage.



Figure 5.3: *School is special because I like to do centers.* Makoa (2024).

**Outdoor Activities** (9 mentions): Many keiki expressed their enjoyment of outdoor activities, demonstrating a keen interest in ‘āina-based activities and highlighting the im-



portance they place on connection to the land and nature. Their remarks featured enjoyable experiences with birds, flowers, grass, and farm-related activities. This theme emphasizes the keiki's appreciation for engaging with the natural world, indicating a deep-rooted value for 'āina exploration and learning in their environment (see Figures 5.4 and 5.5).



Figure 5.4: *I like to see birds. I like to see the flowers on the playground.* Kaiyah- Bella (2024).



Figure 5.5: *I like to do art and to draw flowers. The feathers really think me chickens, like at the farm.* Kai (2024).

**Friendship** (8 mentions): Social connections were also a notable theme, with keiki valuing the time spent with friends. This theme illustrates the importance keiki place on

social interaction and peer relationships in school, contributing to a sense of belonging and enjoyment (see Figure 5.6).



Figure 5.6: *School is special because I get to play outside with my friends.* Honey (2024).

The data from the Mo‘oki‘i Activity identified three themes of importance to the keiki: play-based activities topped the list, followed by outdoor activities, and rounded out with friendship. These themes from the keiki Mo‘oki‘i Activity provided a valuable perspective on what the keiki consider essential and enjoyable in their school environment. This data, correlated with the Mākua Mo‘oki‘i Activity data, presents a clear vision of what is important to mākua and keiki in the preschool learning environment. Chapter Six will explore the correlation between the data collected and the Indigenous practices identified in the review of the literature.

### **Mākua Mo‘oki‘i**

The Mo‘oki‘i Activity conducted with the keiki attending Mālamapōki‘i and their mākua was a collaborative and insightful exercise. It involved the mākua actively categorizing and analyzing photographs they felt encapsulated the essence of Mālamapōki‘i and their reasons for choosing this environment for their children’s education.

In this engaging process, the mākua worked in small groups to sort and categorize photographs. Each group named their categories and grouped the photos, accordingly, demonstrating their perspectives and values. This phase of the activity fostered a shared understanding and collaboration among the parents. Following the initial categorization, the entire group identified similar categories across all groups and merged them into common themes. The final step of this collective effort was captioning the photographs within these unified categories. Five categories emerged from mākua’s classification of the photos: Pilina to ‘Āina, Culture, Creativity, Friendship, and Community.

### **Mākua Mo‘oki‘i Data Presentation**

The data from the **Pilina to ‘Āina** category revealed a profound connection and reverence towards the land and nature. The captions provided by the mākua reflect themes of nurturing, reciprocal care, and spiritual and cultural connections to the land. Table 5.2 presents the data coding.

Table 5.2: Mākua ‘Āina Theme Captions

<b>Key:</b> 1 = Connection to the ‘Āina 2 = Growth, Education, and Tradition	
<b>Caption</b>	<b>Theme</b>
Pilina to ‘Āina	1
Kilo	1
Take care the land and it will take care of you	1
Keiki growing tall like the Kalo - Ready to Harvest	1
Taking time daily in reverence to the mauna	1
Lucky we live Hawai‘i	1
Fun at the farmers market	1
Knowing where our food comes from	1
The dirt	1
Aloha ‘Āina	1

Food from the garden	1
Looking from a different perspective	2
Actively practicing traditions. Here. Now	2
The nēnē	2
Kalua Pua‘a - Teach the keiki and they will carry on for multiple generations	2
Interaction with animals	2

These themes indicate that the mākua share a deep-seated respect and appreciation for the natural environment and the cultural heritage of our ‘āina. One makua expressed, “Take care of the land, and it will take care of you.” The themes underscore the importance that mākua place on instilling these values in their children through their experiences at Mālamapōki‘i. Figures 5.7, 5.8, 5.9, and 5.10 are a sampling of pictures the mākua categorized into this theme.



Figure 5.7: *Morning Kilo (Observation)*  
Kumu 1 (2024).



Figure 5.8: *Keiki growing tall like the Kalo. Ready to harvest.* Mālamapōki‘i Mākua (2024).



Figure 5.9: *Nurturing connections with the animals by feeding.* Kumu 3 (2024).



Figure 5.10: *Taking time daily in reverence to the Mauna.* Amanda (2024).

From the data for the **Culture** theme, 31 captions were analyzed. Three sub-themes emerged: cultural foundations, traditional practices, and events; kuleana to the community, the ‘āina, and generational relationships; and personal development and teamwork.

Table 5.3: Mākua Culture Theme Captions

<b>Key:</b> 1 = Cultural foundations and traditional practices and events; 2 = Kuleana to the community, the ‘āina, and generational relationships; 3 = Personal Development and teamwork	
<b>Caption</b>	<b>Theme</b>
Foundation	1
Hawaiian Culture	1
Cultural Education	1
Lei Kui	1
Lei Making	1
‘Ulumaika- makahiki game	1
Hula and performing arts	1
Hā pai ka pōhaku - Carry the rock for imu building	1
Tradition	1
Makahiki games	1
Participating in cultural events like makahiki give keiki a Sense of celebration, ceremony and culture	1
Learning uma vs arm wrestling - makahiki game	1
Actively practicing traditions. Here. Now	1
Kalua Pua‘a Hu’e ka imu a kā pī ka pua’a It is a central main dish in our culture.	1
Teach the keiki and they will carry on for multiple generations	
Connections	2
Community connection	2
Exploring and finding self in the mauna	2
Kokua aku, kokua mai -give help, receive help	2
‘A’ohe hana nui I ke alu ‘ia - No work is too hard when done together	2
Taking care of where I am	2
Making my school playground nice	2
Generational relationships	2
Having an extended support network beyond teacher-student. Multiple generations in one place, all working together to teach the keiki	2
Having an extended support network beyond teacher-student. Multiple generations in one place, all working together to teach the keiki	2
Skill building	3
Challenge, growth	3
Keeping balanced	3

Creating the ability to enjoy healthy competition and enjoy challenge	3
Team building	3
Self confidence - I got this	3
Team work	3

Cultural foundations, traditional practices, and events emerged as the most frequently mentioned theme with 14 mentions, underscoring the importance mākuā place on embedding cultural values and practices into the preschool experience. This theme includes incorporating Hawaiian values, learning, and participating in traditional activities such as lei making, hula, makahiki games, canoe building, imu (underground oven) making, and food preparation.

The emphasis on these activities highlights mākuā's desire for their children to connect deeply with their cultural roots and heritage from an early age. Figures 5.11 and 5.12 are examples of photographs classified in this theme, showing keiki participating in cultural activities such as Makahiki games and lei making.



Figure 5.11: *Grayson participating in 'Ulu Maika at Kanu Makahiki Games, Kuulei (2024).*





*Figure 5.12: Reya making ti leaf lei. Renee (2024).*

When captioning the pictures, kuleana to the community, the ‘āina, and generational relationships was also an emergent theme, with ten occurrences. Mākua value extended support networks, intergenerational interactions, community connections, and teaching keiki the importance of extended relationships and their kuleana to place and community (see Figure 5.13).



*Figure 5.13: Mālamapōki ‘i haumāna participate in inter-generational imu building. Kumu 2 (2024).*



The theme of personal development and teamwork was mentioned seven times, highlighting cultural activities' role in building self-confidence, encouraging teamwork, and fostering healthy competition among Mālamapōki'i keiki. Mākua rank these practices as an essential component of a quality preschool program. This insight suggests that parents value cultural activities not only for perpetuating culture but also as a critical element for building a positive self-image, developing physical skills, and strengthening social skills. Figure 5.14 is a photo submitted by a makua showing Mālamapōki'i keiki exhibiting teamwork.



Figure 5.14: *Hukihuki Makahiki game develops teamwork.* Mālamapōki'i makua (2024).

## Friendships

From the Friendships category, two major themes emerged from the mākuā's captions: social connections and emotional well-being.

Captions from the social connections theme emphasized the need for friendships and social interaction, stressing keiki's need to connect with others through play and find unity and community in shared experiences and celebrations. The second theme, emotional well-being, focused on the importance of keiki feeling happy, safe, loved, and free to be themselves in the preschool setting. Allowing keiki to grow at a pace that is right for them was also stressed as an important aspect of the emotional well-being component of friendship. Table 5.4 details the coding of the friendship captions.

Table 5.4: Mākuā Friendship Theme Captions

**Key:**

1 = Social Connections

2 = Emotional Well-being

Caption	Theme
Friendships	1
Socializing	1
Keiki need to connect with others, with each other	1
Playing with friends	1
We are one	1
Celebrating those important to us!	1
Community experiences together	1
Feeling connected	1
Playing with friends make me happy	1
Friendships	1
Independence	2
Allowing the keiki to be keiki rather than rushing them to grow up	2

Happiness	2
New beginnings	2
Feeling Safe	2
Feeling loved	2
Feeling Happy	2
New Beginnings	2

Figure 5.15 depicts a huaka'i (field trip) where keiki spent time together at the local farmer's market.



Figure 5.15: *Building Friendships at the farmer's market.* Mālamapōki'i makua (2024).

### Creative Expression

The idea that keiki need creativity surfaces in the captions from the Mo'oki'i activity. The captions reveal three main themes: exploration and expression, creating memories, and unique experiences. Out of 17 captions, nine mention creative expression and exploration, three focus on creating memories, and five highlight unique experiences. Table 5.5 lists the photo captions and coding.

Table 5.5: Mākua Creative Expression Photo Captions

<b>Key:</b> 1 = Exploration and Expression 2 = Creating Memories 3 = Unique Experiences	
Caption	Theme
Creative Expression	1
Creativity	1
Self Expression	1
It is important for keiki to express what they feel	1
Let me be me and run free	1
Happy to be at school	1
Creative play	1
Creativity equals problem-solving	1
I decorated my frame	1
Memories	2
Making Memories	2
Memories	2
Getting to experience things we cannot provide at home	3
Hā-breath	3
Keiki need self regulation	3
Creating new ideas with materials we don't have at home	3
Using what she has around her to build what she wants to see	3

**Creative expression and exploration:** Some captions stress how creativity helps kids show what they think about the world. This kind of play boosts how kids think and feel. One caption puts it: “Creativity = Problem Solving” (see Figure 5.17).

**Making Memories:** The idea of creating lasting memories through creative processes indicates that creative activities offer more than immediate enjoyment; solid relationships and lasting memories are a byproduct of innovative activities.

**Special Moments:** The captions hint that creative activities at school give keiki chances they might not get elsewhere. This highlights the importance of the activities provided by Mālamapōki‘i.



Figure 5.16: *Freedom to express themselves.* Kumu 2 (2024).



Figure 5.17: *Hinae‘a engaged in creative problem solving* Kumu 3 (2024).

The Creative Expression theme indicates that participants believe their keiki need creativity and self-expression. Mākua value the creative activities and processes offered in the Mālamapōki'i program. The emphasis is not just on the creative process and the products produced but also on the joy, memories, unique experiences, and skills that creative expression brings to the lives of the keiki (see Figure 5.16).

## Community

The theme of community, as identified through the Mākua Mo'oki'i activity, includes two clear categories. Community events and community service opportunities were represented four times, while relationships were highlighted seven times.

Table 5.6: Community Photo Captions

Table 5.6: Community Photo Captions	
Key:	Theme
1 = Community Events and Service	
2 = Relationships	
Caption	
Community events	1
Community service	1
Ma ka hana ka 'ike - through doing one learns	1
Making my school playground nice	1
'Ohana	2
'Ohana Pilina	2
'Ohana bonding	2
Community connection	2
Creating lifetime memories	2
Generational relationships	2
Support network	2

Community events and services refer to actions that bring people together, involving community events and community service. Mākua articulated that these activities create a sense of collective participation and support and are important aspects of a well-rounded preschool experience. Relationships deal with familial and social bonds, significant aspects

of a child's development. The captions from this theme underscore the mākua's belief that family relationships provide support for one another. The theme also builds on the importance of community, being tied to the community, having support networks, creating lifetime memories, and recognizing that knowledge comes from actually doing things. One caption stated: "Ma ka hana ka 'ike — through doing, one learns."



Figure 5.18: *Community service - "Making my school playground nice."* Mālamapōki'i keiki, (2024).

### **Mākua Data Set**

Perspectives from the mākua viewpoint were gathered through one talk story session, held on May 10, 2024, in the Mālamapōki'i classroom. Four participants attended the session: one parent of a current student, one parent of a current student who also had other children who previously attended Mālamapōki'i, and two parents of past students. One in-person interview was conducted with a mākua who could not participate in the talk story session; this mākua is a parent of three past students.

Four questions were posed during the talk story session and the interview. The first question was: What are some examples of how your keiki's experience at Mālamapōki'i ground them in cultural values and practices? Building on the previous discussion, the next question explored: How has your experience at Mālamapōki'i strengthened your 'ohana's cultural values and practices? To broaden the scope of the conversation, the next question

was: What experiences at Mālamapōki‘i, if any, have impaired your keiki’s or ‘ohana’s use of cultural values and practices? To delve deeper, the last question asked: What are some examples of how the Mālamapōki‘i program has enriched your keiki through interaction with Indigenous people, communities, and practices?

### **Mākua Data Presentation**

Mākua expressed that their keiki’s experiences at Mālamapōki‘i set the foundation for cultural education. In a discussion about keiki remembering and using oli and mele, a mākua asked if we thought the keiki remembered those things from Mālamapōki‘i. One parent explained it this way:

I think it gave them a solid foundation to continue through school here (at Kanu). How much is the rest of the years here, and how much is Mālamapōki‘i, I couldn’t answer. I can tell you that my daughter, now at the end of the fifth grade, her ‘ōlelo and her cultural base are better than her sister’s was coming out of fifth grade (she didn’t attend Mālamapōki‘i). And I think that’s a good sign that it started here (at Mālamapōki‘i.) - Travis.

The data collected highlighted two themes mākua felt were important in building this foundation and grounding their keiki in cultural values and practices. Participation in cultural protocols and practices emerged as the most significant theme. Mākua made numerous references to keiki involvement in the daily piko ceremony.

Learning oli, mele, and hula were also attributed to the keiki being grounded in the culture. The mākua strongly agreed that participation in oli, mele, and hula were important aspects of their keiki’s learning experience at Mālamapōki‘i. Kauio Kalani noted, “Their chanting, their mele’s. That’s important.” Travis explained that starting hula at a young age and learning oli and mele enriched his daughter and contributed to who she is today. The



mākua iterated that oli and mele are not just used at school; they practice them at home. It is part of their lives:

They do it at home, religiously, in the shower, when they're getting ready. And not just of their piko mea, but any other songs they've learned. You know, every oli, every mele, constantly on repeat. - Maile.

Another factor that surfaced was the Hawaiian value of aloha. They expressed that the value of aloha practiced at Mālamapōki'i made their keiki feel safe. The data underscored that trusting relationships were formed between keiki and kumu, kumu and mākua, and between Mālamapōki'i families through aloha. Kanani expressed that because of the aloha - the genuine love her son felt from his kumu - it boosted his self-confidence and gave him the courage to try hard things without the fear of harsh judgment. She expressed that the feeling of aloha creates a sense of 'ohana at the school. Moana shared that her son brings the value of aloha home with him: "One thing that Kaji always says now, that he got from Mālamapōki'i, was like showing aloha. He often says, 'Let's show aloha' or asks 'Was that showing aloha?'"

Creating connections to the 'āina surfaced as the other important theme in grounding keiki in cultural values and practices. Mākua shared that their keiki learning the proper protocol for using materials to make leis, including cultural ways of gathering and the proper way to return the items back to the 'āina when they were finished, was valuable to their 'ohana. Travis shared his daughter's love of the 'āina: "Ka'enakai wants to just go do stuff. She wants to go in the forest. She is grounded in all of that stuff." The data showed that the keiki are excited about what they are learning about the land, so they take it home and teach it to their 'ohana:

The first thing that comes to my mind is like connection to 'āina. We will be just driving in the car. Randomly he is like, "Look a rainbow. Do you know

how rainbows are made? You have to have sun and you have to have water.” -

Moana.

Evident in the data collected was that parental involvement through PACT (Parent and Child Together) activities strengthened ‘ohana’s cultural values and practices. Each participant expressed gratitude for PACT activities. For the parents of past Mālamapōki‘i keiki, PACT was a weekly occurrence; in response to the COVID pandemic, PACT was reduced to once per month. Although getting to PACT meetings was sometimes challenging due to mākua busy schedules, the participants all agreed that attending PACT was worth it:

Sometimes it felt like a pain in the okole to get there. Just between working and stuff. It is sad because we shouldn’t be that busy. But, it’s hard, like oh my gosh, it’s PACT today, somebody gotta go ... I would definitely say some of those PACT had good impacts that followed to home. - Maile.

Kanani expressed gratitude that PACT is mandatory, saying, “I actually appreciate that Mālamapōki‘i has PACT once every month because I feel like because you guys, like require us to come, it pushed me outside of like my comfort zone.” Travis attributed PACT to strengthening his ‘ohana’s cultural values and practices:

I think a huge part of it is having us ‘ohana involved in a lot of things along the way through PACT. I think that is important. My three kids went to three different preschools, but this is the only one that had involvement.

Community building emerged as another benefit of PACT meetings. The data suggests that through PACT, Mākua develop open communications that stay with them throughout their keiki’s school years. Mākua related the relationships they developed through PACT have aided them in handling sensitive issues that arose between students in later years:

The main thing is all these parents are all getting together. To be honest, all these parents get together, and they communicate with each other. And that makes a big

difference. - Kauio Kalani.

Family learning and practices were evident in the data as activities that strengthen an 'ohana's cultural values and practices. As keiki enter Mālamapōki'i, mākuā can be pushed out of their comfort zone as they are exposed to new practices and values. Often the keiki go home and teach their 'ohana the things they have learned in school:

I went to Kamehameha preschool, and then after that, I went right into public school. So then to come and experience Kanu and Mālamapōki'i, as a parent coming from public school, it was like culture shock. When the school sent text messages they were in English and Hawaiian. I was looking at the words, thinking I don't even know what this means. There were no parentheses with translations. ... And, I'm supposed to be, you know, a little bit more knowledgeable than my kids coming into preschool. The fact that students learn it in school and teach us is great. - Kanani.

When asked about experiences that may have impaired their keiki's or 'ohana's use of cultural values and practices, the response was overwhelming that there were no impairments: "I can't really think of something that would have impaired it. Everything was supporting or supported." - Maile. Considering that two of the parents had keiki at Mālamapōki'i during the transition time in 2018, they were specifically asked about any impairments at that time. The mākuā acknowledged that the transition time was difficult; however, Travis responded, "I don't think there were any barriers. There was a lot of turnover, but that didn't impact the practices."

Exposure to and involvement in cultural activities was showcased in the data collected as examples of how families were enriched through interaction with Indigenous people, communities, and practices: "All of it is relevant, right? Like I mean that's what they do all day, every day pretty much." - Moana.

Keiki being introduced to different places was identified as an important cultural activity that helped keiki discover who they are. Mākua felt the programs at Mālamapōki‘i helped the keiki gain the respect of the community as they learned how to interact with others. One former student graduated from high school and works at a local restaurant where he is well respected. His mother reminisced, “I hear from everyone your son is so well respected. You appreciate it. It takes a village to raise your kids, parents, aunties, and teachers. I would recommend Mālamapōki‘i to everyone. I do.” - Kauio Kalani. The importance of several activities, such as PACT and participation in piko, oli, mele, and hula, resurfaced again under this theme.

When asked about two specific practices at Mālamapōki‘i, lei piko and mo‘okū‘auhau, participants shared the deep connections they felt as they participated in these cultural practices. During the lei piko celebration, each ‘ohana selects a plant to contribute to a collaborative lei-making process:

I really appreciate lei piko ... just to have that tradition of sourcing something from the land or some plant that’s really important to you or your family and has some kind of symbolic value, and then bringing it in and all the families coming together and building this space for the kids. - Moana.

For some mākua, the data shows their first experience with lei piko was challenging. They did not understand the significance of selecting a plant that has meaning to their ‘ohana rather than just grabbing any plant from a provided list.

As part of the lei piko ceremony, each family shares their genealogy using ‘ōlelo Hawai‘i. From the data collection, it was noted that by learning and presenting their mo‘okū‘auhau, they were able to dive deeper into their ‘ohana connections. Participants expressed that they approached the ceremony with hesitation to present their mo‘okū‘auhau in front of everyone, feeling insecure about the use of ‘ōlelo Hawai‘i and knowing the

content for their mo‘okū‘auhau. A veteran Mālamapōki‘i parent reflected, ”It is hard to even say your mo‘okū‘auhau in front of people.” - Kauio Kalani. The Mākua Data Set revealed that mākua value the crossover from school to home:

It is nice that Mālamapōki‘i from then even into Kanu supports what we do at home. At home, we support what’s done at school. So, it’s very well-rounded.

It’s not, you know, whatever you learned in school stays in school. Whatever we do at home stays at home. In our household, it’s very much in both. - Maile.

The collected data highlighted practices that ground keiki and ‘ohana in cultural values and practices and presented ways experiences at Mālamapōki‘i strengthened ‘ohana’s cultural practices. The data emphasizes the significance of participation in piko, oli, mele, and hula. PACT was recognized as vital to strengthening ‘ohana’s cultural practices and building strong communities. No significant impairments caused by experiences at Mālamapōki‘i were identified. Although some transitions were deemed difficult, they did not diminish the cultural foundation of the program.

Table 5.7 provides a summary of the key themes and points of the mākua talk story session and interview.

Table 5.7: Summary of Mākua Perspectives on Mālamapōki‘i

Theme	Key Points	Quotes
Cultural Education Foundation	Keiki’s experiences at Mālamapōki‘i set a foundation for cultural education.	“I think it gave them a solid foundation to continue through school here (at Kanu).” – Travis
Cultural Protocols and Practices	Participation in daily piko ceremony, learning oli, mele, and hula.	“Their chanting, their mele’s. That’s important.” - Kauio Kalani

Value of Aloha	Aloha practiced at Mālamapōki‘i made keiki feel safe, built trusting relationships, and boosted self-confidence.	“One thing that Kaji always says now, that he got from Mālamapōki‘i, was like ‘showing aloha.’” - Moana
Connection to ‘Āina	Keiki learning proper protocols for using materials, gathering, and returning items to the ‘āina.	“Ka‘enakai wants to just go do stuff. She wants to go in the forest. She is grounded in all of that stuff.” - Travis
Parental Involvement (PACT)	PACT activities strengthen ‘ohana’s cultural values and practices, though sometimes challenging to attend.	“It is sad because we shouldn’t be that busy... I would definitely say some of those PACT had good impacts that followed to home.” - Maile
Community Building	PACT meetings help mākuā develop open communications and handle sensitive issues.	“All these parents get together, and they communicate with each other. And that makes a big difference.” - Kauio Kalani
Family Learning and Practices	Keiki teach their ‘ohana what they learn at school, pushing parents out of their comfort zones and fostering family learning.	“When the school sent text messages they were in English and Hawaiian... the fact that students learn it in school, and teach us is great.” - Kanani
Impairments	No impairments to cultural values and practices were identified; transitions were challenging but didn’t impact cultural practices.	“I can’t really think of something that would have impaired it. Everything was supporting or supported.” - Maile
Cultural Activities and Enrichment	Exposure to cultural activities enriches families through interaction with Indigenous people and communities, helping keiki discover their identity.	“Keiki being introduced to different places was identified as an important cultural activity that helped keiki discover who they are.”
Lei Piko and Mo‘okū‘auhau	Lei piko celebration and presenting genealogy deepen ‘ohana connections, though initially challenging for some mākuā.	“It is hard to even say your mo‘okū‘auhau in front of people.” - Kauio Kalani
School-Home Integration	Practices at Mālamapōki‘i support and integrate with home practices, creating a well-rounded cultural education.	“It’s very well-rounded. It’s not, you know, whatever you learned in school stays in school. Whatever we do at home stays at home.” - Maile

### **Kumu and Ho‘okumu Data Set**

This data set was gathered through one talk story session and three interviews. The talk story session was held on March 8, 2024, in the Mālamapōki‘i classroom. Three current Mālamapōki‘i kumu participated. I have a working relationship with all three kumu, which contributed to the desired informal atmosphere required to openly discuss the topics. A small makana (gift) was given to each participant to say mahalo for their participation. The makana were selected for each participant individually. The kumu responded to five prompts, providing their insights into the reality of the daily practices at the school.

The first interview was held in person on July 16, 2024. It was a casual conversation covering the same five questions presented to the current kumu. The second kumu interview was conducted on June 21, 2024, over Zoom to accommodate the kumu’s busy schedule. Even with the use of technology, we were able to establish the same informal atmosphere as the other data-gathering techniques and explored the same questions as the other interview and talk story session. One past ho‘okumu was interviewed in person on March 21, 2024. The ho‘okumu question prompts were slightly different. The talk story and interview prompts can be reviewed in Appendix B. Each session was recorded and later transcribed for reference during analysis. A coding method was used to classify the data and organize it according to the question prompts. The data is summarized in the following section.

### **Kumu and Ho‘okumu Data Presentation**

The first question posed to the kumu and ho‘okumu during data collection was: **“What are some important aspects/values of an effective preschool program?”** Four key points emerged from the data collection: first, family involvement and relationships; second, balance between structure and flexibility; third, kindness, respect, and joy; and fourth, connection to culture and place.

**Family Involvement and Relationships:** Building strong relationships between

kumu, keiki, and 'ohana is crucial. Trust and nurturing relationships are fundamental for effective learning:

One of the things that makes an effective preschool is the family aspect. When I think about Indigenous culture, especially Hawaiian culture in general, the 'ohana aspect is a very important key part. In Hawaiian culture, 'Ohana is not necessarily the nuclear family, which is mom, dad, and children, but it also includes grandparents' aunty's, including mo'okū'auhau. This means that we also incorporate ancestors and their stories, their mo'olelo - Kumu 5.

Parent and Child Together (PACT) activities were presented as a positive example of building strong relationships with the keiki's 'ohana. One of the positive attributes of PACT emerged as the keiki and mākua working together in a playground clean-up activity. Aunty Pat discussed the importance of parents understanding and valuing the goals of the preschool. She noted that when the school transformed from more of a play-group structure to a preschool structure, once the parents understood the purpose of preschool, they saw the value it offered to them and their keiki. It was stressed that the relationships needed to be between kumu, keiki, and 'ohana. Trusting and nurturing relationships were deemed fundamental to student learning. According to the data collected, it was evident that relationships determine the effectiveness of communication between families and the kumu:

You need to have a good pilina between each other with your families. Because then, only then, will the communication aspect be easy. - Kumu 3.

**Balance Between Structure and Flexibility:** A successful preschool program needs to balance structured academic goals with the flexibility to allow children to explore and learn at their own pace. The importance of balancing structure and flexibility was evident in the data collected. During the discussion of structure and flexibility, Kumu 3 stated:

I think you just need to be intentional. You need to be intentional about what



you're doing and how you're doing things because then you can implement Indigenous practices or culture or knowledge or other things in the different lessons that you're trying to do.

Also evident in the data collected was the willingness to be flexible and adapt to keiki's needs:

We understand that children develop in different ways, and they learn in different ways. So, making sure that you are aware of the child and meeting them where they're at so that you can help them grow in a way that is developmentally appropriate for them. - Kumu 5.

This awareness of student needs shows the kumu's flexibility and willingness to adapt lessons and activities to best serve the keiki, even if it requires straying from the day's structure. The data validated that outdoor learning provides a flexible learning structure. Kumu 4 discussed the challenges and impact that not having enough outdoor time had on keiki. She concludes that the lack of outdoor exploration limited the keikis' opportunities for discovery and flexible learning, reducing the children's ability to engage in self-directed learning and discovery.

**Kindness, Respect, and Joy:** Respecting children's voices and ensuring they have joyful experiences are key values identified by the data collected. Allowing children to express themselves and make happy memories is important. Creating an atmosphere of kindness between keiki, kumu, and mākua is an essential element of an effective preschool program:

It is important that the keiki feel joy and make happy memories. - Kumu 4.

Relationship building between kumu, keiki, and mākua was stressed to foster trust and prove communication. Joyful and respectful interactions were mentioned as important aspects of building a family-like atmosphere in the preschool. Kumu 1 emphasized the importance of

balancing structure with nurturing kindness and respect.

**Connection to Culture and Place:** The collected data emphasized the significance of integrating cultural elements, maintaining a connection to the ‘āina, and practicing local traditions in establishing an effective preschool program:

I think we make a connection to land and culture here compared to other schools, and I think that’s why some of the families that we interviewed chose us. Because of ‘āina. - Kumu 2

The importance of connections to culture and place is evident throughout the kumu and po‘okumu data set and will be discussed further in other sections.

The second prompt given to the kumu and po‘okumu was: **“How do you blend modern subject matter with Indigenous knowledge and skills?”** This question produced two themes: braiding through the environment and the use of cultural stories and practices. The responses highlighted the importance of using cultural stories in the natural environment to create an atmosphere where Indigenous knowledge is blended with modern subjects to create an effective learning environment.

**Braiding Through Environment:** Using the natural environment to teach subjects like math and literacy by integrating them with Indigenous knowledge and skills:

We constantly take kids out to kilo (observe) which touches on the weather or just in general looking at the land and the changes and all those things. So, we incorporate it that way. - Kumu 1

For example, the keiki interacted with native plants, observed patterns in the sky, counted baby nēnē (Hawaiian geese), and used these observations to learn and reinforce mathematical concepts. The keiki participated in planting māmakī, a native plant, and learned about the scientific method through observation. They learned about the plant’s life cycle and what the plant is used for. Literacy and science were integrated through

storytelling and hands-on experiences. By observing the movement of the clouds and trees, the keiki learned about wind direction and incorporated cultural knowledge by using Hawaiian directional terms. Often, lessons were delivered outdoors, and natural materials like sticks and rocks were used by keiki to form letters and numbers. Egg-gathering activities were used as a natural way to teach counting, sorting, and responsibility. In the data collected, it was underscored that blending modern subject matter with Indigenous knowledge and skills is achieved through hands-on, outdoor activities that connect traditional cultural practices with academic concepts, creating a holistic and engaging learning environment for the keiki. A kumu pursuing an advanced degree expressed the importance of blending modern with Indigenous, stating:

Going to school, really kind of digging deep to understand how that cultural aspect can be intertwined with this Western education. - Kumu 5

**Use of Cultural Stories and Practices:** Teaching keiki through cultural stories and practices was identified in the data collected as a method that effectively blends modern academic subjects with Indigenous knowledge and teaches keiki Indigenous skills:

Teaching modern subjects through cultural stories (mo‘olelo) and practices helps children connect with their heritage while learning academic skills. - Kumu 5

The mo‘olelo of Hāloa is an example of mo‘olelo blending modern with Indigenous. The story was used to teach the keiki about the significance of kalo in Hawaiian culture. Literacy and mathematical functions were weaved into the activities. Keiki participated in cultivating kalo. They cared for the plants and measured and documented their growth. Extended learning activities were provided, with the keiki learning to make laulau (meat wrapped in kalo leaves) from materials the kumu had prepared to represent the items needed to make

real laulau:

When they did the laulau, they had to count everything and label it. Before they worked with kalo, they watched the story of Hāloa. This set the foundation for their learning, helping them understand the cultural importance and the steps involved in making laulau. - Kumu 2

This one mo‘olelo incorporated many Indigenous practices such as caring for the kalo plants, harvesting them, and learning to make food from the plant while also integrating modern subject skills such as literacy through storytelling, math through counting and measuring the kalo, and science through understanding the plant’s life cycle and the conditions needed for it to grow.

The third topic discussed with the kumu and po‘okumu was: **“What are the barriers to implementing Indigenous philosophies and standards?”** Two major points became evident from the data collection: lack of knowledge and resources and classroom behavior and home support.

**Lack of Knowledge and Resources:** The collected data reveals that a possible barrier to implementing Indigenous philosophies and standards in the preschool program is a lack of knowledge and cultural confidence among staff:

I think the main barrier is the limited knowledge of Indigenous culture and language among staff, and the lack of appropriate tools and resources to assess cultural aspects of the program effectively. - Aunty Pat

Educators at Mālamapōki‘i identified that their limited understanding of ‘ōlelo Hawai‘i and of some Indigenous practices hinders the program’s ability to fully embrace these practices. They expressed a desire for more professional development and training in Indigenous knowledge and cultural practices to overcome these barriers. Seeking out and utilizing available cultural resources was stressed as a learning tool that kumu should utilize

more often. One kumu mentioned learning along with the keiki when a cultural resource was presented through a lesson. The data shows that kumu and po'okumu feel that continuous professional development is crucial to mitigating these challenges. Another barrier that the data indicated is the lack of assessment tools available to evaluate the Indigenous practices at Mālamapōki'i.

**Classroom Behavior and Home Support:** Classroom behavior and the level of support children receive at home can be significant barriers to implementing a preschool program, including integrating Indigenous practices. For example, Kumu 3 related how a keiki coming late to school daily sets the stage for him to have a bad day. Kumu 1 explained that events like a child having a bad morning before they arrive at school sometimes require most of the day to recover from, making it difficult to carry out the daily plan.

The fourth question presented to kumu and po'okumu was: **“How is kūlia manifested in your teaching?”** Kūlia means to strive for your highest and is a core value of Mālamapōki'i. The data collected provides rich insights into how Kūlia is integrated into their daily routines and practices. Two areas of focus were highlighted by the data: encouraging independence and responsibility, and community collaboration.

**Encouraging Independence and Responsibility:** The data highlighted that the kumu place importance on teaching children to take care of their environment and their own belongings, stating that fostering independence and responsibility are crucial for the keiki's development. By encouraging the keiki to manage their own tasks and contribute to the classroom environment, they learn valuable life skills that align with the principle of Kūlia:

Teaching children to take care of their environment and their own belongings fosters independence and a sense of responsibility. - Kumu 5

**Community Collaboration:** The significance of building a strong sense of community and collaboration among the children was evident in the data collected.

Teaching the keiki to work together towards common goals helps instill a sense of collective responsibility and mutual support. This approach not only nurtures social skills but also reinforces the value of striving for excellence as a group.

The final inquiry directed to kumu and po‘okumu was: **“What are some examples of how the Mālamapōki‘i program is enriched through interaction with Indigenous people, communities, and practices?”** The data collected revealed three main points: engagement with Indigenous experts, hands-on cultural activities, and incorporating cultural observations. The insights gathered from interviews and talk story sessions with kumu and ho‘okumu highlight these enriching interactions.

**Engagement with Indigenous Experts:** Inviting cultural practitioners and community members to share their knowledge with students is crucial. An example of this is a cultural practitioner working with the keiki to plant native plants such as māmaki and koa. Keiki got hands-on experience participating in traditional Hawaiian practices. Another example is the keiki’s interaction with wa‘a (canoe) building. Experiences ranged from experts visiting the classroom to keiki working alongside older students and cultural practitioners learning to shape a new canoe. Students document this learning with sequential drawings of the progress made each time they visit the wa‘a. This interaction will be discussed further in the Observation and Document Review section later in this chapter.

**Hands-On Cultural Activities:** Conducting activities such as harvesting kalo and preparing an imu (underground oven) by helping to carry the rocks. Keiki learn through direct experience and peer learning. Another example of hands-on cultural activities includes kilo (observation) of the environment, moon phases, and other natural elements. These practices are integral to cultural learning and promote scientific observation and inquiry. Evidence of these practices discussed by the kumu is presented later in this chapter in the Observation and Document Review section. Table 5.8 provides a summary of the key

themes and points of the Kumu talk story session and interviews.

Table 5.8: Summary of Kumu and Ho'okumu Perspectives on Mālamapōki'i

Theme	Key Points	Quotes
Family Involvement and Relationships	Building strong relationships between kumu, keiki, and 'ohana is crucial. Trust and nurturing relationships are fundamental for effective learning.	"One of the things that makes an effective preschool is the family aspect. When I think about Indigenous culture, especially Hawaiian culture in general, the 'ohana aspect is a very important key part." - Kumu 5
Balance Between Structure and Flexibility	A successful preschool program needs to balance structured academic goals with the flexibility to allow children to explore and learn at their own pace.	"I think you just need to be intentional. You need to be intentional about what you're doing and how you're doing things because then you can implement Indigenous practices or culture or knowledge or other things in the different lessons that you're trying to do." - Kumu 3
Kindness, Respect, and Joy	Respecting children's voices and ensuring they have joyful experiences are key values identified by the data collected. Allowing children to express themselves and make happy memories is important.	"It is important that the keiki feel joy and make happy memories." - Kumu 4
Connection to Culture and Place	The collected data emphasized the significance of integrating cultural elements, maintaining a connection to the 'āina (land), and practicing local traditions in establishing an effective preschool program.	"I think we make a connection to land and culture here compared to other schools, and I think that's why some of the families that we interviewed chose us. Because of 'Āina." - Kumu 2
Braiding Through Environment	Using the natural environment to teach subjects like math and literacy by integrating them with Indigenous knowledge and skills.	"We constantly take kids out to kilo (observe) which touches on the weather or just in general looking at the land and the changes and all those things. So, we incorporate it that way." – Kumu 1
Use of Cultural Stories and Practices	Teaching keiki through cultural stories and practices was identified as a method that effectively blends modern academic subjects with Indigenous knowledge and teaches keiki Indigenous skills.	"Teaching modern subjects through cultural stories (mo'olelo) and practices helps children connect with their heritage while learning academic skills." - Kumu 5

Encouraging Independence and Responsibility	Teaching children to take care of their environment and their own belongings fosters independence and a sense of responsibility.	“Teaching children to take care of their environment and their own belongings fosters independence and a sense of responsibility.” - Kumu 5
Community Collaboration	Building a strong sense of community and collaboration among the children was evident. Teaching the keiki to work together towards common goals helps instill a sense of collective responsibility and mutual support.	“Building a strong sense of community and collaboration among the children helps instill a sense of collective responsibility and mutual support.” - Kumu 3
Engagement with Indigenous Experts	Inviting cultural practitioners and community members to share their knowledge with students is crucial.	“We have cultural practitioners working with the keiki to plant native plants such as māmakī and koa.” - Kumu 2
Hands-On Cultural Activities	Conducting activities such as harvesting kalo and preparing an imu (underground oven) by helping to carry the rocks.	“Keiki got hands-on experience participating in traditional Hawaiian practices like harvesting kalo and preparing an imu.” – Kumu 1
Lack of Knowledge and Resources	The collected data reveals that a possible barrier to implementing Indigenous philosophies and standards in the preschool program is a lack of knowledge and cultural confidence in staff.	“I think the main barrier is the limited knowledge of Indigenous culture and language among staff, and the lack of appropriate tools and resources to assess cultural aspects of the program effectively.” -Aunty Pat
Classroom Behavior and Home Support	Classroom behavior and the level of support children receive at home can be significant barriers to implementing a preschool program, including integrating Indigenous practices.	“You need to have a good pilina (relationship) between each other with your families. Because then, only then, will the communication aspect be easy.” - Kumu 3

### Past Haumāna Data Set

Data was collected for the past haumāna data set at a talk story session held on May 3, 2024.

The session was attended by six haumāna who were past Mālamapōki‘i students. At the time of the session, two were in fifth grade, and four were kindergarteners. As the haumāna entered the classroom, they spent some time discovering what had changed and exploring remembered spaces. It is customary to serve food during gatherings, so the haumāna enjoyed



a pizza lunch as part of the activity. After the session, each haumāna received a makana (gift) comprised of local treats and an ‘ōlelo Hawai‘i storybook, which presents the story in Hawaiian and, when flipped over, the story in English. The atmosphere was relaxed and engaging. The haumāna were presented with a long banner attached to the wall labeled “Memory Lane.” We began by discussing the memories they had of their time at Mālamapōki‘i. After the discussion, the haumāna were asked to draw what made Mālamapōki‘i a special place and to illustrate why they enjoyed attending school. The haumāna were excited as they reminisced about their experiences at Mālamapōki‘i. They enjoyed explaining their drawings and looking at the work of their peers.

### **Past Haumāna Data Presentation**

The next step was open coding. I began by assigning initial codes to each data point without preconceived categories. The captions and drawing descriptions were analyzed, and 13 open coding categories were identified: Outdoor Activities, Playground Elements, Safety Awareness, Cultural Practices, Social Interactions, Physical Development, Creative Expression, Nature and Environment, Animal Interactions, Emotional Experiences, Skill Acquisition, Structured Activities, and Free Play. Moving forward, I grouped similar codes into broader categories by identifying patterns and relationships among the initial codes. See Table 5.9 for a description of the criteria used to classify the data.

Table 5.9: Open Coding Categories for Memories of Past Haumāna

Code	Description
1. Outdoor Activities	Includes mentions of playing outside on the playground, etc.
2. Playground Elements	Specific features of the playground like pu‘u, climbing logs, rocks, etc.
3. Safety Awareness	References to learning safety rules or safe practices.
4. Cultural Practices	Mentions of hula and other culturally specific activities.
5. Social Interactions	Instances of playing with others or learning social skills.
6. Physical Development	Activities that promote physical skills like balance, climbing, etc.
7. Creative Expression	Artistic activities like painting or drama.
8. Nature and Environment	References to natural elements or outdoor environments.
9. Animal Interactions	Mentions of animals, like the Jackson Chameleon.
10. Emotional Experiences	Expressions of feelings or emotional states.
11. Skill Acquisition	Learning new abilities or improving existing ones.
12. Structured Activities	Organized or guided activities like hula lessons.
13. Free Play	Unstructured play activities

The open coding was consolidated into five final themes: Nature, Environment, and Playground (NEP), Creative Expression (CE), Cultural Practices (CP), Physical Development (PD), and Social and Emotional Learning (SEL). Table 5.10 summarizes how the initial open codes were consolidated and depict the frequency with which the themes surfaced. The NEP theme was by far the most prominent, with 20 occurrences in the data. This theme encompasses outdoor activities, playground elements, and interactions with the natural environment. Creative Expression developed as a theme to represent artistic activities and dramatic play, appearing six times in the data. Hula was the primary focus of the Cultural Practices theme, surfacing seven times. The older haumāna spoke fondly of participating in mass hula practice, where the Mālamapōki‘i haumāna joined the larger K-12 school community for weekly hula practice. The theme of Physical Development centered around activities that promote the development of gross motor skills through structured and unstructured activities on the playground and surfaced eight times throughout the data. The Social and Emotional Learning theme, combining aspects of safety awareness,

social interactions, and emotional experiences, was represented nine times in the data collected.

Figure 5.19 highlights many of the playground features mentioned in the data.



Figure 5.19: *Mālamapōki 'i Playground*. Ka'enakai (2024).

Figures 5.20 through 5.25 are sections of the “Memory Lane” banner. Each image illustrates the keiki’s memories of what made Mālamapōki‘i special for them. The illustrations capture a wide range of activities. These vibrant depictions reflect the keiki’s engagement with hula, their love of the outdoors, and the joy found in everyday learning and play.



Figure 5.20: *Haumāna napping and playing outside*. 'Ihiwai (2024).



Figure 5.21: *Learning the safety rules* Colton (2024).



Figure 5.22: *Playing on the playground.* Kinsey (2024).



Figure 5.23: *Painting on the outside easel and Hula Drama.* Kali'a (2024).



Figure 5.24: *Mālamapōki 'i playground and ipu.* Lehiwa (2024).



Figure 5.25: *Mass hula practice.* Ka'enakai (2024).

To summarize, Table 5.10 provides a detailed snapshot of the coded data. This thematic presentation helps identify patterns and connections based on the haumāna's memories of Mālamapōki'i, thereby highlighting significant experiences that define their time at the school.

Table 5.10: Final Coding of Past Haumāna Data

<b>Key:</b>					
NEP = Nature, Environment, and Playground; CE = Creative Expression; CP = Cultural Practices; PD = Physical Development; SEL = Social and Emotional Learning					
<b>Captions and Drawing Description</b>	<b>NEP</b>	<b>CE</b>	<b>CP</b>	<b>PD</b>	<b>SEL</b>
I am on the playground	X				
I learned safety rules	X				X
This is us in Kupu'ae napping					X
I love playing outside	X				
I love playing on the pu'u	X			X	
I love painting on the board	X	X			
I love doing Hula Drama		X	X		
Learning how to play nice is what the playground taught me	X				X
Hula helped me join a halau and get better			X	X	
The playground helped me learn the safety rules	X				X
The playground helped me learn how to be balanced	X			X	
When I played on the playground, I learned safety from the very beginning	X				X
In hula I learned the basics of hula from the school			X		
Mass Hula			X		
Smiling keiki					X
Playing ball	X			X	
Board with numbers		X			
Keiki napping					X

Keiki playing outside	X				
Keiki painting on outdoor easel	X	X			
Natural pu'u in the playground	X				
Keiki doing hula			X		
Climbing Logs on the playground	X			X	
Garden boots	X				
Numbers		X			
Jackson Chameleon Cage	X				
Climbing Rocks on the playground	X			X	
Stage on the playground	X	X			
Climbing Tree on the playground	X			X	
Balance Beam	X			X	
Keiki with ipu			X		
Many keiki doing hula together			X		X
Carpet square rug in the classroom		X			

### Observation and Document Review Data Set

The observation and document review data set represents data collected through five distinct observations. Two observations were conducted during PACT activities where mākuā and keiki participated in activities together. Another observation focused on Makahiki games, while another centered on the students' year-end hō'ike, Hula Drama. The final set of observations was conducted in the Mālamapōki'i classroom.

To complement the observations, I also reviewed documents relevant to the observations. A structured approach was used for thematic coding. Ten themes were predetermined and used to code the observation and document review data. This thematic approach produced targeted insights into Indigenous practices at Mālamapōki'i and allowed

for efficient categorization of the data based on the predetermined themes. The themes were selected from Nā Honua Maui Ola. The scope of this study did not allow for observations of all 16 guidelines. Considering the age of the participants and the environments that would be observed, the observations focused on five of the guidelines. Each of the guidelines encompasses two of the predetermined themes. Table 5.11 provides an overview of the observations and how the themes align with the Nā Honua Maui Ola Guidelines.

Table 5.11: Observation Alignment with Nā Honua Maui Ola

<b>Observation Code</b> PL = PACT - Lei Piko, M = Makahiki, PK = PACT - Kāpala, C = Classroom, HD = Hula Drama					
1. Incorporate cultural traditions, language, history, and values in meaningful holistic processes to nourish the emotional, physical, mental/intellectual, social and spiritual well-being of the learning community that promote healthy maui and mana.					
	PL	M	PK	C	HD
Cultural Practices and Behaviors (CPB)	X	X	X	X	X
Demonstrate Hawaiian Values (DHV)	X	X	X	X	X
2. Maintain practices that perpetuate Hawaiian heritage, traditions, and language to nurture one's maui and perpetuate the success of the entire learning community.					
	PL	M	PK	C	HD
Mo'okū'auhau (MO)	X				
Interact with Kūpuna (IP)				X	
12. Develop an understanding of Hawaiian language, history, culture, and values through an Indigenous perspective to foster a sense of self, place, community, and global connection.					
	PL	M	PK	C	HD
Cultural Activities (CA)	X	X	X	X	X
Respectful of Places (RP)	X			X	
14. Plan for meaningful learner outcomes that foster the relationship and interaction among people, time, space, places, and natural elements around them to enhance one's ability to maintain a "local" disposition with global understandings.					
	PL	M	PK	C	HD
Understand the Meaning of Words (UMW)	X	X	X	X	
Understand Practices (UP)	X	X		X	X
16. Cultivate a strong sense of kuleana to one's past, present, and future to enhance meaningful purpose and to bring about joy and fulfillment for one's self and family, and local and global communities.					
	PL	M	PK	C	HD
Kilo (K)				X	X
Know Kuleana (KK)	X	X	X	X	X

Cultural practices and behaviors (CPB), Demonstrate Hawaiian Values (DHV), Cultural Activities (CA), and Know Kuleana (KK) were observed during all five observations. The Understand the Meaning of Words (UMW) and Understanding Practices (UP) themes were observed in four observations. Respectful of Places (RP) and Kilo (K) were observed in two observations. Mo‘okū‘auhau (MO) and Interact with Kūpuna (IP) were each observed once.

Observations and document reviews were conducted between September 2023 and May 2024. Each observation included identifying which themes were evident during the observation. Thorough descriptions of each observation are detailed below, including the date, setting, activities observed, and the documents reviewed, if any.

**Ka Lei Piko Observation:** September 1, 2023

**Documents Reviewed:** Ka Lei Piko Packet

Ka Lei Piko is an annual cultural activity. At the start of each school year, families are invited to participate in Ka Lei Piko. The activity was held in the Mālamapōki‘i classroom on September 1, 2023. At the time of the activity, 20 keiki were enrolled in the program. Nineteen families attended and participated in the activity. An informational packet sent home to each ‘ohana was reviewed as part of the document review. The document provided background on lei making and explained the significance of the word “lei,” which is used figuratively to describe a loved one, especially a child. The document explained what Ka Lei Piko is and why it is a cultural practice observed at Mālamapōki‘i:

Ka hana lei is a skill and craft of our kūpuna that is still practiced today. Lei were made and gifted as a symbol of aloha and affection. It can be made of flowers, leaves, feathers, and or shells. The word lei is also figuratively used to describe a loved one and especially a child. Ka Lei Piko is a lei that is made and placed at the piko or center of a place or hale. Ka Lei Piko is essentially a



hō‘ailona or symbol of unity, aloha, and a sign of a new beginning. In our efforts to start off the new school year, we would like to create a lei piko to represent Nā ‘ohana o ka Papa Mālamapōki‘i. This will be a time where all kumu and ‘ohana of our class can come together and contribute their mana‘o, aloha, and kāko‘o into the lei, which in turn will reflect onto the new school year. (Mālamapōki‘i, 2023, p. 1)

Through the documentation, participants were educated about the significance of plants and encouraged to think deeply about the plants selected and share their significance during the Ka Lei Piko activity. The document reviewed states:

Anything offered to be added into the lei piko should have either a special connection to the individual or some kind of mana‘o behind the reason for sharing it. For example, lehua flowers can be added to represent our wahipana ‘o Waimea. Koa leaves can represent the strength of our kūpuna and what we envision our haumāna and school to be in the future. Be sure to do your research before choosing your mea kanu. (Mālamapōki‘i, 2023, p. 1)

The document included a list of possible pua and lau to be used in a lei piko. Twelve mea kanu (plants) were listed, and the significance was explained. Parents could select a plant from the list that held significance for them, or they could choose alternate plants that were important to their ‘ohana.

The process of making the Lei Piko was explained in the provided documentation to prepare the ‘ohana members that would attend the activity. The purpose of a lei piko was stressed:

When each mea kanu is added into the lei, the individual will be asked to explain its significance to themselves or the school. At this time each mea kanu will be made pa‘a into the lei and likewise each mana‘o will be pa‘a as well. Our

contribution to this lei is evidence of willingness to connect with each other, symbolizing commitment to the mission, vision, and purpose, and weaving together a balanced education. When the Lei Piko is pau it will be placed at the piko of our classroom. (Mālamapōki‘i, 2023, p. 1)

The document reviewed and the activity observation indicated a spiritual aspect of Lei Piko and the intent to build cultural practice with the Mālamapōki‘i ‘ohana:

This Lei Piko will not only be a visual symbol for our kumu and haumāna but also a spiritual and cultural connection to our past, present, and future. When we look at this Lei Piko we should be able to ground ourselves and connect ourselves as one ‘ohana with the same mission and goal. It should be a reminder of where we have been, where we are now, and where we are going. (Mālamapōki‘i, 2023, p. 1)

Mo‘okū‘auhau is an important aspect of Lei Piko. Two templates were provided in the reviewed document, Ka Lei Piko Packet, for parents to practice reciting their mo‘okū‘auhau. Instructions were provided that allowed parents to select the template that they felt the most comfortable with, one being simpler than the other:

There are two different versions of mo‘okū‘auhau (genealogy) for you to choose from. One version is simple while the other version is a little more challenging. You may choose to use whichever version is best for you. You will need to read from the paper or memorize your mo‘okū‘auhau and share it with the class. (Mālamapōki‘i Admin, 2023, p. 1)

Table 5.12 presents a detailed analysis of the PACT Ka Lei Piko observation. This coding table aligns the observed practices and behaviors during the Lei Piko activity with the observation and document review data set themes. Observations were coded and grouped in alignment with the ten established themes. Evidence of themes observed is provided as

examples. The table is structured to showcase how the Lei Piko activity demonstrates these themes. Each row represents a specific theme, indicating the theme's presence and providing concrete evidence from the observation. It is important to note that not all instances of each theme may have been observed and documented during the observation, highlighting a limitation in the comprehensiveness of the collected data.

Table 5.12: Coding for PACT - Lei Piko Observation with Evidence

Theme	Present	Evidence from Observation
Cultural Practices and Behaviors (CPB)	X	<p>“Ka hana lei is a skill and craft of our kūpuna that is still practiced today.”</p> <p>“The process of making the Lei Piko was explained in the provided documentation to prepare the ‘ohana members that would attend the activity.”</p>
Demonstrate Hawaiian Values (DHV)	X	<p>“Ka Lei Piko is essentially a hō‘ailona or symbol of unity, aloha, and a sign of a new beginning.”</p> <p>“Our contribution to this lei is evidence of willingness to connect with each other, symbolizing commitment to the mission, vision, and purpose.”</p>
Mo‘oku‘auhau (MO)	X	<p>“Two templates were provided... for parents to practice reciting their mo‘okū‘auhau.”</p> <p>“You will need to read from the paper or memorize your mo‘okū‘auhau and share it with the class.”</p>
Interact with Kūpuna (IP)		
Cultural Activities (CA)	X	<p>“Ka Lei Piko is an annual cultural activity.”</p> <p>“This Lei Piko will not only be a visual symbol for our kumu and haumāna but also a spiritual and cultural connection to our past, present, and future.”</p>
Respectful of Places (RP)	X	<p>“For example, lehua flowers can be added to represent our wahipana ‘o Waimea.”</p> <p>“Be sure to do your research before choosing your mea kanu.”</p>
Understand the Meaning of Words (UMW)	X	<p>“The document provided background on lei making and explained the significance of the word lei...”</p> <p>“The word lei is also figuratively used to describe a loved one and especially a child.”</p>

Understand Practices (UP)	X	“The process of making the Lei Piko was explained in the provided documentation...” “When each mea kanu is added into the lei, the individual will be asked to explain its significance to themselves or the school.”
Kilo (K)		
Know Kuleana (KK)	X	“It should be a reminder of where we have been, where we are now, and where we are going.” “This Lei Piko will not only be a visual symbol for our kumu and haumāna but also a spiritual and cultural connection to our past, present, and future.”

### Makahiki Ceremony and Games Observation



Figure 5.26: *Mālamapōki ‘i keiki concentrating in the ‘Ulu Maika Competition.* Kumu 3 (2024).

**Observation:** December 5-6, 2023

**Documents Reviewed:** Hunehune Kalo Newsletter - December 2023

Hunehune Kalo Newsletter - January 2024

The Makahiki season begins with the rising of the star constellation Makali‘i. It is a season of rejuvenation filled with feasting, sports and games, storytelling, and hula dancing. Kā Kanu Makahiki opened with each class participating in protocol, oli, and ceremony. Each class presented their flag and offered a makana (gift). The two Hunehune newsletters

reviewed provided parents with a wealth of information about Makahiki, explaining the history and significance of the Makahiki season:

Makahiki is a season of peace, feasting, and rejuvenation that begins with the rising of Makali‘i and the constellation Pleiades at sunset. It marks the Hawaiian New Year and the beginning of Makahiki season. Makahiki usually starts in late October, early November and ends in late January or February. One of the four great Hawaiian gods, Lono is honored during the Makahiki season. Lono, is the god of peace, agriculture, and fertility. He is also the god of the winter winds, clouds, and rains, which nourish the ‘āina and rich vegetation. The end of Makahiki began when Lono and his procession completed their journey around the island. It was time for Lono to return to his home in the luakini temple of the high chief. The slight changes in the weather and nature showed that Makahiki was ending. The nights grew shorter and the days warmer. Ritual ceremonies brought an end to the Makahiki season. (*Hunehune KALO - Bits and pieces of news*, 2023, p. 17)

Mālamapōki‘i keiki participation at the Kanu Makahiki games was observed over two days on December 5-6, 2023. Makahiki games were held on the large field on the Kanu o ka ‘Āina campus. Haumāna from Pre-K-12th grade participated and enjoyed a week-long festive celebration. Mālamapōki‘i keiki participated during the first two days of the event. Keiki participated in ‘Ulu Maika, a traditional stone disk rolling game; Hukihuki, a tug-of-war game; Kūkini, a foot race for speed and endurance; Pā Uma, or arm wrestling; and Hākā Moa, a game of balance and physical skill (*Hunehune KALO - Bits and pieces of news*, 2023).

Observation of the Hukihuki event highlighted teamwork and emphasized the Hawaiian value of kōkua aku, kōkua mai — give help, receive help — as the keiki worked

together to compete in a tug-of-war with an opposing team. The keiki even went up against their kumu! Keiki demonstrated knowledge of their kuleana depending on what place they had in the lineup for Hukihuki. ‘Ōlelo Hawai‘i was used by the judges to start and end the game. Keiki were encouraged to show good sportsmanship whether they won or lost. I observed keiki from both sides, congratulating each other after the competition. Figures 5.27 through 5.30 show Mālamapōki‘i keiki participating in the Kanu Makahiki games.



Figure 5.27: *Mālamapōki‘i keiki preparing for Hukihuki.* Kumu 3 (2024).



Figure 5.28: *Mālamapōki‘i keiki winning the race.* Kumu 3 (2024).

Kūkini is a traditional Hawaiian game featuring a foot race that exhibits speed, strength, and endurance. Watching the keiki, you could see they were trying their hardest, exemplifying the Hawaiian value of Kūlia i ka nu‘u, or strive to reach your highest. You could see it on their faces.

Pā Uma is a traditional arm-wrestling challenge. Keiki’s knowledge of the rules was evident during the observation. Each keiki kept their other arm behind their back and tried to keep the active elbow on the ground. The value of Hawaiian Mālama, or caring for others, surfaced as the keiki showed concern for each other as the competition pushed them to their limits. I often heard the competitors and the spectators expressing concern about each other. Comments like, “Are you okay?” or “You can do it, you’ve got this” echoed throughout the competition.

Hākā Moa is a wrestling match where participants can only use one arm and one leg. It represents a chicken fight. Keiki demonstrated an understanding of the rules as they tried to wrestle their opponent out of the circle while hopping on one foot. Figure 5.31 shows opponents expressing the Hawaiian value of aloha to each other at the end of their match.



Figure 5.29: *Mālamapōki 'i keiki challenging each other in Pā Uma.* Kumu 3 (2024).



Figure 5.30: *Mālamapōki 'i keiki engaged in Hākā Moa competition.* Kumu 3 (2024)

‘Ulu Maika, as shown in Figure 5.26 at the beginning of this section, is a traditional stone rolling game. Mālamapōki‘i keiki demonstrated the Hawaiian value of kuleana by waiting patiently for their turn. They also displayed good sportsmanship by cheering on other competitors, embodying both Kuleana and Aloha as they fulfilled their responsibility to respect and support others. (See 5.31)



Figure 5.31: *Mālamapōki‘i keiki showing Aloha to one another.* Kumu 3 (2024).

In summary, Table 5.13 presents the themed analysis of the Makahiki Games observation. The table aligns the observed practices and behaviors and the documents reviewed with the themes used for observation. Each observation was coded and categorized according to the ten predetermined observation themes. The table provides a structured summary of the highlights and examples of the themes observed during the activity.



Table 5.13: Coding for Makahiki Games Observation with Evidence

Theme	Present	Evidence from Observation
Cultural Practices and Behaviors (CPB)	X	Kā Kanu Makahiki opened with each class participating in protocol, oli, and ceremony. Keiki participated in ‘Ulu Maika, Hukihuki, Kūkini, Pā Uma, and Hākā Moa, all traditional Hawaiian games.
Demonstrate Hawaiian Values (DHV)	X	Emphasized the Hawaiian value of kōkua aku, kōkua mai - give help, receive help. Keiki demonstrated the Hawaiian value of Kūlia i ka nu‘u, or strive to reach your highest. The value of Mālama or caring for others was evident.
Mo’oku‘āuhau (MO)		
Interact with Kūpuna (IP)		
Cultural Activities (CA)	X	Makahiki games were held on the large field on the Kanu o ka ‘Āina campus. Haumāna from Pre-K-12th grade participated and enjoyed a week-long festive celebration.
Respectful of Places (RP)		
Understand the Meaning of Words (UMW)	X	‘Ōlelo Hawai‘i was used by the judges to start and end the game.
Understand Practices (UP)	X	Keiki demonstrated knowledge of their kuleana depending on what place they had in the lineup for Hukihuki. Keiki’s knowledge of the rules was evident during the observation.
Kilo (K)		
Know Kuleana (KK)	X	Keiki demonstrated the Hawaiian value of kuleana by waiting patiently for their turn. Keiki demonstrated knowledge of their kuleana depending on what place they had in the lineup for Hukihuki.

### (PACT) Kāpala Observation

**Observation Date:** April 4, 2024

**Documents Reviewed:** Email correspondence (Friday Reminders - March)

To prepare parents for the April PACT meeting, kumu sent an email outlining the items needed for the activity.

Aloha e nā ‘ohana,

Our hui theme for this school year is pilina (relationship). We spent the year building pilina with our ʻōpio, learning about kuleana (responsibility) and sustainability through mea kanu (plants), and caring for our holoholona (animals) at the farm.

For next week's PACT we will be making kāpala (stamps) to print on your keiki's malo or sash in preparation for stamping both at May's PACT. Our keiki will be reenacting the mo'olelo (story) of Hāloa and dancing a hula about kalo. We are asking you to begin brainstorming ideas for your kāpala. We have attached a picture of an example. The theme for our kāpala is kalo leaves.

Malo - printing horizontally at the bottom of the malo

flap Sash = printing vertically at the bottom of the sash

The dimensions of the kāpala base are: 2" (wide) x 5" (long)

Kumu will provide all materials needed for making your kāpala

If you have any questions at all, feel free to reach out to us!

Mahalo,

Nā Kumu (Mālamapōki'i, 2024, p.1)

In fulfillment of the assigned kuleana, parents arrived at PACT prepared with images and ideas to use to create their kāpala. During the observation, mākua and keiki were intently focused on creating the kāpala that would be used to print the keiki's attire for the year-end hō'ike the following month. Hawaiian values were evident as participants provided Kōkua to one another. Many parents were new to the practice of kāpala, and they freely asked questions of the kumu and other, more seasoned parents. Parents carefully guided their keiki in creating the kāpala. The values of Mālama and Kuleana were apparent in the care keiki and mākua took in gathering the needed materials, creating the kāpala, and meticulously cleaning up and securing their kāpala for use in printing during the May PACT activity. I

witnessed one keiki waiting to ask a kumu for help. She stood quietly and did not interrupt the kumu who was talking with a parent, showing Aloha and Kuleana.

Table 5.14 concludes this data set with a summary of the data analysis. Observations were classified and coded according to the ten predetermined themes. The table presents a structured overview, highlighting key points and instances of the observed themes during the activity.

Table 5.14: Coding for PACT Kāpala Observation with Evidence

Theme	Present	Evidence from Observation
Cultural Practices and Behaviors (CPB)	X	Observed mākoa and keiki who were intently focused on creating the kāpala that would be used to print the keiki's attire for the year-end hō'ike.
Demonstrate Hawaiian Values (DHV)	X	Hawaiian values were evident as participants provided Kōkoa to one another. The values of Mālama and kuleana were apparent in the care keiki and mākoa took in gathering the needed materials, creating the kāpala, and meticulously cleaning up and securing their kāpala.
Mo'okū'auhau (MO)		
Interact with Kūpuna (IP)		
Cultural Activities (CA)	X	Parents arrived at PACT prepared with images and ideas to use in creating their kāpala. Kumu, mākoa, and keiki worked together on their kāpala designs.
Respectful of Places (RP)		
Understand the Meaning of Words (UMW)	X	"Our hui theme for this school year is pilina (relationship). We spent the year building pilina with our ōpio, learning about kuleana (responsibility) and sustainability through mea kanu (plants), and caring for our holoholona (animals) at the farm." "For next week's PACT we will be making kāpala (stamps)."
Understand Practices (UP)	X	Parents guided their keiki in creating the kāpala. Many parents freely asked questions of the kumu and other more seasoned parents.
Kilo (K)		
Know Kuleana (KK)	X	Keiki demonstrated the Hawaiian value of kuleana by waiting patiently for their turn to ask a kumu for help.

### Classroom Observations

For this observation, "classroom" is defined as any utilized learning space. The teaching and

learning at Mālamapōki‘i are not confined to a classroom in a building. Learning takes place in the classroom, on the outdoor playground, at the Kanu farm, and in other areas of the larger K-12 campus. At the entrance to the Mālamapōki‘i classroom, there is a check-in kiosk where mākua and keiki are greeted each morning by one of the kumu. The indoor classroom area consists of a large open room that serves as the main classroom, a smaller room that can be closed off from the larger classroom, and another smaller area with access to the bathrooms and the outdoor playground. The front of the classroom leads to a covered lānai (porch) furnished with tables and chairs used for eating snacks and lunch. The main classroom has a kitchen center play area and an area rug with individual squares of different colors, used for gathering time. The walls of the classroom are lined with colorful alphabet posters, each featuring Hawaiian words to illustrate each letter. The outdoor playground just outside the classroom is a fenced area that includes spaces for art expression, including a large chalkboard and standing easels for drawing and painting. Sensory tables are available for kumu to fill with a variety of materials to enhance learning activities. The main feature of the playground is a hilly section in the middle that mimics the surrounding pu‘u (cinder cones) visible from the playground.

**Classroom Observation 1:** April 12, 2024

**Documents Reviewed:** Keiki kilo journals

Kīhāpaio ke ola - Farm project description

Photographs

Mālamapōki‘i keiki interact with the Kīhāpaio ke Ola hui from Kanu’s High School. The project name means “cultivated land of life.” The project focuses on agriculture and animal husbandry with an emphasis on small-scale sustainable farming:

As a hui we try to visit this project group at least once a week. Every visit there is different. Some days it’s just Mālamapōki‘i and other days it’s with the

project group. Our haumāna are able to visit with the animals when we are the only ones there. We can also have our lessons in this outdoor space, using what is around us or bringing things with us from our classroom. On the days when the project group is there, our haumāna get a chance to get more involved. They get the opportunity to feed and care for the animals. Animals that they have gotten to interact with from birth to full grown have been pigs (pua'a), chickens (moa), and rabbits (lāpaki). Haumāna have watched the hui move the pig pens to different areas and have learned that when the pens are getting moved, it's because the pigs have eaten all the grass and need a new space with long grass to eat. They also learned that when a mommy rabbit is in a cage by herself with a nesting box, she will be having her babies soon. (Lindsey, 2023, p. 1)

From the preschool, the farm is located on the opposite side of the Kanu campus. It is a large outdoor area with space for growing native plants and vegetables. There are rabbit hutches and a small, fenced enclosure for the rabbits to roam in, pig pens, and a fenced enclosure for the cow. The pheasants are housed in small structures that open to a fenced area for the birds to enjoy during the day. The chickens are free-range within the farm area. Keiki were able to participate in preparing the imu that would cook the processed animals from the farm. Keiki formed a line and passed the imu stones. The keiki witnessed the whole process from digging the imu to shredding the pig after it was cooked (Lindsey, 2023). The kumu attribute student growth to participation in the farm project:

We feel that our visits and interactions with hui Kīhāpaio ke ola have been an important part of our students' growth. Being able to know where their food comes from, interacting with those animals, seeing them being raised and treated humanely and with respect will eventually lead to them continuing good (pono) processes later. (Lindsey, 2023, p. 1)

A document review of keiki kilo journals and activity photographs provided evidence of learning at the farm. This is illustrated in Figures 5.32 through 5.35. Figure 5.32 shows the hands-on nature of the keiki's experiences on the farm and clearly represents the keiki's comfort level when interacting with the animals. Figure 5.33 demonstrates keiki's ability to accurately observe and document their learning experiences. Figure 5.34 and Figure 5.35 provide further examples of Mālamapōki'i keiki spending time in the environment and translating that learning into their kilo journals.



Figure 5.32: *Mālamapōki'i keiki petting Nugget.* Kumu 1 (2024).



Figure 5.33: *Keiki Kilo Journal farm reflection.* Kai (2024).



Figure 5.34: *Mālamapōki 'i keiki engaged reflection. Kumu 2 (2024).*



Figure 5.35: *Keiki Kilo Journal farm in Kilo. Manaia (2024).*

Evidence that outdoor learning activities integrate core learning domains such as math is illustrated in Figures 5.36 and 5.37. Excursions to the farm often included egg gathering. The eggs were used for sorting and counting activities. During the process of gathering and counting, the keiki learned proper ways to Mālama the eggs and the land as they gathered eggs. This documentation strengthens the kumu's responses during their talk story session as they discussed integrating cultural learning with math and science.



Figure 5.36: *Mālamapōki 'i keiki gathering eggs. Kumu 3 (2024).*



Figure 5.37: *Keiki Learning in the environment. Kumu 3 (2024).*

On the day of my observation, the keiki were observed at the farm interacting with the baby pheasants in the newly constructed pheasant house. Wearing their farm boots that are kept at school for outdoor activities, the keiki moved from structure to structure observing the baby pheasants. They commented on how much the babies had grown, indicating that interacting with the pheasants is an ongoing endeavor. The keiki practiced math skills as they tried to count the “moving targets.” One keiki exclaimed, “Wow! They are so fast!” They observed how soft and fluffy the babies were, commenting on the different colored feathers. Watching the keiki at the farm made it clear that they were ma‘a (accustomed to) to the area and the older haumāna who worked on the farm as part of their project.



Figure 5.38: *Mālamapōki ‘i keiki learning about baby pheasants.* Kumu 1 (2024).



Figure 5.39: *Keiki kilo journal, the pheasant house.* Kai (2024).

## **Classroom Observation 2: April 15, 2024**

### **Documents Reviewed: none**

This observation focused on the morning routine at Mālamapōki‘i. Keiki were observed as they arrived at school. Each keiki was met at the front door and welcomed to the school. I heard greetings such as, “Aloha, we missed you, so nice to have you back at school” and “Good morning, how was your weekend?” One child was hesitant to leave her



mother's side. The kumu warmly reminded the child of previous activities at school that the keiki enjoyed. Soon, the kumu and keiki were laughing together, and the parent was off to start her day.

The keiki knew what was expected of them. They put their backpacks away, set their snack and lunch bags on the table with their water bottles, removed their shoes, and placed them on the provided shelves. One child was having difficulty hanging his backpack on the hook. Before he could ask a kumu for help, another keiki stepped in and assisted him. After washing their hands, the keiki selected a pahu (container) to play with. The keiki played quietly, individually or in groups, while they waited for school to start.

Each day at Mālamapōki'i starts with morning piko or protocol. On this morning, piko was held on the large field in conjunction with Kanu K-12 haumāna and kumu. When the call to get ready for piko came, the keiki cleaned up, put on their shoes, and lined up. For the most part, during piko, the keiki remained in their lines and participated in the chants. When reminders were needed, the kumu gently guided the keiki back to the line and reminded them to be quiet and look forward.

After morning piko, the keiki and kumu gathered in the classroom, sitting in a circle on the rug. Kumu engaged the keiki in a variety of songs. One song reinforced the color names in Hawaiian, helping keiki expand their 'ōlelo Hawai'i vocabulary, while another was personalized, incorporating the names of keiki and kumu. I could see the keiki building pilina as they sang, "I am (Keiki Name), who are you?"

**Classroom Observation 3:** May 21, 2024

**Documents Reviewed:** Keiki kilo journals

#### Lesson Plan

The week after the Hula Drama performance, I observed the keiki in the classroom retelling the story of Hāloa, which was presented at Hula Drama. Very little prompting from their kumu was required. The keiki knew the storyline, the characters, and the significance

of the story. The kumu shared with me several learning activities teaching the keiki about kalo. Figures 5.40 and 5.41 represent a lesson that involved learning the parts of the kalo plant. As you can see in Figure 5.41, a real kalo plant was used to engage the keiki in the learning.

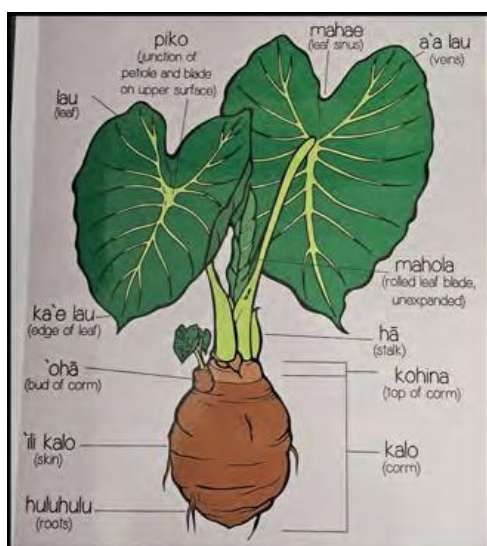


Figure 5.40: *Kalo plant poster*



Figure 5.41: *Kalo plant poster with real kalo*

The keiki cultivated kalo; they learned about what kalo needs to grow and hypothesized about why some plants died. In their kilo journals, keiki documented the growth of the plants and drew the number of leaves. Figure 5.42 shows a keiki focusing on her kalo observation and documenting the growth of the plant. Figure 5.43 documents the keiki measuring the kalo leaves. Figure 5.44 is an example of a keiki's completed kalo observation, documenting the growth of the leaf and counting the number of leaves.



Figure 5.42: *Mālamapōki* 'i keiki making an entry in her kilo journal: Kumu 3 (2024).



Figure 5.43: *Keiki* measuring a *kalo* leaf: Kumu 3 (2024).

An extension to the other Hāloa and *kalo* lessons was documented in the lesson plan review. A yarn art project extended the *keiki*'s learning about the *kalo* plant. Using glue and string, *keiki* created a *kalo* leaf. The activity integrated math as the *keiki* used rulers to measure and cut the yarn for the project. Prompts from the lesson plan included: "First, I want you to get your ruler," "Let's point and count to the number 12," "Take the yarn and put it at 0," "Now measure the yarn to the number 6," "Pinch the yarn at the number six," and "Carefully cut the yarn, right there." They counted the number of yarn pieces. Figure 5.45 is an example of a completed project (Lindsey, 2016, p. 1).



Figure 5.44: *Completed observation in kilo journal*. Kaiyah-Bella (2024).



Figure 5.45: *String art project* *Mālamapōki* 'i keiki (2024).



Figure 5.46: *Visual Aids for teaching the story of Hāloa*



Figure 5.47: *Visual Aids for teaching the story of Hāloa*

During the school year, the kumu taught the mo‘olelo of Hāloa to the keiki. Figures 5.46 and 5.47 depict the visual aids the keiki used to act out the story. These activities helped the keiki learn to retell the story, identifying the beginning, the middle, and the end.

Other themes noted in the review of keiki kilo journals that were not observed during the classroom observations include keiki observations of the weather. Keiki recorded the daily weather in response to the question “Pehea Ke Anilā?” (How is the weather?). Captions to keiki’s journal entries included: “Our weather is cold, the clouds are gray, it is windy,” “Today it is a sunny day and there are clouds in the sky,” “The moon is big, and half, the color is white,” “There is wind and it is sunny. I go outside and play,” “Makani a me lā keia lā (This is a windy and sunny day),” and “Don’t play in the rain because you will get sick - ‘ōma‘ima‘i.” Figure 5.48 is an example of a weather-related kilo journal entry.

Through photos and kilo journal reviews, a notable activity that was not part of the classroom observations was discovered. Keiki participated in a wa‘a (canoe) building project. The photos and journals documented the keiki’s participation with cultural practitioners as they observed the progress of the carving, met with kūpuna, and gained

hands-on experience with the wa‘a. Captions from the journal entries, as seen in Figure 5.49, show the observed progression of the wa‘a building and interaction with cultural practitioners (the uncles). The captions included: “It looks like a giant banana,” “The log is brown and it has stripes,” “I helped the uncles take out pieces of the wood from the canoe,” “It is light red,” “There were lots of lines,” “The canoe has a shape now,” “We pulled out the wood to make room for the people,” and “Looks like a boat today.”

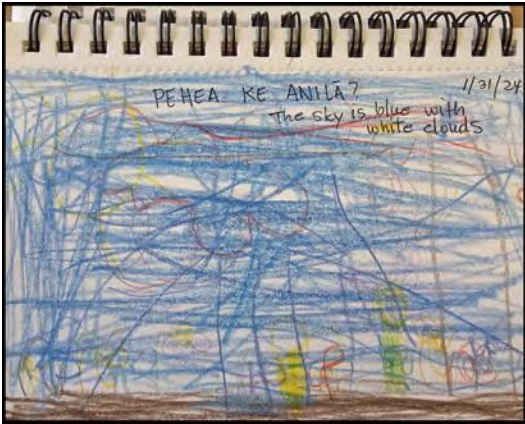


Figure 5.48: *Pehea ke anilā?* Tasi (2024).



Figure 5.49: *Wa‘a building progress recorded in kilo journal.* Honey (2024).

The Classroom Observation Data Set is concluded with Table 5.15, which offers a summary of the data analysis. Observations were classified and coded according to the ten predetermined themes. The table presents a structured overview, highlighting key points and instances of the observed themes during the activity.

Table 5.15: Coding for Mālamapōki‘i Classroom Observations with Evidence

Theme	Present	Evidence from Observation
Cultural Practices and Behaviors (CPB)	X	“Keiki were able to participate in preparing the imu that would cook the processed animals from the farm.”

Theme	Present	Evidence from Observation
Demonstrate Hawaiian Values (DHV)	X	<p>“Interacting with those animals, seeing them being raised and treated humanely and with respect will eventually lead to them continuing good (pono) processes later.”</p> <p>Keiki demonstrated the Hawaiian value of kuleana by waiting patiently for their turn to ask a kumu for help.</p> <p>Keiki were greeted with Aloha and other welcoming phrases.</p> <p>Keiki learned proper ways to Mālama the eggs and the land as they gather eggs.</p>
Mo’okū’auhau (MO)		
Interact with Kūpuna (IP)	X	Keiki participated in wa’a building, documented the progress, and interacted with the cultural practitioners. They interacted with and learned from kūpuna.
Cultural Activities (CA)	X	<p>Keiki cultivated kalo; they learned about what kalo needs to grow and hypothesized about why some plants died.</p> <p>The keiki knew the storyline, the characters, and the significance of the story of Hāloa.</p>
Respectful of Places (RP)	X	Keiki learned proper ways to Mālama the eggs and the land as they gather eggs.
Understand the Meaning of Words (UMW)	X	One song reinforced color names in Hawaiian, helping keiki expand their ‘ōlelo Hawai‘i vocabulary.
Understand Practices (UP)	X	Keiki formed a line and passed the imu stones. Keiki documented the growth of the plants and drew the number of leaves in their kilo journals.
Kilo (K)	X	<p>In their kilo journals, keiki documented the growth of the plants and drew the number of leaves.</p> <p>Figures 5.44 and 5.45 are examples of keiki’s completed kalo observation, documenting the growth of the leaf and counting the number of leaves.</p> <p>Other themes noted in the review of keiki kilo journals are observations of the weather using ‘ōlelo Hawai‘i and pictures and descriptions of the weather.</p>



Theme		Evidence from Observation
Know Kuleana (KK)		Keiki demonstrated the Hawaiian value of kuleana by waiting patiently for their turn to ask a kumu for help. Keiki were ma‘a (accustomed to) what was expected of them. They put their backpacks away, set their snack and lunch bags on the table with their water bottles, removed their shoes, and placed them on the provided shelves.

### **Hula Drama Observation May 17, 2024**

#### **Documents Reviewed:** Hula Drama Program

Keiki Kilo Journals

Email correspondence (Friday Reminders)

Hula Drama is a culminating hō‘ike at the end of the school year produced by Kanu o ka ‘Āina NCPCS (Kanu). Mālamapōki‘i keiki joined Kanu students in grades K-12 to showcase their learning in this annual community event. The event is held at Kahilu Theatre in Waimea on Hawai‘i Island. The students performed three shows in front of a sold-out audience. The theatre seats 490 people. My observation was on the last night of the performances.

Activities and lessons throughout the year focused on building pilina between the keiki and the ‘āina, placing emphasis on learning about kuleana. Evidence of this was presented earlier in this chapter in the classroom observation section. To reinforce the learning at home, kumu provided a song list so parents could play the songs on YouTube to facilitate their keiki’s learning of the words (Mālamapōki‘i Admin, 2024). The mo‘olelo of Hāloa, the first kanaka, was central to the Mālamapōki‘i theme of pilina. The Hula Drama printed program introduced Mālamapōki‘i’s presentation, tying it into the year-long learning:

We share with you the simplified story of Hāloa, the first kanaka, born to Wākea

and Ho‘ohokukalani. Hāloa is the younger sibling of both kalo (Hāloanakalaukapalili) and ‘āina. Similar to the pilina of Hāloa and his siblings, kanaka are also a younger sibling of ‘āina, kalo, and Hāloa. In sharing the mo‘olelo of Hāloa, our haumāna have formed their own pilina with ‘āina and learned the value and importance of Mālama i ka ‘āina (caring for the land). If we look at ‘āina as our older sibling and Mālama i ka ‘āina, our ‘āina will Mālama us by providing food, water, and other necessities we need as kanaka. This reciprocal relationship continues today, and our hope is that our keiki will continue to foster their pilina with ‘āina as they grow. Huki i ke kalo is a mele that teaches the keiki the process of making poi. Keiki have gained greater insight about kalo and its importance to our people. (Kanu o ka ‘Āina NCPCS, 2024, p. 6)

To open the event, Mālamapōki‘i keiki joined with other students to present the opening protocol, a cultural practice observed by the students at Kanu and Mālamapōki‘i daily. I observed the keiki dressed in the attire they had printed with their kāpala, participating in protocol. They stood respectfully in their assigned lines, joined in with the oli and mele, and exited the stage quietly at the close of protocol:

Opening protocol consists of chats asking for strength, guidance, and enlightenment through ancestral knowledge. Protocol is how we center ourselves. It is how we show our readiness to receive the ‘ike of our kumu, and draw on the support of our kūpuna. (Kanu o ka ‘Āina NCPCS, 2024, p. 2)

Mālamapōki‘i keiki performed Huki i ke Kalo as described above. The following are examples of the keiki’s reflections on Hula Drama as documented in their kilo journals: “My favorite part of ula Drama was going on the stage,” “I think it was fun doing it,” “I love Hula Drama, my favorite part was huki i ke kalo,” “My favorite thing about Hula Drama was everything!!,” “Me and my friends on stage,” and “My favorite part of Hula Drama was



doing ‘ai i ka poi!” Figures 5.50 and 5.51 are examples of keiki Hula Drama reflections.



Figure 5.50: *Keiki kilo journal Hula Drama reflection.* Margi (2024).



Figure 5.51: *Keiki kilo journal Hula Drama reflection.* Manaia (2024).

Table 5.16 wraps up the data collected during the Hula Drama observation by providing a summary of the analysis. Each observation was coded and sorted into ten predetermined themes. The table delivers a comprehensive summary, illustrating the highlights and examples of the themes observed throughout the activity.

Table 5.16: Coding for Hula Drama Observation with Evidence

Theme	Present	Evidence from Observation
Cultural Practices and Behaviors (CPB)	X	“Opening protocol consists of chants asking for strength, guidance, and enlightenment through ancestral knowledge. Protocol is how we center our- selves.” Keiki performed Huki i ke Kalo, demonstrating the process of making poi.
Demonstrate Hawaiian Values (DHV)	X	Throughout the year, lessons and activities focused on pilina or building relationships. There was an emphasis on learning about kuleana and Mālama i ka ‘āina. The values of pilina and kuleana were highlighted in the simplified story of Hāloa shared by the keiki.
Mo’okū’auhau (MO)		
Interact with Kūpuna (IP)		

Cultural Activities (CA)	X	Mālamapōki‘i keiki joined Kanu students in grades K-12 to showcase their learning in the annual Hula Drama event. Keiki shared a simplified story of Hāloa, demonstrating their learning through performance. Parents were provided a song list to facilitate their keiki’s learning of the words, showing involvement in cultural activities.
Respectful of Places (RP)		
Understand the Meaning of Words (UMW)		
Understand Practices (UP)	X	Keiki demonstrated their understanding of the process of making poi through the performance of Huki i ke Kalo. Throughout the year, activities focused on the pilina between keiki and ‘āina, teaching the importance of Mālama i ka ‘āina.
Kilo (K)	X	Reflections in keiki kilo journals about their experiences and favorite parts of Hula Drama. Documented keiki reflections such as ”My favorite part of Hula Drama was going on the stage” and ”My favorite thing about Hula Drama was everything!!”
Know Kuleana (KK)	X	Activities and lessons throughout the year focused on building pilina and learning about kuleana. Keiki’s performance and reflections demonstrated their understanding of their responsibilities to the ‘āina and their cultural heritage.

### ‘Ohana Data Set

An additional data set was added to the research project to deepen the understanding of the Indigenous practices of ‘ohana at Mālamapōki‘i. Data collected from the original data sets led to the addition of the ‘Ohana Data Set. The importance of family involvement and engagement was identified in the Mo‘oki‘i, Mākua, and Kumu Data Sets. Mākua identified PACT as a valuable resource for learning and reinforcing Indigenous practices in the home. The ‘Ohana Data Set was added to gather data that informs the study about the status of Indigenous practices in the homes of our keiki. Parents of current Mālamapōki‘i keiki were invited to participate in the survey. To alleviate any barriers to completing the survey, Google Forms was selected as the platform because it is frequently used to gather data from

the mākua. Ten questions were presented. If the answer was yes, the participant was presented with a follow-up question to gather examples. The questions and follow-up questions are listed in Table 5.17, and Figure 5.52 provides the breakdown of yes and no answers.

Table 5.17: Interview Questions and Follow-up Questions

No.	Main Question	Follow-up Question(s)
1	Do you regularly practice and teach Hawaiian cultural traditions and language in your home?	Can you provide examples of these practices and how they impact your family's daily life?
2	Do you use traditional Hawaiian stories, songs, dances, and histories to educate your family about spiritual traditions and community history and to pass on cultural values and traditions?	How do these activities support the preservation and understanding of your cultural heritage within your family?
3	Do you regularly use traditional Hawaiian greeting terms and practices in your home and community?	How do these practices contribute to sustaining Hawaiian cultural knowledge in everyday life?
4	Do you teach and involve your family in conservation and revitalization practices, especially those related to Hawaiian culture?	How do these practices help your family understand and appreciate the importance of sustainability and cultural heritage?
5	Do you engage in and support activities that promote intergenerational learning within your family and community?	Could you share an example of how intergenerational learning has benefited your family or community?
6	Do you use traditional Hawaiian naming practices when naming your children?	How do you help your children understand the significance of their Hawaiian names?
7	Do you create opportunities for intergenerational learning within your family?	Can you provide examples of these learning experiences and how they transmit skills and knowledge?
8	Do you actively practice and encourage the cultural values and behaviors of Aloha, Mālama, Kōkua, Kuleana, and Kūlia in your family activities?	What are some of these values and behaviors, and how do you incorporate them into your family life?
9	Do you work to strengthen family ties by ensuring each generation understands their mo'okū'auhau (genealogy), family history, and heritage within the context of Hawaiian culture and kuleana (responsibilities)?	How do you teach and maintain this knowledge within your family?
10	Do you find ways to adapt traditional Hawaiian practices to modern settings with guidance from elders or kupuna?	Could you describe how you've successfully blended traditional practices with contemporary life?

Figure 5.52 provides a breakdown of yes and no answers by question. This visualization offers a quick reference for understanding the general trends. It clearly shows which practices are widely adopted by Mālamapōki'i 'ohana and which practices are observed less often.

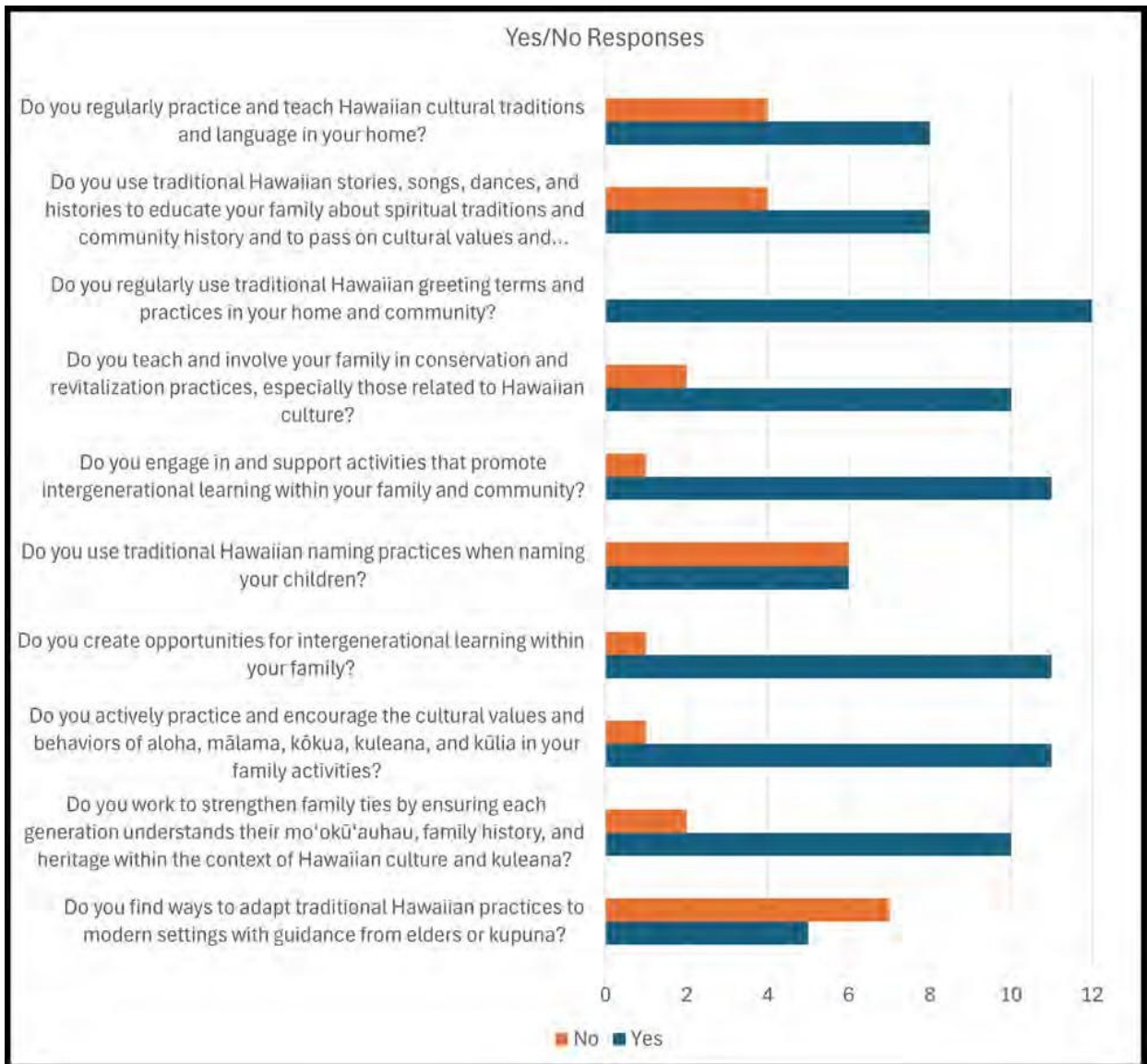


Figure 5.52: 'Ohana Survey Responses by Question. Levenson (2024).

This data set was analyzed by questions, drawing from the survey responses to the follow-up questions that were initiated with a yes response to the main question. Each main question and the supporting data from the follow-up question are presented in the following section.

Question 1: Do you regularly practice and teach Hawaiian cultural traditions and language in your home? Follow-up: Can you provide examples of these practices and how they impact your family's daily life? Families reported using the Hawaiian language and learning along with their keiki. The following are quotes from survey responses:

- We try to use the Hawaiian language as much as possible. I have to relearn it myself so it's slow progress.
- We just try to practice using the Hawaiian language every day. To be completely honest it's mainly used to scold the kids and to get them to listen.
- We practice short Hawaiian slang or actual words and we practice what was passed down to us such as Hawaiian myths in our lifestyle

Living Hawaiian values were common practices identified as ways families practice Hawaiian culture and traditions in their homes. Comments included:

- We heavily instill Hawaiian values which are incorporated/used in our daily lives.
- We show Aloha every day.
- But we do encourage our children to Mālama the 'āina and their elders.

Activities related to the 'āina were prevalent in the examples families provided in the survey. The responses below show a variety of ways 'āina is central to daily life:

- But we do encourage our children to Mālama the 'āina and their elders. (Teach them) how we need to take care of our home and the surrounding land.
- Raising and gathering food.
- Working the 'āina.
- We spend time on a Hawaiian mala caring for the āina.

Question 2: Do you use traditional Hawaiian stories, songs, dances, and histories to educate your family about spiritual traditions and community history and to pass on cultural values and traditions? Follow-up: How do these activities support the preservation

and understanding of your cultural heritage within your family? Responses to the follow-up emphasized the need to pass these traditions down. They connected these traditions with building respect within and grounding their 'ohana:

- Pass down from generation to generation. They respect the past.
- It reflects what we believe in and what was passed down on us.
- By passing them down from generations and teaching us that it is important to practice our Hawaiian culture.
- They bring an extra sense of respect, grounding, and deeper understanding of present life and our ancestors before us.
- For our family since our ancestry is not from these islands, it connects us to the land we get to live on and that which feeds us and to the people whose culture we get to surround ourselves with and immerse in to further connect to land and spirit.

Question 3: Do you regularly use traditional Hawaiian greeting terms and practices in your home and community? Follow-up: How do these practices contribute to sustaining Hawaiian cultural knowledge in everyday life? Traditional Hawaiian greeting terms and practices were reported to be used by one hundred percent of the respondents. When asked how these practices contribute to sustaining Hawaiian cultural knowledge in everyday life respondents shared a variety of ways:

- By using Hawaiian language and other practices we can pass this knowledge onto the next generation.
- It shows respect and it shows that we were taught these practices from our
- Kūpuna and ancestors.
- Just trying to keep the language and spirit alive.

Question 4: Do you teach and involve your family in conservation and revitalization

practices, especially those related to Hawaiian culture? Follow-up: How do these practices help your family understand and appreciate the importance of sustainability and cultural heritage? Responding to these prompts, families shared:

- As people, we are only an extension of the land and the environment. We are all a part of it, so the practices help us to connect to our greater unification, being stewards of the land and living in reciprocity. Everything else is unsustainable!
- Whenever we go out, we teach them to always try to Mālama the ‘āina and to leave the space better than it was when we got there. We also teach them about gathering and hunting. We don’t do it for sport. It’s to feed the ‘ohana.
- We try to teach them the value of taking care of what we do have before we no longer have that privilege.
- Proper farming and fishing practices is what we really emphasize. It directly correlates with everyday life and the respect you have for not only one another but the aina as well.

Question 5: Do you engage in and support activities that promote intergenerational learning within your family and community? Follow-up: Could you share an example of how intergenerational learning has benefited your family or community? Intergenerational learning was overwhelmingly reported to be an active practice in the responders’ ‘ohanas. Only one negative response was noted; all the remaining responses were affirmative. Families shared:

- By receiving wisdom from elders, such as grandparents or community grandparents, our family learns to hear different voices, different perspectives and build a grander and more detailed picture of the world and life. Stories passed down from others help to shape who we are now and how we engage with our environment, learning from the way things were before, for better or worse.

- When we visit the grandparents or anyone really, but specifically my dad. I ask him to teach my kids about diving, hunting, how to do things that he learned growing up. Because my kids Will understand it differently than my siblings and myself.
- Our grandparents and our parents share memories, share their knowledge, and teach us what they were taught to pass it down to our keiki. Whether it's a new plant in the yard or a new word or a simple task that they have done and learned from their elders and are passing it down to us and or our keiki.
- We believe that anything involved with the community is not only beneficial to those who partake for the first time but it also teaches those who involve in these activities. Ideally, it brings awareness that is needed to help preserve culture and our way of life.
- We live in an international home so there is constant learning. For example, my keiki taught his mom and grandma the hula drama chant.
- When we do our lei piko we learn about our keikis family generations.

Question 6: Do you use traditional Hawaiian naming practices when naming your children? Follow-up: How do you help your children understand the significance of their Hawaiian names? Fifty percent of respondents confirmed that they use traditional Hawaiian naming practices when naming their children. They identified several ways they help their keiki understand the significance of their Hawaiian names including:

- We always remind them of their names and what they mean when we see tangible things related to them.
- By telling them how they got their names who named them and what it means.
- There's always a story behind their name and it's something that all of our children have found intriguing, especially as they get older.



Question 7: Do you create opportunities for intergenerational learning within your family? Follow-up: Can you provide examples of these learning experiences and how they transmit skills and knowledge? The responses provided an array of ways intergenerational learning transmits skills and knowledge from one generation to another:

- Just being open and having conversations with grandparents, parents, and kids.  
And it's not all top-down. Allowing the keiki to teach us too.
- Watching Uncle fix the car. Seeing the aunty cooking. Everyday things can teach them something. They love being underfoot when I'm doing something. But I know I'm not the best. So I encourage them to ask questions and follow the elders around them. Preferably not their siblings lol.
- Time with tutu and aunties - storytelling, learning through doing.

Question 8: Do you actively practice and encourage the cultural values and behaviors of Aloha, Mālama, Kōkua, Kuleana, and Kūlia in your family activities? Follow-up: What are some of these values and behaviors, and how do you incorporate them into your family life? Responses highlight the role of responsibility and the importance of setting an example for family members:

- In order to go anywhere or get something they really want, we expect them to take care of our home first. We try to have them care for their belongings and those of everyone in the home so that they too can have the same benefits. We teach them to share among other things.
- We explain to our children the importance of caring for themselves and their community and the responsibility they hold in doing that. We explain and lead by example.
- We teach our children kuleana by assigning chores/tasks, we all work together to care for our animals, and teach the importance of caring for our 'āina, etc.

- We tell our family Kūlia I ka Nu‘u and never give up, also Kokua, Mālama both respect and help our kupuna, ‘āina, keiki and ourselves.

Question 9: Do you work to strengthen family ties by ensuring each generation understands their mo‘okū‘auhau (genealogy), family history, and heritage within the context of Hawaiian culture and kuleana (responsibilities)? Follow-up: How do you teach and maintain this knowledge within your family? Responses share myriad ways to maintain and perpetuate ‘ohana mo‘okū‘auhau knowledge. One ‘ohana expressed a desire to connect more with their mo‘okū‘auhau:

- We always talk about our elders and ancestors and explain to each other how we’re related to this person and that person. We have parties and gatherings and til this day we still learning our relatives.
- Answering our children’s questions and maintaining family ties with our living relatives, sharing photos and stories.
- This is another area that we are trying to connect with a bit more. On our mom’s side - this already is something that is imbedded within their ‘ohana. In the dad’s side, it wasn’t instilled as much growing up and again, we are trying to revive and sustain this.

Question 10: Do you find ways to adapt traditional Hawaiian practices to modern settings with guidance from elders or kupuna? Follow-up: Could you describe how you’ve successfully blended traditional practices with contemporary life? This question had the most ‘No’ responses. The few responses to the follow-up question highlighted the challenge of trying to use modern things while still staying true to traditional ways:

- Farming and fishing have been a big one. It’s also hard because we will use modern ways which makes things “easier” yet we also teach the traditional way to see the importance.

- Continue doing the same as the past. Maybe the tools have changed.

Seven themes emerged from the ‘Ohana Data Set: Cultural Transmission, Challenges Maintaining Traditions, The Role of Technology, Intergenerational Learning, Community Involvement, Cultural Practice, and Connection to the ‘Āina. These themes highlight the primary ways ‘ohana integrate Indigenous practices into family life. Excerpts from the surveys are presented in Table 5.18.

Table 5.18: Thematic Analysis of the ‘Ohana Data Set with Supporting Quotes

Theme	Evidence (Quotes)
<b>Cultural Transmission</b>	<p>“We heavily instill Hawaiian values which are incorporated/used in our daily lives.”</p> <p>“We always talk about our elders and ancestors and explain to each other how we’re related to this person and that person.”</p>
<b>Challenges Maintaining Traditions</b>	<p>“It’s also hard because we will use modern ways which makes things ‘easier’ yet we also teach the traditional way to see the importance.”</p> <p>“The challenge is balancing traditional practices with modern conveniences.”</p>
<b>Role of Technology</b>	<p>“We try to incorporate Hawaiian language apps and online resources, but it’s not the same as learning from elders.”</p> <p>“Technology helps us stay connected, but it’s also a distraction from practicing our traditions.”</p>
<b>Inter-generational Learning</b>	<p>“Our kupuna are the main teachers in our household, passing down traditions and stories.”</p> <p>“We learn a lot from our parents and grandparents, especially about our mo‘okū‘auhau.”</p>
<b>Community Involvement</b>	<p>“We actively participate in community events like Makahiki games and other cultural festivals.”</p> <p>“Our community gatherings are crucial for keeping our traditions alive.”</p>
<b>Cultural Practice</b>	<p>“We practice using the Hawaiian language every day and ensure our children understand its significance.”</p> <p>“Raising and gathering food the traditional way is part of our everyday life.”</p>
<b>Connection to ‘Āina</b>	<p>“We encourage our children to Mālama the ‘āina and their elders.”</p> <p>“Our connection to the land is evident in our daily activities like farming and spending time in nature.”</p>

The analysis of the ‘Ohana Data Set suggests that many families are committed to practicing Hawaiian culture and preserving traditions. Examples of the braiding of Hawaiian cultural practices in families’ lives clearly indicate a dedication to cultural preservation. The data also show evidence that some practices are not fully embraced by all families.

### **Chapter Summary**

This chapter detailed how the Indigenous Standpoint Theory (Foley, 2003) informed the data collection process. In line with the theory, the data collection process was influenced by nurturing relationships to build trust, was ethical, and was guided by culturally responsive approaches. Six data sets were presented and analyzed. Rich qualitative data was collected through methods utilizing ‘ike, nīnau, and kilo. The methods employed depended on relationships to ensure the voices of the stakeholders, including keiki, mākua, and kumu, were kept central to the study.

The Mo‘oki‘i Data Set combined data from the current keiki attending Mālamapōki‘i and their mākua. The Mo‘oki‘i process provided rich qualitative data by engaging stakeholders as co-researchers. The thematic analysis of the Keiki Mo‘oki‘i data set identified

Play-Based Activities, Outdoor Activities, and Friendship as the key themes important to the keiki. These themes, combined with the mākua-identified themes of Pilina to ‘Āina, Culture, Creativity, Friendship, and Community, provided a clear vision of what mākua and keiki value in the preschool learning environment.

The Mākua Data Set revealed that mākua view their keiki’s experiences at Mālamapōki‘i as laying the groundwork for their cultural education. Participation in cultural protocols and practices and connection to the ‘āina were the two major themes that emerged in the thematic analysis. The role of PACT in strengthening ‘ohana’s cultural values and practices was validated by the data.

The Kumu and Ho‘okumu data set produced four key points: first, the importance

of family involvement and relationships; second, the balance between structure and flexibility; third, the values of kindness, respect, and joy; and fourth, the connection to culture and place. Two barriers to implementing Indigenous philosophies and standards in the classroom were identified: a lack of knowledge and resources, and challenges related to classroom behavior and home support.

Coding from the Past Haumāna Data Set was consolidated into five themes: Nature, Environment, and Playground (NEP), Creative Expression (CE), Cultural Practices (CP), Physical Development (PD), and Social and Emotional Learning (SEL). These themes provided a structured framework for analyzing the data. This thematic overview revealed recurring patterns and relationships drawn from the haumāna's recollections of Mālamapōki'i.

The Observation and Document Review data set included five observations and an examination of relevant documents. The themes for this data set were predetermined, with five guidelines from Nā Honua Mauli Ola serving as the foundation. Each of these guidelines was aligned with two of the predetermined themes, ensuring comprehensive coverage of the key areas.

The addition of the 'Ohana Data Set enhanced the research by further exploring Indigenous practices within the families of Mālamapōki'i. The importance of family involvement was highlighted in earlier data sets, leading to this addition. Analysis reveals that while many families are dedicated to cultural preservation, there are some practices that are not fully embraced by families.

I acknowledge that not all Indigenous practices were covered under the scope of this study. Limitations to the data collection include the number of feasible observations as well as constraints on time during the observations, determined by classroom routines and obligations.

The next chapter, “Findings,” contains an in-depth analysis of the data collected during the study, drawing from the available literature. Correlations between the data and the literature facilitated answering the research questions by indicating the extent to which the observed practices and behaviors align with the Indigenous philosophies and frameworks identified in the literature. The findings analysis outlines key themes and patterns that emerged from the data, indicating how and if these suggest that Indigenous philosophies and standards are present in the early learning framework at Mālamapōki‘i.

## Chapter 6

### Findings and Discussion

“I ka nānā no a ‘ike.”

By observing, one learns (Pukui, 1983, p. 276).



Figure 6.1: *Mālamapōki‘i keiki kilo spectacular cloud formations*. Kumu 4 (2023).

In the previous chapter, the data were organized, presented, and analyzed. This chapter details the findings derived from the analyses, focusing on evaluating the Indigenous practices at Mālamapōki‘i. The aim of this chapter is to understand how the practices at Mālamapōki‘i align with Indigenous philosophies and standards. The rich qualitative data collected through talk story sessions, interviews, observations, and document reviews provide a comprehensive understanding of how Indigenous practices are manifested in the Mālamapōki‘i Early Learning Framework.

This chapter begins with findings from the review of Indigenous practices identified in the literature from New Zealand, Australia, and Hawai‘i. These practices provide a comparative structure for the findings. Next, the chapter evaluates the Mālamapōki‘i framework against five common practices identified in the literature. The research question

and supporting questions that emerged during the research are answered. Finally, the limitations of the study are acknowledged. Through this examination, a deeper understanding of the Indigenous practices at Mālamapōki‘i is gained, contributing valuable insights to the field of Indigenous early childhood education.

Reflections on Te Whāriki’s holistic assessment approach helped identify the braiding of cultural knowledge and practices, mākua and community involvement, connection to ‘āina, and holistic development, all of which shaped the thematic analysis in this chapter. The contrast between New Zealand’s model, with its deeply embedded cultural foundation, and Australia’s more fragmented or surface-level integration of culture provided a valuable perspective in analyzing the study’s data. This analysis was crucial in determining whether Indigenous practices at Mālamapōki‘i were truly driven by Indigenous philosophies and whether culture was an intrinsic part of all aspects of learning and assessment.

### **Common Indigenous Practices from the Literature**

This thesis set out to evaluate the early learning framework at Mālamapōki‘i, with a focus on how it aligns with Indigenous philosophies and standards. The literature reviewed in Chapters Three and Four provided a plethora of Indigenous practices that are considered important aspects of early childhood education and assessment in New Zealand, Australia, and Hawai‘i.

To answer the research question: “How does the early learning framework at Mālamapōki‘i reflect Indigenous philosophies and standards?” five themes common among the three countries were identified from the literature and used to answer the question. The common themes are Holistic Development, Cultural Braiding and Preservation, Family and Community Involvement, Relationships and Social Contribution, and Connection to Land.

The Te Whāriki framework from New Zealand supports a holistic approach with an emphasis on well-being, belonging, and communication. The framework places a high priority on building relationships with families and the community. It also promotes



exploration and developing respect for the environment.

The Early Years Learning Framework from Australia values the involvement of Indigenous community members, specifically elders. The framework focuses on a holistic approach that is responsive to cultural ways of learning. There is a strong emphasis on the role of the environment in learning.

Nā Hopena A‘o and Nā Honua Mauli Ola from Hawai‘i provide foundational frameworks that promote a holistic approach to education, emphasizing the importance of culture, language, and community. They offer standards to integrate Hawaiian cultural values and practices into the curriculum. These key frameworks from the literature reviewed were used to select the five common themes.

Table 6.1 summarizes the common Indigenous assessment themes identified in the frameworks from New Zealand, Australia, and Hawai‘i that were used to evaluate the Mālama Pōki‘i framework.

Table 6.1: Common Indigenous Assessment Themes

<b>Common Themes</b>	<b>New Zealand: Te Whāriki</b>	<b>Australia: Early Years Learning Framework</b>	<b>Hawai‘i: Nā Hopena A‘o and Nā Honua Mauli Ola</b>
Holistic Development	Kotahitanga (Holistic Development) and Mana Atua (Wellbeing)	Holistic, integrated Approach	The strengthened sense of total well-being and lifelong learning
Cultural Braiding and Preservation	Mana Whenua (Belonging) and Mana Reo (Communication)	Cultural responsiveness and inclusion of elders	Braiding of culture, perpetuation of Hawaiian heritage, and respect for cultural knowledge
Family and community Involvement	WhānauTangata (Family and Community)	Respect for family diversity and engage with each child’s family and community	A strengthened sense of belonging, responsibility and Aloha

Relationships and Social Contribution	Ngā Hononga (Relationships) and Mana Tangata (Contribution)	Children participate in reciprocal relationships and are connected with and contribute to their world	A strengthened sense of belonging and Aloha
Connection to Land	Tangata Whenua (people of the land- denotes relationship with the land)	Recognition of interconnectedness of learning and environment	Mālama ‘Āina (Land Stewardship) and safe and supportive environments

### **Mālamapōki‘i Framework Findings**

I argue that the early learning framework at Mālamapōki‘i offers an environment rich in Indigenous practices, philosophies, and standards. The Mālamapōki‘i framework is holistic in nature, providing opportunities for keiki growth and support in physical, emotional, cognitive, and spiritual development. This aligns with the Kotahitanga concept of holistic development in the Te Whāriki framework discussed in Chapter 3, which acknowledges that children need to be given opportunities that develop their abilities in all aspects of their growth. Physical development practices are evident in the playground and other outdoor activities, including climbing, balancing, running, and interacting with the natural environment such as logs and hilly or grassy areas. Cited in Chapter 4, these practices align with Learning Outcome 3 of Australia’s Early Years Learning Framework which incorporates physical fitness and activity as components of wellness. The deliberate hilly areas in the Mālamapōki‘i playground that mimic the nearby pu‘u reflect the strand of Mana Aotūroa (exploration) in Te Whāriki, as students “purposefully use resources” (Whāriki, 2017 p. 46). The keiki’s emotional well-being is supported through the ‘ohana atmosphere at the school and the building of relationships among parents, teachers, and students. Cognitive development is fostered by skill acquisition and creative expression. The data highlight keiki learning new skills and expressing themselves through creativity. The blending of modern academic studies with Indigenous knowledge supports the whole child. The framework’s inclusion of spiritual development is apparent in the connections to ‘āina

and participation in cultural ceremonies. The incorporation of Hawaiian values and traditions grounds the keiki and instills a sense of kuleana and pilina in their communities.

The Mālamapōki'i framework demonstrates Cultural Braiding and Preservation through the use of mo'olelo in teaching cultural stories and linking them with modern subject content. Engagement with Hawaiian practitioners further enhances cultural preservation as experts pass their knowledge to the next generation. This alignment preserves and actively revitalizes Indigenous cultural practice at Mālamapōki'i and reflects Te Whāriki's emphasis on cultural identity as a foundation for learning highlighted in Chapter 3 and Te Whatu Pōkeka's advocacy for embedding whakapapa and cultural narratives into education as discussed in Chapter 4.

Family involvement was a focal point of several data sets. Participation in PACT was attributed to mātua successfully integrating cultural teaching at home. This finding is of particular interest because, in the day-to-day running of the school, it is difficult to know if parents value the experience of participating in PACT. Through PACT, mātua reported building pilina with other families that have lasted as their keiki continue school in the K-12 environment. The framework at Mālamapōki'i fosters open communication, providing a safe environment for cultural exchanges. The integration of home and school practices often involved reciprocal learning, where the keiki teach the 'ohana. The active participation of mātua in Mālamapōki'i mirrors the Whānu Tangata principle which emphasizes the role of families as co-educators in culturally grounded frameworks discussed in Chapter 3.

Mālamapōki'i's framework aligns with common Indigenous practices by fostering strong relationships and encouraging social contributions. Friendship was a central focus of the data collected from the keiki. The keiki expressed happiness and a feeling of belonging as they made connections with their peers and kumu. Events such as the Makahiki games and Hula Drama provided a venue for pilina building with 'ohana and the community, strengthening social bonds and utilizing generational support networks. This finding reflects

the Whānau Tangata principle from Te Whāriki, discussed in Chapter 3, which emphasizes the importance of reciprocal relationships and collaborative efforts among educational communities. Similarly, the concept of Belonging from Australia's Early Years Learning Framework, also reviewed in Chapter 3, highlights the critical role of connection and participation in fostering emotional well-being and social development. The keiki's expressions of happiness and connection align with these frameworks, underscoring the importance of nurturing relationships as a foundation for learning.

The natural environment is a fundamental aspect and 'āina is a living classroom in the Mālamapōki'i framework. Pilina to 'āina was observable in the keiki kilo journals and the hands-on engagement with the environment. The keiki were directly involved in caring for the 'āina on their playground, at the farm, and on the broader K-12 campus. Keiki were responsible for gathering eggs, feeding animals, and planting native trees. This connection to the environment aligns with the learning models discussed in Chapter 3, particularly the Exploration Strand in Te Whāriki that promotes outdoor activities to help children develop deep connections with the environment. Similarly, the concept of kaitiakitanga, as presented in Te Whatu Pōkeka in Chapter 4, highlights the responsibility to learn from and care for the environment. The keiki's active involvement with the environment signifies alignment with the principles of relational accountability described in Chapter 2 Table 6.2 summarizes how the Mālamapōki'i framework aligns with the common themes identified from the Indigenous practices that are important to early childhood education, as outlined in the literature review.

Table 6.2: Common Themes as Manifested in Mālamapōki'i's Framework

<b>Common Theme</b>	<b>Description</b>	<b>Evidence from Mālamapōki'i</b>
Holistic Development	Addressing children's physical, emotional, cognitive, and spiritual needs	Classroom activities include art projects, storytelling, and physical play; cultural practices incorporate chanting and hula; participation in hula drama showcases physical, emotional, and cognitive engagement.
Cultural Braiding and Preservation	Integrating and preserving Hawaiian culture	The use of 'ōlelo Hawai'i in communication and storytelling helps preserve linguistic heritage; traditional activities such as making poi from kalo and participating in makahiki games reinforce cultural knowledge.
Family and Community Involvement	Actively involving family and community in education	PACT (Parents and Children Together) sessions encourage family participation; community events like makahiki games and year-end Hula Drama foster a sense of belonging.
Relationships and Social Contribution	Building strong relationships and encouraging social contribution	Collaborative activities, such as preparing the imu and cultural performances teach keiki the value of cooperation; mentorship and guidance from kumu foster strong relationships.
Connection to Land	Emphasizing connection to 'āina (land)	Keiki use kilo journals to observe and document interactions with the land; cultural stories and practices connect them to their heritage and the land.

### Findings From Supporting Questions

Supporting questions identified at the start of the research were selected to examine aspects such as the braiding of modern and Indigenous knowledge, barriers to implementing Indigenous philosophies, and examples of enrichment through interactions with Indigenous communities. The braiding of modern and Indigenous knowledge is evident in the data presented in Chapter Five. This braiding was often achieved through outdoor experiences. Mo'olelo and hands-on activities were used to reinforce literacy, mathematical, and science concepts and skills, including telling and retelling stories, learning about native plants, and

observing patterns.

Data collected from kumu and mākua provide insights into the barriers identified in implementing Indigenous practices. These barriers were discussed in more detail in the Data Analysis chapter. To summarize the findings and answer the sub-question, the kumu identified three major points that presented barriers to implementing Indigenous philosophies in the learning framework: a lack of knowledge and resources, classroom behavior, and home support. Interestingly, despite my initial assumptions that licensing regulations and testing might be seen as significant obstacles, these factors were not highlighted by the kumu as barriers. The mākua agreed that they did not experience any barriers.

Interactions with Indigenous communities were manifested in Mālamapōki‘i’s involvement in cultural events such as Makahiki games, which is a generational event. The keiki also learned from cultural practitioners in a wa‘a building project. In their daily activities, keiki interacted with cultural experts from the larger school community and learned about native plants, the wind, and cloud formations.

Other supporting questions surfaced as a response to concepts discussed in the review of literature in Chapter 3. They include:

**“How are experiences grounded in Hawaiian ways of learning and knowing?”**

Experiences at Mālamapōki‘i are rich in Hawaiian ways of learning and knowing. Connection to the land is fostered, and cultural protocols are practiced daily. Keiki experienced and learned about cultural practices such as cooking in an imu. They interacted with cultural experts and engaged in a wa‘a building project.

**“Do the activities at Mālamapōki‘i follow the pattern of tēnā?”** An example of the practice of tēnā as discussed in Chapter 3 is evident in the observation of older keiki guiding younger ones in cultural practices and classroom routines. This step of tēnā is where the learners become the kumu. The keiki kilo journals provide another illustration of this

practice. Kilo journals documenting kalo plant growth show the progression from simple observation to more detailed documentation, with keiki learning to kilo and document on their own, demonstrating the unaccompanied tēnā stage.

**“How does Mālamapōki‘i incorporate ‘āina as interconnected relationships with the world fostering love, respect, and stewardship in the lives of the keiki?”** As discussed in Chapter 3, Goodyear-Ka‘ōpua empathized the connection between the ‘āina and keiki’s well-being. Mālamapōki‘i strengthens keiki’s connection to the ‘āina through daily kilo practices, where they observe weather patterns and plant growth. The keiki regularly engage in farming activities that are based on cultural knowledge. Mo‘olelo and oli are used to teach them about significant places in the community. They are expected to take on the kuleana of caring for the ‘āina, a concept reinforced through gardening and farming activities. Keiki learn the proper way to gather materials for making leis and the protocol for returning these materials to the ‘āina when they are no longer needed.

The supporting questions provided depth to the study and a link to the Indigenous practices identified in the literature. Addressing these questions highlighted the braiding of traditional knowledge with modern content through outdoor experiences and hands-on activities. Barriers to implementing Indigenous philosophies were identified, and the supporting questions showcased the enrichment provided by cultural events and interactions with practitioners. These questions also explored the grounding effect of cultural practices.

### **‘Ohana Survey Findings**

The findings of the ‘Ohana Data Set revealed gaps in the practice of Hawaiian culture and traditions among Mālamapōki‘i families. The four top areas are: adapting traditional Hawaiian practices to modern settings, using traditional Hawaiian naming practices, using traditional Hawaiian songs, stories, dances, and histories to teach families, and regularly practicing and teaching cultural traditions and language in the home. Another challenge revealed in the ‘Ohana Data Set is the role of technology in maintaining traditions. It was

pointed out that cultural technology resources are valuable but managing ‘ohana technology use can be a distraction.

### **Limitations of the Study**

This qualitative study has provided an in-depth look at practices at Mālamapōki‘i but does not provide statistically significant findings. The talk story sessions, interviews, mo‘oki‘i activities, and surveys provided the perspectives of a select group of stakeholders. Their experiences cannot be generalized to other groups or situations, limiting the transferability of the findings. The classroom observations captured moments in time and are reflective of the practices at Mālamapōki‘i. However, due to the limited number of observations, this study could not capture the full range and variability of activities and interactions that constitute the Mālamapōki‘i framework. Additionally, the short duration of the observations may have missed variations in practices that occur during different times of the year or under varying circumstances. As a single observer, there is also the possibility that certain activities and interactions were missed or not fully captured during the observation periods.

### **Chapter Summary**

Chapter Six documented the research findings, answering the research question through a critical analysis of the learning framework at Mālamapōki‘i in the context of Indigenous philosophies and standards. A thematic analysis of the qualitative data from the sessions of talk stories, interviews, observations, and document reviews was used to highlight how Mālamapōki‘i reflects the five common practices: holistic development, cultural braiding and preservation, involvement of family and community, relationships and social contributions, and connection to the ‘āina.

The findings of this study affirm that the Mālamapōki‘i framework aligns with the Indigenous practices identified in the literature and provides an education that “honors traditional Native teachings and cultural values and beliefs while nurturing academic excellence” as described by Dr. Hanohano in Chapter 3. The findings clearly reinforce the



importance of relational accountability as emphasized in the Braiding the Ropes of Pilina methodology outlined in Chapter 2, where the interconnectedness of community and keiki is paramount.

Their approach is bilingual and incorporates traditional knowledge through oli, mo‘olelo, and pilina with ‘āina. Mākua and community involvement are recognized as essential components of the program, with data indicating active participation, particularly from mākua. Overall, the program is holistic and provides an educational environment that enriches the keikis’ overall development. The additional ‘Ohana Data Set provided insight into how ‘ohanas implement traditional Hawaiian practices and knowledge in their lives, identifying gaps that exist within family practices.

The findings suggest that the framework at Mālamapōki‘i provides a holistic learning environment where keiki thrive in an inviting, culturally rich environment that promotes a sense of belonging and community. Attention to pilina provides security and safety for the keiki. A connection to the ‘āina is central to the framework and grounds the kumu, keiki, and mākua in cultural practices. While limitations to the study were acknowledged, this study provides insights that contribute to the field of Indigenous early childhood education. Overall, this research advocates for Indigenous self-determination in education and the need for the decolonization of early childhood education. By offering a methodology for other Indigenous communities to undertake similar evaluations of their early childhood learning frameworks, this study advances the field of Indigenous early childhood education.

The final chapter of this thesis discusses the implications of these findings, suggesting potential areas for further research and next steps. A recap of the entire thesis will summarize the study and highlight the key contributions to the field of Indigenous early childhood education, emphasizing the significance of aligning educational practices with Indigenous philosophies and standards.

## Chapter 7

### Recommendations and Conclusion

**“Kupu a‘e ke aloha no Waimea.**

**Nāpua makamae mu‘o i ke anu.**

*Love for Waimea sprouts, growing forth.*

*Budding in the chill are the precious flowers.*

**Mu‘o maila nāpua ho‘oheno.**

**I ka noe ‘alohi wehi i nāliko.**

*Cherished flowers (youth) budding and growing.*

*In the glittering mists that adorn the leaves.*

**Liko a‘ela nāmamo aloha.**

**Nāmamo ha‘aheo Mālamapōki‘i.**

*The beloved children bloom and unfold.*

*The proud children of Mālamapōki‘i.”*



Figure 7.1: Former Mālamapōki‘i keiki continue to build on their hula foundation, maintaining the cultural practice they began at Mālamapōki‘i. Kumu 2 (2024).

## **Summary of Key Findings**

The conclusion of this study reflects upon the alignment between the Mālamapōki'i framework and Indigenous practices as identified in the literature. As detailed in the findings chapter, the program's bilingual approach, braiding of traditional knowledge through oli, mo'olelo, and pilina with 'āina, and the active involvement of mākua and the community are key elements that contribute to its holistic nature. Additionally, insights from the 'Ohana Data Set reveal how traditional Hawaiian practices and knowledge are implemented within families, highlighting certain gaps that may exist. For a comprehensive analysis of these findings, please refer to the Mālamapōki'i Framework Evaluation section in the findings chapter.

## **Recommendations**

Based on the findings and limitations of this study, recommendations in three areas will be offered. First, recommendations for the Mālamapōki'i Early Childhood Education Framework; second, recommendations for policymakers; and lastly, suggestions for further research.

### **For Mālamapōki'i**

Interaction with kūpuna and cultural practitioners was the least observed theme. I recommend an intentional approach during planning to increase opportunities for keiki to learn from and interact with kūpuna and other Indigenous practitioners. This could be accomplished through scheduled classroom visits and field trips by establishing community partnerships to leverage opportunities for keiki, mākua, and kumu to participate in hands-on learning opportunities led by kūpuna and other practitioners. Kūpuna sharing place-based mo'olelo will perpetuate community traditions and strengthen the pilina as traditions are handed down from generation to generation. These initiatives will enrich the keikis' educational experience. By implementing these suggestions, kūpuna will also be valuable

resources of cultural knowledge that kumu can rely on.

Increase the cultural content of PACT activities in response to the gaps identified in the 'Ohana Data Set. PACT offers a monthly opportunity to strengthen 'ohana's capacity to fortify cultural practices and expand Indigenous knowledge. Each PACT, no matter the topic, should provide a cultural lesson or activity. Examples of possible activities include recounting a previously learned mo'olelo, practicing an oli or mele, or engaging in hana no'eau projects such as kāpala or other traditional arts. An additional recommendation is to utilize 'ohana's cultural knowledge to provide a platform for cultural sharing and teaching within the school community, honoring the proverb, "A'ohe pau ka 'ike ka hālau ho'okahi. All knowledge is not taught in the same school. One can learn from many sources" (Pukui, 1986, p. 66).

A desire for more cultural professional development surfaced in the Kumu Data Set. Additionally, a lack of cultural knowledge was identified as a barrier to implementing Indigenous practices. To address these barriers, my recommendation is to offer opportunities for kumu to participate in cultural professional development designed to meet their needs that draw on community resources to facilitate learning. The professional development opportunities should be hands-on activities and offer practical ways to implement Indigenous practices in the classroom. Follow-up sessions should be offered to provide kumu with support for effectively integrating the new skills and knowledge into their classroom teaching. Barriers such as a kumu's investment of time and money should be mitigated by scheduling learning opportunities that can be incorporated into their existing schedules and provided at no cost to them. Additionally, these offerings should utilize cultural practitioners from the community.

### **For Policymakers**

Hawai'i's Lieutenant Governor has made strides in elevating the status of early childhood education in the State. Policymakers can validate the importance of Indigenous Early

Childhood Education as they support policies that leverage the existing Hawaiian education laws to fully integrate Indigenous standards and assessment models into the Statewide educational framework. Policymakers should prioritize the allocation of funds for projects to develop authentic Indigenous assessment frameworks that are modeled after the tools available in New Zealand and Australia. I recommend these assessment models build on the foundation provided by Nā Hopena A‘o (HĀ) and Nā Honua Mauli Ola—Cultural pathways for culturally healthy and responsive learning environments.

### **For Future Research**

Student behavior was identified as a barrier to implementing Indigenous practices in the classroom. Using Indigenous methods for classroom management would increase the use of Indigenous practices. I recommend research to explore available Indigenous behavior and classroom management systems with the goal of developing or adapting a system for Mālamapōki‘i that is immersed in Hawaiian values.

Such a model would provide culturally relevant strategies to alleviate disruptive behavior and enhance the learning environment, ensuring that Indigenous practices can be fully embraced in the classroom. While extensive research has been conducted on Indigenous assessment models in Hawaiian education, there is a clear gap in comprehensive frameworks for early childhood education, particularly those that offer detailed exemplars similar to New Zealand’s assessment models. Adapting or developing a culturally based behavior and classroom management system is a critical step in implementing a comprehensive Indigenous early childhood education assessment framework at Mālamapōki‘i.

As discussed in Chapter 4, the literature from New Zealand uncovered the practice of using mo‘olelo as an effective assessment tool in early childhood education. I recommend further research into adapting the use of mo‘olelo as a specialized assessment tool to be included in the Indigenous assessment framework for Mālamapōki‘i. Including place-based mo‘olelo assessment tools could deepen relevance and cultural connection in the assessment

process.

### **Reflection on Mission, Vision, and Values**

As I reach the conclusion of this research, I am filled with gratitude for the kumu at Mālamapōki‘i who are dedicated to perpetuating our culture and practices. This study gave me a glimpse into the sacrifices they make daily to provide love and care for our pōki‘i. Considering the vast changes the Mālamapōki‘i framework has undergone for over 20 years, I am pleased to report that the original mission, vision, and values permeate the Mālamapōki‘i framework and are evident in daily practice.

The themes identified in each of the data sets correlate to the mission and vision. Starting with the overarching organization, KALO’s mission to “serve and perpetuate sustainable Hawaiian communities through Education with Aloha” (KALO 2020, p.2). Mālamapōki‘i efforts embody the kaona of EA as they implement community-based and controlled education strengthening Hawaiian education.

KALO’s vision to “work with its partners to establish an autonomous, holistic, education environment for the children of Hawai‘i—Grounding every child and adult in the values that have shaped and empowered Hawaiians for generations—Involving every member of the Hawaiian community in determining his/her educational path, and, preparing every Hawaiian to thrive in the modern world, free from oppression, and with pride for our heritage” (KALO 2020, p.2) is realized in Mālamapōki‘i’s efforts to involve the whole ‘ohana in the education of our keiki.

The Mālamapōki‘i values of “Aloha kekahi i kekahi” (Aloha), “Mahalo i ka mea loa‘a” (Mahalo), “Mālama i kou kuleana” (Mālama), “Kōkua aku, kōkua mai” (Kōkua), and “Kūlia i ka nu‘u” (Kūlia) are evident in all data sets. The themes identified across the data sets consistently reflect these core values, demonstrating their central role in the Mālamapōki‘i learning framework. This alignment validates that the daily practices continue to support the values of the organization.

The themes identified in the keiki mo‘oki‘i activity include Play-based Activities, Outdoor Activities, and Friendship. As keiki develop friendships, they exhibit Aloha and Mālama when they care for their friends and Kōkua as they learn to share. As they participate in outdoor activities, they learn kuleana as they Mālama the environment. Keiki expressed thankfulness for their surroundings, their friends, and the opportunity to play.

The Mākua Mo‘oki‘i Activity identified Friendships, Culture, Community, Creativity, and ‘Āina as essential elements of an effective early childhood education learning environment. The importance placed on building pilina with the Mālamapōki‘i ‘ohana, the larger K-12 community, and the extended Waimea community is a direct reflection of Aloha. Through these relationships, lasting friendships are maintained.

Mālama is evident in the emphasis on ‘āina-based activities and the expressed feeling of kuleana to care for the ‘āina and pass cultural practices from one generation to the next. Mākua valued environmental stewardship and wanted their keiki to understand where their food comes from. Mākua acknowledged that it was important to create pilina with the ‘āina, with the understanding that if we take care of the ‘āina, it will take care of us. Mākua expressed thankfulness for the opportunity to live in Hawai‘i.

The community theme clearly indicates the value of Kōkua. As Mālamapōki‘i ‘ohanas collaboratively participate in community events, they make community connections, create lifetime memories, and strengthen intergenerational relationships. Mākua attributed community support networks as instrumental to a well-rounded educational learning environment. Culture and creativity are integrally connected to the value of Mahalo. Parents and children alike expressed appreciation for their cultural heritage through creative expression. These activities show honor and respect for cultural knowledge and practices.

The themes of community and culture complement the mission of Mālamapōki‘i, which is to provide family-oriented and community-based learning opportunities for keiki and their ‘ohana in the Waimea area. Mālamapōki‘i’s vision is manifested in the themes of

community, culture, and ‘āina. The Mo‘oki‘i Data Set validates the Mālamapōki‘i vision of providing a nurturing and loving environment where children grow, prosper, and are protected.

E kupu mai ana, oho a lau. No nā mea ma lalo, he mea māmalu.

Pā mai ka lā, iho mai ka ua.

Ulu nō.

Sprouting forth until leaves form

A protector for all things below

The sun shines, and the rain falls.

Indeed Growth

A baby grows and becomes a young child.

For these young children, we provide a caring place.

A nurturing and loving environment

Where children will grow and prosper

(KALO, 2016, p. 6)

The themes from the Mākua Data Set are entrenched in the mission, vision, and values of Mālamapōki‘i. Mākua valued the Cultural Education Foundation their keiki received at Mālamapōki‘i, including cultural practices such as participation in daily piko and learning cultural practices and values. These activities embrace all the values and work towards the fulfillment of the mission and vision. The value of Kūlia played a consistent role in the themes from all the data sets, as striving to reach your highest was an underlying pursuit of all the themes.

The themes of Parental Involvement through PACT, Community Building, Family



Learning, and School and Home Integration incorporate the values of Kōkua and Aloha as knowledge is shared from school to home and pilina is established between keiki, kumu, and ‘ohana. These themes directly impact the mission and vision as they involve mākua and the community in the learning framework.

The themes drawn from the Kumu and Ho‘okumu Data Set are deeply rooted in the mission, vision, and values of Mālamapōki‘i. Aloha was central to the themes of Family Involvement and Relationships and Kindness, Respect, and Joy. The themes of Family Involvement and Relationships, Community Collaboration, and Engagement with Indigenous Experts were deeply anchored in Kōkua. Mālama was a core element of the themes of Connection to Culture and Place, Braiding Through Environment, Encouraging independence and Responsibility, and Hands-on Cultural Activities. The themes of Family Learning, School and Home Integration, and Use of Cultural Stories and Practices were strongly influenced by the value of Mahalo.

The mission, vision, and values of Mālamapōki‘i are strongly reflected in the themes identified in the Past Haumāna Data set. The Nature, Environment, and Playground theme was closely tied to the value of Mālama. Kūlia was woven into the Creative Expression Value. The cultural practice theme embodied all the values. Mālama was central to the Physical Development theme. The Social and Emotional Learning theme was strongly influenced by the values of Aloha and Kōkua.

The Past Haumāna Dat Set confirms Mālamapōki‘i’s holistic approach and provides evidence that the mission, vision, and values are an integral part of the framework by engaging keiki in cultural-based education that provides for their needs and encourages connection to the ‘āina and helps ground keiki in their cultural identity.

The Observation Data Set provided a unique look into the daily operations at Mālamapōki‘i. As I reflect on the experience, I am overcome with feelings of joy as I recall witnessing the values in action and the mission and vision being realized daily. This is not

to say that Mālamapōki‘i does not face challenges; however, any concerns I may have had about implementing Indigenous practices were dismissed as I saw the dedication of the staff and the buy-in of the parents. After participating in this research, I know there is a path forward that will address any issues and provide a continual evaluation tool that will drive decision-making and program implementation.

The themes from the ‘Ohana Data Set made it clear that the mission, vision, and values of Mālamapōki‘i extend to the homes of our haumāna as they learn traditional knowledge from kupuna and other family members, engage in cultural practices, and create connections to the ‘āina.

Reflections across all the data sets confirm that Mālamapōki‘i’s mission, vision, and values are evident throughout the early learning framework. The commitment of the Mālamapōki‘i community, including the kumu, keiki, mākua, and the extended community, fosters a strong sense of cultural identity. Mālamapōki‘i remains true to its founding principles and philosophies and supports KALO’s vision to “establish an autonomous, holistic education environment for the children of Hawai‘i” (KALO, 2020, p.2).

Table 7.1: Mapping of Themes to Mission, Vision, and Values of Mālamapōki‘i

<b>Theme</b>	<b>Mission Alignment</b>	<b>Vision Alignment</b>	<b>Values</b>
Play-based Activities	Supports family-oriented learning	Nurtures keiki in a loving environment	Aloha, Mālama, Kōkua
Outdoor Activities	Encourages connection to ‘āina	Fosters environmental stewardship	Mālama, Kuleana
Friendship	Strengthens community bonds	Builds pilina with ‘ohana	Aloha, Mālama, Kōkua
Culture	Promotes cultural education	Involves community in cultural practices	Aloha, Mālama, Kōkua, Mahalo, Kūlia
Community	Encourages community-based learning	Strengthens intergenerational relationships	Kōkua, Aloha, Mālama

Creativity	Honors cultural heritage through expression	Encourages creative cultural practices	Mahalo, Kūlia
‘Āina	Connects keiki to the land	Ensures cultural practices are passed on	Mālama, Kuleana
Parental Involvement (PACT)	Engages mākuā in learning	Integrates school and home life	Kōkua, Aloha
School and Home Integration	Facilitates learning continuity	Strengthens pilina between school and Home	Kōkua, Aloha
Family Involvement and Relationships	Promotes family participation	Builds strong family bonds	Aloha, Kōkua
Community Collaboration	Engages wider community	Fosters collective responsibility	Kōkua
Engagement with Indigenous Experts	Ensures cultural accuracy	Preserves cultural knowledge	Kōkua, Mālama
Connection to Culture and Place	Grounds keiki in cultural identity	Nurtures connection to ‘āina	Mālama, Aloha
Creative Expression	Encourages cultural creativity	Fosters pride in heritage	Kūlia, Mahalo
Social and Emotional Learning	Supports emotional development	Builds healthy relationships	Aloha, Kōkua
Nature, Environment, and Playground	Promotes environmental stewardship	Connects keiki with nature	Mālama, Kuleana
Physical Development	Supports holistic growth	Encourages healthy living	Mālama
Cultural Practice	Embodies core cultural values	Preserves traditional practices	Aloha, Mālama, Kōkua, Mahalo, Kūlia

## Conclusion

This research journey has come full circle, beginning in Chapter One with the exploration of Mālamapōki‘i’s foundational philosophies. Starting with its founding in 2002 and tracing its growth through changes in staffing and program delivery methods, the study confirms Mālamapōki‘i’s continued commitment to its mission and values. The rigorous methodology set forth in Chapter Two provided a culturally relevant framework to guide the research with a focus on pilina. The literature reviewed in Chapter 3 gave context to the struggles Indigenous communities face in providing early childhood education in culturally

appropriate ways, highlighting the educational oppression Hawai‘i endured and the significance of reclaiming Indigenous education. This situated Mālamapōki‘i within the broader context of Indigenous early childhood education.

The in-depth examination of Indigenous assessment practices in New Zealand, Australia, and Hawai‘i in Chapter 4 provided a framework for analyzing the data in Chapter Five. Drawing on Indigenous practices identified from the literature, thematic coding was used to organize and analyze the data. In Chapter Six, the conclusion of the journey brought me to an understanding of how the early learning framework at Mālamapōki‘i reflects Indigenous philosophies and standards and led to the recommendations presented in this chapter. The findings validate Mālamapōki‘i’s alignment with Indigenous philosophies and standards identified as common practices among Indigenous programs in New Zealand, Australia, and Hawai‘i.

As discussed earlier in this study, accountability to the community is an important part of Indigenous research and an integral component of my methodology. Building and maintaining pilina was central to the success of this study, and this kuleana does not end now that the research is complete. It continues through the recommendations made and by giving back to the Mālamapōki‘i community. It is crucial that the research respects the community and that the community maintains ownership of its own data. To complete the circle, I must report back to the community.

In the “Give Back” section of Chapter Two, I outlined a plan for a visual presentation that would share the Mo‘oki‘i findings with the Mālamapōki‘i community. Originally, I intended to create a physical display featuring keiki collages and mākua photographs to be showcased in the KALO facility. However, this method had limitations. Due to space constraints, the number of items that could be displayed would be limited. Additionally, displaying the work in the KALO facility would restrict the audience, as most of the study participants are no longer with Mālamapōki‘i and are unlikely to visit the facility regularly.

For these reasons, I decided to modify the display to a digital format. The display is now presented as a video, available on the Mālamapōki‘i website. The aim of this presentation is to strengthen community ties and encourage ongoing participation and interaction among the extended Mālamapōki‘i community. This shift in presentation mode not only preserved the original intent but also allowed for the inclusion of all student collages and mākua photographs while expanding the audience and enabling the findings to reach a wider community.

While the findings of this study are specific to Mālamapōki‘i and cannot be generalized to all Indigenous early childhood education programs, they highlight the critical importance of culturally integrated education. The lessons learned from Mālamapōki‘i emphasize the value of maintaining cultural values and practices within educational frameworks to enrich the educational experiences of keiki. Ongoing commitment to these principles will preserve Indigenous knowledge, promote holistic development, and perpetuate Hawaiian culture, values, and practices for future generations.

During my initial review of the Mālamapōki‘i framework, I identified a missing element within the foundational documents. While the mission, vision, and values provided a cohesive overview of the program, Mālamapōki‘i lacked an oli or mele as part of its guiding principles. Many Hawaiian schools have an oli or mele that is unique to their place and traditions, serving to invite spiritual presence and unify the community. To address this gap, a collaborative process was initiated. Mālamapōki‘i kumu and administrators worked with a cultural practitioner to envision a mele for the keiki and ‘ohana of Mālamapōki‘i. This mele was crafted as a living expression of the principles that guided this study. The process took over a year to complete. The mele below is not the conclusion of this research but serves as an affirmation of Mālamapōki‘i’s commitment to perpetuating Hawaiian culture, values, and practices.

**“Kupu a‘e ke aloha no Waimea.**

**Nāpua makamae mu‘o i ke anu.**

*Love for Waimea sprouts, growing forth.*

*Budding in the chill are the precious flowers.*

**Mu‘o maila nāpua ho‘oheno.**

**I ka noe ‘alohi wehi i nāliko.**

*Cherished flowers (youth) budding and growing.*

*In the glittering mists that adorn the leaves.*

**Liko a‘ela nāmamo aloha.**

**Nāmamo ha‘aheo Mālamapōki‘i.**

*The beloved children bloom and unfold.*

*The proud children of Mālamapōki‘i.”*

## References

- Aboriginal and Torres Strait Islander perspectives: Assessment for children's learning. (2023, November). Retrieved June 21, 2024, from <https://www.edresearch.edu.au/guides-resources/practice-resources/aboriginal-torres-strait-islander-afcl>
- ‘Aha Pūnana Leo. (2009). *Kumu honua mauili ola : He kālaimana ‘o ho ‘ona ‘auao ‘ōiwi Hawai‘i*. Ka Haka ‘Ula o Ke‘elikōlani, ke Kulanui o Hawaii Hilo.
- The ‘Aha Punana Leo connection in Hawaiian language revitalization. In *The Green Book of Language Revitalization in Practice* (pp. 147–176). Academic Press.
- Alaska Native Knowledge Network. (1998). *Alaska standards for culturally-responsive schools*. University of Alaska Fairbanks. <https://www.uaf.edu/ankn/publications/guides/alaska-standards-for-cult/>
- Anakalea, K. (2024, February). The cultural significance of hair.
- Australian Government Department of Education. (2022). Belonging, being and becoming: The early years learning framework for Australia.
- Bang, M., Montaña Nolan, C., & McDaid-Morgan, N. (2018). Indigenous family engagement: Strong families, strong nations. In E. A. McKinley & L. T. Smith (Eds.), *Handbook of Indigenous Education* (pp. 1–22). Springer. <https://doi.org/10.1007/978-981-10-1839-8>
- Beniamina, J. I. K. (2010). Tēnā: A learning lifestyle. *Hūlili: Multidisciplinary Research on Hawaiian Well-Being*, 6, 9–23.
- Bergin, P. (2024, March). Mālamapōki‘i Transitional History.
- Bertelmann, P. (2022, September). *Hunehune KALO - Bits and pieces of news*. Kanu o ka ‘Āina NCPCS. <https://kauhale.kanuokaaina.org/wp-content/uploads/2022/09/September-Newsletter.pdf>

Best of both worlds. (2015, March). Retrieved June 18, 2024, from

<https://www.education.govt.nz/early-childhood/teaching-and-learning/assessment-for-learning/te-whatu-pokeka-english/best-of-both-worlds/>

Bourassa, C., Billan, J., Starblanket, D., Anderson, S., Legare, M., Hagel, M. C., Oakes, N., Jardine, M., Boehme, G., Dubois, E., Spencer, O., Hotomani, M., & McKenna, B. (2020). Ethical research engagement with Indigenous communities. *Journal of Rehabilitation and Assistive Technologies Engineering*, 7, 205566832092270.

Brayboy, B. M. J., & Lomawaima, K. T. (2018). Why don't more Indians do better in school? The battle between U.S. schooling and American Indian/Alaska Native education. *Daedalus*, 147(2), 82–94, [https://doi.org/10.1162/DAED\\_a\\_00492](https://doi.org/10.1162/DAED_a_00492)

Brown, M. A. (2016, May). *Facing the spears of change: The life and legacy of John Papa 'Ūi*. University of Hawaii Press.

Burnam, L. (2023, May). Reflexivity in qualitative research: Why you'll never be an objective observer. Retrieved February 4, 2024, from <https://www.userinterviews.com/blog/reflexivity-in-qualitative-research>

Buxton, L. (2015). Early childhood education at the cultural interface. *The Australian Journal of Indigenous Education*, 44(1), 1–10. <https://ajie.atsis.uq.edu.au/ajie/article/view/143>

Cajete, G. (1994). *Look to the mountain: An ecology of Indigenous education*. Kivak'1 Press. Retrieved June 12, 2024, from <https://archive.org/details/looktomountainec0000caje>

Cameron, M., Aspden, K., Smith, P., & McLaughlin, T. (2023). “The curriculum just flows.” An examination of teachers’ understandings and implementation of Te Whāriki pre-2017. *Waikato Journal of Education*, 28(1), 41–53. Retrieved May 28, 2024, from <https://eric.ed.gov/?id=EJ1393235>

Castagno, A. E., Tracy, T. L., Denny, D., Davis, B. S., & Kretzmann, H. C. (2020). You



- are never too little to understand your culture. Strengthening early childhood teachers through the Dine' Institute for Navajo Nation educators. *Journal of Indigenous Early Childhood Education*, 1(1), 1–13.
- Chalmers, J. (2017). The transformation of academic knowledges: Understanding the relationship between decolonising and Indigenous research methodologies. *Socialist Studies*, 12(1), 97–116.
- Chilisa, B. (2020). *Indigenous research methodologies* (2nd ed.). SAGE.
- Cohrssen, C., Hedge, K., Hill, G., Madanipour, P., & Stewart, L. (2020, January). *Early years planning cycle resource for the Victorian early years learning and development framework*. Victorian Curriculum and Assessment Authority. Retrieved June 22, 2024, from <https://www.vcaa.vic.edu.au/Documents/earlyyears/EarlyYearsPlanningCycle.pdf>
- The Cole Academy. (n.d.). Retrieved March 2, 2024, from <https://thecoleacademy.com/>
- The Coolangatta Statement on Indigenous Rights in Education. (1999). *Journal of American Indian Education*, 39(1), 52–64.
- Council of Australian Governments Education Council. (2019, December). *Alice Springs (Mparntwe) education declaration*. Retrieved June 14, 2024, from [https://all-learning.org.au/app/uploads/2020/12/final - alice springs declaration - 17 february 2020 security removed.pdf](https://all-learning.org.au/app/uploads/2020/12/final_-_alice_springs_declaration_-_17_february_2020_security_removed.pdf)
- D'Aprano, A., Carmody, S., Manahan, E., Savaglio, M., Galvin, E., & Skouteris, H. (2023). A rapid review of implementation frameworks underpinning Aboriginal and Torres Strait Islander children's health and social care programs. *Australian and New Zealand Journal of Public Health*, 47(3), 100063.
- Dreaver, K., Carr, M., Lee, W., & Jones, C. (2007a). *Kei tua o te pae: Assessment for learning: Early childhood exemplars. An introduction to books 11-15*. Ministry of Education.

- Dreaver, K., Carr, M., Lee, W., & Jones, C. (2007b). *Kei tua o te pae: Assessment for learning: Early childhood exemplars. The strands of Te Whāriki: Communication*. Ministry of Education.
- Education Review Office. (2018, November). *Engaging with Te Whāriki (2017)*.  
<https://ero.govt.nz/sites/default/files/2021-05/Engaging-with-Te-Whariki.pdf>
- Education Review Office. (2020). *Indicators of quality for early childhood education: What matters most*. <https://ero.govt.nz/sites/default/files/2021-04/Te-Ara-Poutama-Indicators-of-quality-full-document.pdf>
- Epistemology: Definition & meaning. (n.d.). Retrieved February 5, 2024, from  
<https://www.merriam-webster.com/dictionary/epistemology>
- Evaluation with Aloha. (2019). Retrieved June 14, 2024, from  
<https://www.creahawaii.org/aloha>
- Find child care. (n.d.). Retrieved March 2, 2024, from <https://www.patchhawaii.org/find-%20child-care/>
- Foley, D. (2003). Indigenous epistemology and indigenous standpoint theory. *Social Alternatives*, 22(1), 44–52.
- Fujikane, C. (2016). Mapping wonder in the Māui Mo‘olelo on the Mo‘o‘āina: Growing Aloha ‘āina through indigenous and settler affinity activism. *Rooted in wonder: Tales of indigenous activism and community organizing*, 30(1), 45–69.
- Goldstein, L., & Andrews, L. (2004). Best practices in a Hawaiian kindergarten: Making a case for Nā Honua Maui Ola. *Hūlili: Multidisciplinary Research on Hawaiian Well-Being*, 1(1), 133–148.
- Goodyear-Ka‘o‘pua, N. (2016). Reproducing the ropes of resistance: Hawaiian studies methodologies. In *Kanaka ‘ōiwi Methodologies*. University of Hawaii Press.
- Grajczonek, J. (2012). Interrogating the spiritual as constructed in "Belonging, being and becoming: The early years learning framework for Australia." *Australasian*

*Journal of Early Childhood*, 37(1), 152–160.

<https://doi.org/10.1177/183693911203700118>

Grieshaber, S. (2010). Departures from tradition: The early years learning framework for Australia. *International Journal of Child Care and Education Policy*, 4(2), 33–44.

Hanohano, P. K. (2003). *Restoring the sacred circle: Education for culturally responsive native families*. [Doctoral dissertation, University of Alberta.]

Hawaii State Department of Education. (2015). Nā Hopena A‘o (HĀ ). Retrieved June 18, 2024, from <https://www.hawaiipublicschools.org/TeachingAndLearning/StudentLearning/HawaiianEducation/Pages/HA.aspx>

Hewett, K.-A. K. (1998). *Ko Makou mau mo ‘olelo: Native Hawaiian students in a teacher education program* [Doctoral dissertation, University of Hawaii].

HI Const. art. X, sec 4. (1978). Retrieved April 4, 2024, from <https://lrb.hawaii.gov/constitution/>

Hawaii State Department of Education. (n.d.). History of Hawaiian education. Retrieved April 5, 2024, from <https://www.hawaiipublicschools.org/TeachingAndLearning/StudentLearning/HawaiianEducation/Pages/History-of-the-Hawaiian-Education-program.aspx>

Hohepa, M. (2015). Kia Mau Ki te Aka Matua: Researching Māori development and learning. In *Kaupapa Rangahau: A reader* (pp. 115–124). University of Waikato.

Ho‘oikaika. (n.d.). Retrieved March 1, 2022, from <https://hilo.hawaii.edu/wehe/?q=Ho%E2%80%98oikaika>

Introduction: Assessment for children’s learning. (2023, November). Retrieved June 21, 2024, from <https://www.edresearch.edu.au/guides-resources/practice-resources/introduction-afcl>

Jarvie, W. K. (2012). Qualitative research in early childhood education and care implementation. *International Journal of Child Care and Education Policy*, 6(2),

KALO. (2001). Grant Application Mālamapōki'i. KALO. (2016). Mālamapōki'i parent handbook. KALO. (2018). Mālamapōki'i parent handbook.

KALO. *Hunehune KALO - Bits and pieces of news*. (2023, December). Kanu o ka 'Āina NCPCS. <https://kauhale.kanuokaaina.org/wp-content/uploads/2023/01/December.pdf>

KALO. (2020). Kanu o ka 'āina Learning 'Ohana Strategic Plan.

Kamehameha Schools. (n.d.). Nā Lau Lama community report - Indigenous assessment. Retrieved June 19, 2024, from <https://www.ksbe.edu/page-research-naa-lau-lama-community-report>

Kamehameha Schools preschools. (n.d.). Retrieved March 2, 2024, from <https://ksbe.edu/education/preschools>

Kana'iaupuni, S. (2005). Ka'akālai kū kanaka: A call for strengths-based approaches from a Native Hawaiian perspective. *Educational Researcher*, 34(5), 32–38.

Kana'iaupuni, S. (2013). Ho'opilina: The call for cultural relevance in education. *Hūlili: Multidisciplinary Research on Hawaiian Well-Being*, 9, 153–204.

Kana'iaupuni, S., & Else, I. (2005). Ola Ka Inoa (The name lives): Cultural inputs and early education outcomes of Hawaiian children. In *Learning in cultural context: Family, peers, and school* (pp. 109–131). Kluwer Academic/Plenum Publishers.

Kana'iaupuni, S., Kekahio, W., Duarte, K., & Ledward, B. (2021). *Ka Huaka 'i Native Hawaiian educational assessment 2021*. Kamehameha Publishing.

Kana'iaupuni, S., Ledward, B., & Jensen, U. (2010, September). *Culture-based education and its relationship to student outcomes*. Kamehameha Schools.

Kana'iaupuni, S. M., & Ishibashi, K. (2003, June). *Left behind: The status of Hawaiian students in Hawai'i public schools*. Kamehameha Schools.

Kana'iaupuni, S. M., & Kawai'ae'a, K. K. C. (2008). E Lauhoe Mai Nā Wa'a: Toward a

- Hawaiian indigenous education teaching framework. *Hūlili: Multidisciplinary Research on Hawaiian Well-Being*, 5, 67–90.
- Kanu o ka ‘Āina NCPCS. (2024, May). Hānau Ka ‘āina, Hānau Ke Ali‘i, Hānau Ke Kanaka.
- Kaomea, J. (2005). Reflections of an “always already” failing Native Hawaiian mother: Deconstructing colonial discourses on indigenous child-rearing and early childhood education. *Hūlili: Multidisciplinary Research on Hawaiian Well-Being*, 2(1), 77–95.
- Kawai‘ae‘a, K. (2002, June). *Nā Honua Mauli Ola: Hawai‘i guidelines for culturally healthy and responsive learning environments*. University of Hawaii at Hilo.  
[http://www.academia.edu/40960576/Na\\_Honua\\_Mauli\\_Ola\\_Hawaii\\_Guidelines\\_for\\_Culturally\\_Healthy\\_and\\_Responsive\\_Learning\\_Environments](http://www.academia.edu/40960576/Na_Honua_Mauli_Ola_Hawaii_Guidelines_for_Culturally_Healthy_and_Responsive_Learning_Environments)
- Kawai‘ae‘a, K. (2012, January). *Kūkohu: Ka nānaina kaiaola o nā kaiaa ‘o ‘olelo Hawai‘i (A study on the cultural ecology of Hawaiian-medium and Hawaiian immersion learning environments)* [Doctoral dissertation, Union Institute and University].
- Kawai‘ae‘a, K., Akana, K., Arnold, C., Beniamina, I., & Case, P. (2024). *Nā Honua Mauli Ola—Cultural pathways for culturally healthy and responsive learning environments* (Third). Hale Kuamo‘o.
- Kawai‘ae‘a, K., Housman, A., & Alencastre, M. (2007). Pu‘a i ka ‘Olelo, Ola ka ‘Ohana: Three generations of Hawaiian language revitalization. *Hūlili: Multidisciplinary Research on Hawaiian Well-Being*, 4(1), 183–237.
- Kawakami, A., & Aton, K. K. (2001). Ke A‘o Hawai‘i (Critical elements for Hawaiian learning): Perceptions of successful Hawaiian educators. *Pacific Educational Research Journal*, 11(1), 53–66.
- Kawakami, A. J., Aton, K., Cram, F., Lai, M. K., & Porima, L. (2007). Improving the practice of evaluation through indigenous values and methods: Decolonizing

- evaluation practice—Returning the gaze from Hawai‘i and Aotearoa. *Hūlili: Multidisciplinary Research on Hawaiian Well-Being*, 4(1), 319–348.
- Kennedy, M., Maddox, R., Booth, K., Maidment, S., Chamberlain, C., & Bessarab, D. (2022). Decolonising qualitative research with respectful, reciprocal, and responsible research practice: A narrative review of the application of yarning method in qualitative Aboriginal and Torres Strait Islander health research. *International Journal for Equity in Health*, 21(134), 1–22.  
<https://doi.org/10.1186/s12939-022-01738-w>
- KHONK Preschool. (n.d.). Retrieved March 2, 2024, from <https://www.honokaakeiki.org>
- Kimura, L. (2010). Aia Ia Kakou Na Ha‘ina - The answers are within us: Language rights in tandem with language survival. In *American Indian language development institute: Thirty year tradition of speaking from our heart* (pp. 41–51). University of Arizona Press.
- Kitson, R., & Bowes, J. (2010). Incorporating Indigenous ways of knowing in early education for indigenous children. *Australasian Journal of Early Childhood*, 35(4), 81–89. <https://doi.org/10.1177/1836939110035004>
- Kovach, M. (2010). Conversation method in indigenous research. *First Peoples Child & Family Review*, 5(1), 40–48.
- Kukahiko, K., Fernandez, P., Sang, D. K., Yim, K., Iwane, A., Kalama-Macomber, K., Makua, K., Nakasone, K., Fong, K., Tanigawa, D., Kim, K., Reyes, L. C., & Fleming- Nazara, T. (2020). Pūpūkahi i Holomua: A story of Hawaiian education and a theory of change. *Encounters in Theory and History of Education*, 21, 175–212. <https://doi.org/10.24908/encounters.v21i0.14218>
- Kula Kamali‘i. (n.d.). Retrieved March 27, 2024, from <https://www.ahapunanaleo.org/kula-kamalii-1>
- Lindsey, C. (2016). Kalo yarn art - lesson plan. Lindsey, C. (2023, February). Kīhāpaio ke

ola.

Maaka, M. (2019). Education through paideia. In H. Tomlins-Jahnke, S. D. Styres, S.

Lilley, & D. Zinga (Eds.), *Indigenous education: New directions in theory and practice*. University of Alberta Press.

Mahfouz, J., & Anthony-Stevens, V. (2020). Why trouble SEL? The need for cultural relevance in SEL. *Occasional Paper Series*, 2020(43).

<https://doi.org/10.58295/2375-3668.1354>

Mālamapōki'i. (2010).

Mālamapōki'i Website Documentation. Mālamapōki'i. (2023, August). Ka Lei Piko.

Mālamapōki'i. (2024, March). April PACT.

Mālamapōki'i Admin. (2023, August). Additional Lei Piko Information. Mālamapōki'i Admin. (2024, May). Hula drama mele.

McDonald, G., & May, H. (2018). Education: Early childhood. Retrieved April 29, 2024, from <https://nzhistory.govt.nz/women-together/theme/education-early-childhood>

McMillan, H. (2020). Mana whenua / Belonging through assessment: A Kōhanga Reo perspective. *Early Childhood Folio*, 24(2), 15–20.

Meade, A. J. (1997). Good practice to best practice: Extending policies and children's minds [ISSN: 0112-0530]. In *Early Childhood Folio 3: A Collection of Recent Research*. New Zealand Council for Educational Research Distribution Services.

Meyer, M. A. (2003). *Ho'oulu: Our time of becoming*. 'Ai Pohaku Press.

Meyer, M. A. (2013). Holographic epistemology: Native common sense. *China Media Research*, 9(2), 94–101.

Mutch, C. (2004). The rise and rise of early childhood education in New Zealand.

*Citizenship, Social and Economics Education*, 6(1), 1–11.

Mutch, C. (2013). *Doing educational research: A practitioner's guide to getting started* (2nd ed.). NZCER Press.

Nakata, M. (2007). *Disciplining the savages, Savaging the disciplines*. Aboriginal Studies Press.

National Association for the Education of Young Children. (2020). Developmentally appropriate practice (DAP) position statement. Retrieved October 18, 2021, from <https://www.naeyc.org/resources/position-statements/dap/contents>

New Zealand Ministry of Education. (2009). *Te whatu pōkeka : Kaupapa Māori assessment for learning : Early childhood exemplars*.

Oliveira, K.-A. (2016). Ka Wai Ola: The life-sustaining water of kanaka knowledge. In *Kanaka 'ōiwi methodologies: Mo 'olelo and metaphor* (pp. 72–85). University of Hawaii Press.

Pidgeon, M., & Riley, T. (2021). Understanding the application and use of indigenous research methodologies in the social sciences by indigenous and non-indigenous scholars. *International Journal of Education Policy and Leadership*, 17(8).  
<https://doi.org/10.22230/ijep1.2021v17n8a1065>

Porsanger, J. (2004). An essay about indigenous methodology. *Nordlit*, 8(1), 105–120.  
<https://doi.org/10.7557/13.1910>

Porter, M. K., & Cristobal, N. (2018). Cultivating aloha 'aina through critical indigenous pedagogies of place. *Journal of Folklore and Education*, 5, 199–218.

Prochner, L. (2003). The American creche: 'Let's do what the French do but do it our way'. *Contemporary Issues in Early Childhood*, 4(3), 267–285.  
<https://doi.org/10.2304/ciec.2003.4.3.4>

Pukui, M. K. (Ed.). (1983). *'Olelo No 'eau: Hawaiian proverbs & poetical sayings*. Bishop Museum Press.

Pukui, M. K., & Elbert, S. H. (1986). *Hawaiian dictionary: Hawaiian-English, English-Hawaiian* (Revised and enlarged). University of Hawaii Press.

Qina'au, J. (2016). Policy E-3: Nā Hopena A'o (HĀ ).



- Rameka, L. (2010). Culturally relevant assessment: Kaupapa Maori assessment in early childhood education. *Early Education*, 54, 12–17. <https://elp.co.nz/wp-content/uploads/2024/05/Culturally-Relevant-Assessment-Llesley-rameka.pdf>
- Rameka, L. (2016). Kia whakatōmuri te haere whakamua: ‘I walk backwards into the future with my eyes fixed on my past’. *Contemporary Issues in Early Childhood*, 17(4), 387–398. <https://doi.org/10.1177/14639491166779>
- Rameka, L. K. (2021). Kaupapa Māori assessment: Reclaiming, reframing and realising Māori ways of knowing and being within early childhood education assessment theory and practice. *Frontiers in Education*, 6, 1–8. <https://doi.org/10.3389/feduc.2021.687601>
- Rei, T., & Hamon, C. (1993). Te Kōhanga Reo. Retrieved July 7, 2024, from <https://nzhistory.govt.nz/women-together/te-kohanga-reo>
- Rogers, J. (2017). Photoyarn: Developing a new arts-based method. In *Building intercultural and interdisciplinary bridges: Where theory meets research and practice* (pp. 65–74). BIBACC Publishing.
- Romero-Little, M. E. (2010). How should young Indigenous children be prepared for learning? A vision of early childhood education for Indigenous children. *Journal of American Indian Education*, 49(1/2), 7–27.
- Small World Preschool-Hawaii. (n.d.). Retrieved March 2, 2024, from <https://smallworldpreschool-hawaii.com/>
- Smith, G. H. (1992). Research issues related to Māori education. In *The issue of research and Māori* (pp. 1–9). University of Auckland.
- Smith, L. T. (2021). *Decolonizing methodologies: Research and indigenous peoples* (3rd ed.). Zed Books.
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104, 333–339.

<https://doi.org/10.1016/j.jbusres.2019.07.039>

Taira, B. W., & Maunakea, S. P. (2023). Ma ka hana ka 'ike: Implementing culturally responsive educational practices. *Behavior and Social Issues*, 32(1), 234–248.

<https://doi.org/10.1007/s42822-023-00127-4>

Tamati, A. (2021). *He Piki Raukura (The flight feathers of the toroa): Understanding and assessing ao Māori child development constructs within kaupapa Māori early years education* [Doctoral dissertation, University of Otago].

<https://ourarchive.otago.ac.nz/esploro/outputs/doctoral/He-Piki-Raukura-the-flight-feathers/9926479956501891>

Thornton, K. (2021, June). Leadership in early childhood education in New Zealand:

History and context. Retrieved July 2, 2024, from

<https://theeducationhub.org.nz/leadership-%20in-ece-in-new-zealand-history-and-context/>

UH Maui College Professional Development. (2020, December). Transformation through storytelling, Mele and Hana No'eau, Session 1: Kaula. Retrieved June 18, 2022,

from <https://www.youtube.com/watch?v=PFW-Ux7tnWw>

UNESCO. (2021, June). Land as teacher: Understanding Indigenous land-based education.

Retrieved April 13, 2024, from <https://en.ccunesco.ca/idealab/indigenous-land-based-education>

Waikoloa Baptist Keikiland Preschool. (n.d.). Retrieved March 2, 2024, from

<https://www.waikoloabaptistkeikiland.com/>

Welcome. (n.d.). Retrieved March 2, 2024, from

<https://waimeamontessori.wixsite.com/mech>

Whāriki, T. (2017). *He Whāriki mātauranga mō ngā mokupuna o Aotearoa: Early childhood curriculum*. Ministry of Education.

Williams, N., Fletcher, J., & Ma, T. (2023). Advice from Māori experts for bicultural early

- childhood education in Aotearoa New Zealand. *New Zealand Journal of Educational Studies*, 58(2), 271–290.
- <https://link.springer.com/article/10.1007/s40841-023-00294-3>
- Wilson, K. S. (2023, July). *Nāniho e pa ‘a ‘ia ‘ana: Setting the foundation for kanaka ‘ōiwi principalship in Hawai‘i’s educational ecosystem* [Doctoral dissertation, The University of Hawaii at Mānoa].
- <https://eric.ed.gov/?q=quality+of+work+life&ff1=pubDissertations%2fTheses+-+Doctoral+Dissertations&ff2=subPrincipals&id=ED638548>
- Wilson, S. (2008). *Research is ceremony: Indigenous research methods*. Fernwood.
- Wilson, W. H., & Kamanē, K. (2001). Mai Loko Mai O Ka 'J'ini: Proceeding from a dream: The 'Aha Punana Leo connection in Hawaiian language revitalization. In *The green book of language revitalization in practice* (pp. 147-176). Brill.
- Doherty, W. (2019). Maintaining Indigeneity within education and broader contexts. In H. Tomlins-Jahnke, S. D. Styres, S. Lilley, & D. Zinga (Eds.), *Indigenous education: New directions in theory and practice* (pp. 405-426). University of Alberta Press.
- Without language, there is no culture. And aboriginal languages are in danger of dying. (2015, June). Retrieved August 19, 2024, from <https://www.cbc.ca/player/play/audio/1.3101028>
- World Indigenous Peoples Conference on Education. (2014, May 20). *WIPCE Youth Declaration Poster* [Poster]. WIPCE.
- <https://www.wipceinternational.com/youthdeclaration>
- Yuen, L. (2022, May). Kaula and ka‘ ā – the ties that bind. Retrieved June 17, 2022, from <https://www.kaahelehawaii.com/kaula-and-ka%ca%bb-a-the-ties-that-bind/>

## **Appendix A: Research Information Sheets**

### **Participant Information Sheet**

#### **Kumu and Ho'okumu Participation**

**Research Title:** Braiding the Ropes of Pilina – Indigenous Practices at Mālamapōki'i

**Researcher:** Nancy Levenson

Early learning sets a foundation that promotes or detract from Indigenous traditions and practices. The aim of this study is to evaluate the framework and practices at Mālamapōki'i Early Childhood Education Program. The key research question is, "How does the early learning framework at Mālamapōki'i reflect Indigenous philosophies, standards, and best practices?" Data will be gathered through observations, talk story sessions, Mo'oki'i sessions, and informal interviews.

#### **Your Participation**

As a **current or past administrator**, you are invited to participate in an informal interview. The interviews will be audio recorded.

#### **Statement of Rights**

You have the right to:

- Decline to participate;
- Decline to answer any particular question;
- Withdraw from the study (specify timeframe);
- Ask any questions about the study at any time during participation;
- Provide information on the understanding that your name will not be use unless you give permission to the researcher;
- To be given access to a summary of the project finding when it is concluded.
- I also understand that I have the right to ask for the audio/video tape to be turned off at any time during the session.

Project Contact:

Researcher: Nancy Levenson

Phone: (808) 887-1117

Email: [nancy@kalo.org](mailto:nancy@kalo.org)

Ethics Reference Number: **EC2023.16**

Contact Details for **Ethics Committee Secretary**: [Kahukura.epiha@wananga.ac.nz](mailto:Kahukura.epiha@wananga.ac.nz)

**Postal address:** Private Bag 006 Whakatāne

**Courier address:** Cnr of Domain Rd and Francis St Whakatāne

Participant Information Sheet  
**Current Haumāna and Mākua Participation**

**Research Title:** Braiding the Ropes of Pilina (relationships)– Indigenous Practices at Mālamapōki‘i

**Researcher:** Nancy Levenson

Early learning sets a foundation that promotes or detract from Indigenous traditions and practices. The aim of this study is to evaluate the framework and practices at Mālamapōki‘i Early Childhood Education Program.

The key research question is, “How does the early learning framework at Mālamapōki‘i reflect Indigenous philosophies, standards, and best practices?” Data will be gathered through observations, talk story sessions, Mo‘oki‘i (storytelling through pictures) sessions, and informal interviews.

**Your Participation**

As a **current haumāna** (student) your keiki’s participation includes informal group observations, review of their work, group hō‘ike review and two Mo‘oki‘i sessions (All during school hours). During the Mo‘oki‘i sessions haumāna will take photos or draw pictures based on a prompt. With their kumu (teachers) and mākua (parents) haumāna will help categorize the images during January PACT meeting. The Mo‘oki‘i sessions will be transformed into an art display, which will be exhibited at the KALO facilities.

As a **current mākua** your participation includes one informal observation at a PACT meeting (date to be determined later), one talk story session at a PACT meeting (date to be determined later) and one Mo‘oki‘i session at January 2024 PACT Meeting. If you do not consent to be included in the research project, you will attend PACT as usual and your data will be excluded from the study.

During the talk story session, you will engage in an informal group conversation to share your viewpoints, these discussions will be guided by prompts. During the Mo‘oki‘i sessions you will bring a photo based on a prompt and categorize them for later data analysis. Additionally, you may be asked to participate in an informal interview.

The talk story sessions and interviews will be audio recorded. The Mo‘oki‘i sessions will be audio and/or video recorded.

**Statement of Rights**

You have the right to:

- Decline to participate;
- Decline to answer any particular question;
- Withdraw from the study;
- Ask any questions about the study at any time during participation;
- Provide information on the understanding that your name will not be use unless you give permission to the researcher;
- Be given access to a summary of the project finding when it is concluded.
- To ask for the audio/video tape to be turned off at any time during the session.

Project Contact:

Researcher: Nancy Levenson

Phone: (808) 887-1117

Email: [nancy@kalo.org](mailto:nancy@kalo.org)

Contact Details for **Ethics Committee Secretary:** Kahukura.epiha@wananga.ac.nz

**Postal address:** Private Bag 006 Whakatāne

**Courier address:** Cnr of Domain Rd and Francis St Whakatāne

## Participant Information Sheet Past Mākua Participation

**Research Title:** Braiding the Ropes of Pilina – Indigenous Practices at Mālamapōki‘i

**Researcher:** Nancy Levenson

Early learning sets a foundation that promotes or detracts from Indigenous traditions and practices. The aim of this study is to evaluate the framework and practices at Mālamapōki‘i Early Childhood Education Program.

The key research question is, “How does the early learning framework at Mālamapōki‘i reflect Indigenous philosophies, standards, and best practices?” Data will be gathered through observations, talk story sessions, Mo‘oki‘i sessions, and informal interviews.

### Your Participation

As a **past mākua**, your involvement includes one talk story session where you will engage in an informal group conversation to share your viewpoints; these discussions will be guided by prompts, after which you may be asked to participate in an informal interview. The talk story sessions and interviews will be audio recorded.

### Statement of Rights

You have the right to:

- Decline to participate;
- Decline to answer any particular question;
- Withdraw from the study (specify timeframe);
- Ask any questions about the study at any time during participation;
- Provide information on the understanding that your name will not be used unless you give permission to the researcher;
- To be given access to a summary of the project finding when it is concluded.
- I also understand that I have the right to ask for the audio/video tape to be turned off at any time during the session.

Project Contact:

Researcher: Nancy Levenson  
Phone: (808) 887-1117  
Email: [nancy@kalo.org](mailto:nancy@kalo.org)

Contact Details for **Ethics Committee Secretary:**  
[Kahukura.epiha@wananga.ac.nz](mailto:Kahukura.epiha@wananga.ac.nz)

**Postal address:** Private Bag 006 Whakatāne

**Courier address:**

*Cnr of Domain Rd and Francis St Whakatāne*

Participant Information Sheet  
**Past Haumāna**

**Research Title:** Braiding the Ropes of Pilina – Indigenous Practices at Mālamapōki‘i

**Researcher:** Nancy Levenson

Early learning sets a foundation that promotes or detract from Indigenous traditions and practices. The aim of this study is to evaluate the framework and practices at Mālamapōki‘i Early Childhood Education Program.

The key research question is, “How does the early learning framework at Mālamapōki‘i reflect Indigenous philosophies, standards, and best practices?” Data will be gathered through observations, talk story sessions, Mo‘oki‘i sessions, and informal interviews.

**Your Participation**

As a **past haumāna** you will participate in one talk story session. During the talk story session, you will engage in an informal group conversation answering the question “How has your experience at Mālamapōki‘i shaped your cultural values and practices? You are also welcome to share any other insights you have about your time at Mālamapōki‘i.

If you agree, the talk story session will be audio recorded.

**Statement of Rights**

You have the right to:

- Decline to participate;
- Decline to answer any particular question;
- Withdraw from the study (specify timeframe);
- Ask any questions about the study at any time during participation;
- Provide information on the understanding that your name will not be use unless you give permission to the researcher;
- To be given access to a summary of the project finding when it is concluded.
- I also understand that I have the right to ask for the audio/video tape to be turned off at any time during the session.

Project Contact:

Researcher: Nancy Levenson Phone: (808) 887-1117 Email: [nancy@kalo.org](mailto:nancy@kalo.org)

Contact Details for **Ethics Committee**

**Secretary:** Kahukura.epiha@wananga.ac.nz

**Postal address:** Private Bag 006 Whakatāne

**Courier address:**

Cnr of Domain Rd and Francis St Whakatāne

## **Appendix B: Interview and Talk Story Guides**

### **Interview Guide**

Qualitative Interviews will be semi-structured or unstructured utilizing open ended questions.

#### **Interview prompts:**

##### **Kumu**

What are some important aspects/values of an effective preschool program? How do you blend modern subject matter with Indigenous knowledge and skills? What are the barriers to implementing Indigenous philosophies and standards? How is kūlia manifested in your teaching?

What are some examples of how the Mālamapōki‘i program is enriched through interaction with Indigenous people, communities, and practices?

##### **Mākua**

What are some examples of how your keiki’s experience at Mālamapōki‘i ground them in cultural values and practices?

How has your experience at Mālamapōki‘i strengthened your ‘ohana’s cultural values and practices?

What experiences at Mālamapōki‘i , if any, have impaired your keiki’s or ‘ohana’s use of cultural values and practices?

What are some examples of how the Mālamapōki‘i program has enriched your keiki through interaction with Indigenous people, communities and practices?

##### **Past Haumāna**

How has your experience at Mālamapōki‘i shaped your cultural values and practices?

##### **Ho‘okumu**

In what ways do our Indigenous philosophies govern educational programming, curriculum, pedagogy, instruction, and assessment?

What are the barriers to this process?



**Mo 'oki'i prompts:**

**Haumāna,**

Read Research Adventure Story

Create an image that shows what is special or important to you about Mālamapōki'i. Why do you want to come to school every day?

Provide collage making and drawing supplies.

**Makua, and Kumu**

Task with taking 1-3 pictures of what makes Mālamapōki'i unique and the right place for their keiki?

**Haumāna, Makua and Kumu**

Participate in a one-hour session.

Keiki images and makua photos were divided into four groups.

Groups categorized images.

Whole groups reviewed categories and combined them into categories.

## Appendix C: Participant Consent Forms



TE WHARE WĀNANGA O  
AWANUIĀRANGI

*School of Indigenous Graduate Studies Rongo-o-Awa Domain Rd Whakatāne*

### **Braiding the Ropes of Pilina (Relationships) Indigenous Practices at Mālamapōki'i**

Ethics reference number: EC2023.16

#### CONSENT FORM

**THIS CONSENT FORM WILL BE HELD FOR A PERIOD OF FIVE (5) YEARS**

I have read the Information Sheet and understand the details of the study. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I agree to participate in this study under the conditions set out in the Information Sheet, but I

may withdraw my consent at any given time. Yes ☐ No ☐

I agree my keiki can participate in this study under the conditions set out in the Information

sheet, but I may withdraw my consent at any given time. Yes ☐ No ☐

**Keiki Full Name Printed :** \_\_\_\_\_

I consent to being identified by first name in the research:

**for myself** ☐ Yes ☐ No **For my keiki** Yes ☐ No ☐

If No, I consent to being identified using a pseudonym (a made-up name):

For myself ☐ Yes ☐ No **For my keiki** ☐ Yes ☐ No

If you want, please suggest a preferred pseudonym (made up name):

Myself \_\_\_\_\_ My Keiki \_\_\_\_\_

Interviews, Talk Story Sessions and Mo'oki'i (telling a story through pictures) may be recorded using audio/video devices. Recordings will only be used to assist with accurately documenting your responses. You have the right to refuse the recording. Please select one of the following options:

I consent to audio/video recording **of myself** Yes ☐ No ☐ **of my keiki** ☐ Yes ☐ No

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Full name – printed:** \_\_\_\_\_



# TE WHARE WĀNANGA O AWANUIĀRANGI

*School of Indigenous Graduate Studies Rongo-o-Awa Domain Rd Whakatāne*

**Braiding the Ropes of Pilina Indigenous Practices at Mālamapōki'i Ethics reference**

number: EC2023.16

## CONSENT FORM

THIS CONSENT FORM WILL BE HELD FOR A PERIOD OF FIVE (5) YEARS

**I have read the Information Sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.**

**Interviews, Talk Story Sessions and Mo'oki'i may be recorded using audio/video devices. Recordings will assist with accurately documenting your responses. You have the right to refuse the recording. Please select one of the following options:**

**I consent to audio/video recording: Yes ☐ No ☐**

**I consent to being identified by name in the research: Yes ☐ No ☐**

**If No, I consent to being identified using a pseudonym: Yes ☐ No ☐**

**If desired suggest desired pseudonym: \_\_\_\_\_**

**I agree to participate in this study under the conditions set out in the Information Sheet, but may withdraw my consent at any given time.**

**Signature: \_\_\_\_\_ Date: \_\_\_\_\_**

**Full name – printed: \_\_\_\_\_**

Aloha Parents and Guardians,

To enhance the depth and authenticity of my research, I would like to include photographs of the keiki (children) and makua (parents/guardians) participating in my research activities. These images will be used exclusively for academic purposes, including my PhD thesis, presentations, and possible academic publications related to this research.

I request your permission to use these photographs. Please rest assured that all images will be handled with the utmost respect for privacy and confidentiality. No names or identifying information will be disclosed in any form of publication or presentation.

By signing this release statement, you grant me permission to use the photographs of you and/or your child as described above. Your participation is entirely voluntary, and you may withdraw your consent at any time without any impact on your child's participation in our programs.

If you have any questions or concerns, please do not hesitate to contact me at [nancy@kalo.org](mailto:nancy@kalo.org) or 808-890-2500. Ethics reference number: EC2023.16

Mahalo for your valuable contribution to this research. Me ke aloha pumehana,



Nancy Levenson  
PhD Candidate, Indigenous Development and Advancement Te  
Whare Wānanga o Awanuiārangi

#### Photo Release Consent

I, the undersigned, hereby give my permission for photographs of myself and/or my child to be used in the PhD research thesis and related academic presentations and publications conducted by Nancy Levenson at Te Whare Wānanga o Awanuiārangi

Child's Name: \_\_\_\_\_

Parent/Guardian's Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Please return this signed form to the Mālamapōki'i classroom, KALO office, or email to [nancy@kalo.org](mailto:nancy@kalo.org).

## Appendix D: Ethics Approval



09.07.2023

Nancy Levenson

64-5214 Puu Nani Drive

Kamuela

Tēnā koe i roto i ngā tini āhuatanga o te wā,

The Ethics Research Committee Chairperson has reviewed your response to the Ethics Committee feedback. We are pleased to inform you that your ethics application has been approved. The committee commends you on your hard work to this point and wishes you well with your research.

Please ensure that you keep a copy of this letter on file and include the Ethics committee document reference number: **EC2023.16** on any correspondence relating to your research.

This includes documents for your participants or other parties. Please also enclose this letter of approval in the back of your completed thesis as an appendix.

If you have any queries regarding the outcome of your ethics application, please contact us on our freephone number 0508926264 or via e-mail [ethics@wananga.ac.nz](mailto:ethics@wananga.ac.nz).

Nāku noa, nā ahukura Epiha

Ethics Research Committee Secretary

Phone: 0508 92 62 64

## Appendix E: Glossary

### Glossary of Hawaiian Words

Definitions used in this glossary are from <https://wehewehe.org/>, my own interpretation, or a definition that was cited in the thesis.

**‘Aho:** Single cord.

**Ahu:** Altar, a sacred structure in Hawaiian culture, symbolizing a place of offering and respect.

**‘Āina:** Land.

**Aloha:** A component of the Hawaiian triad of gaining knowledge, focusing on the spirit. It is also a common greeting in Hawaiian, meaning love, compassion, and mercy.

**Ha‘aha‘a:** Humility.

**Hale:** House.

**Hāloa:** The first kanaka.

**Hana No‘eau:** Traditional Hawaiian hands-on activities or crafts, emphasizing learning through doing.

**Haumana:** Student.

**Haumāna:** Students.

**Hi‘ilei:** A name meaning to carry, tend, and cherish a beloved child, indicating a deep relationship or connection.

**Hō‘ihi:** Treating something with reverence and respect.

**Hō‘ike:** Performance, used in a broader sense to denote seeing, knowing, and experiencing. It is considered a natural form of assessment in Hawaiian culture.

**Ho‘oikaika:** To make strong in a reciprocal sense, emphasizing the importance of strengthening relationships.

**Ho‘okumu:** Founders or administrators.

**Ho‘okupu:** Ceremonial gift-giving, a traditional Hawaiian practice showing respect and gratitude.

**‘Ihi:** Sacred, indicating something that is spiritually significant.

**‘Thiwaikēkalīloaahi‘ilei:** A name rich in cultural and familial significance, implying connections to people, places, and cherished values.

**‘I‘ini:** Burning desire or yearning.

**‘Ike:** Knowledge, encompassing seeing, knowing, feeling, and examining.

**Imu:** Underground oven.

**Ka‘ā:** Thread, an important component in the creation of kaula (rope).

**Kalo kanu o ka ‘āina:** A proverb meaning "taro planted on the land," signifying natives of the land from generations back.

**Kanaka:** Human being, man, person, individual.

**Kaona:** Hidden meaning.

**Kaula:** Rope or cord, used for various functional and cultural purposes in ancient Hawaiian society.

**Keiki:** Child/Children.

**Ki‘i:** Picture, image.

**Kilo:** To watch closely or examine.

**Kōkua:** Help, aid, assistance.

**Kuleana:** Responsibility or duty. It conveys a deep sense of accountability and connection to a cause or community.

**Kumu:** Teacher/Teachers.

**Kupuna:** Elder or grandparent, often revered for wisdom and cultural knowledge.

**Kūpuna:** Plural of kupuna.

**Lāhui:** Community or nation, emphasizing the collective identity and responsibility within Hawaiian society.

**Lānai:** Porch.

**Ma‘a:** Accustomed to.

**Ma ka hana ka ‘ike:** A Hawaiian proverb meaning "In working, one learns," highlighting the importance of hands-on experience for acquiring knowledge.

**Mālama:** To take care, protect.

**Mālamapōki‘i:** A family-based early childhood learning program.

**Mamakai:** Native plant belonging to the Urticaceae family.

**Mana:** A fundamental Hawaiian concept referring to spiritual power, force, or energy that resides in all living and nonliving things.

**Manaolana:** A component of the Hawaiian triad of gaining knowledge, focusing on the body.

**Manaoia:** A component of the Hawaiian triad of gaining knowledge, focusing on the mind.

**Makahiki Games:** Competition of ancient Hawaiian Games.

**Makana:** Gift.

**Makua:** Parent (singular).

**Mākua:** Parents (plural).

**Mauli:** Unique life force, which is cultivated by, emanates from, and distinguishes a person who self-identifies as a Hawaiian.

**Mo‘oki‘i:** An innovative conversational approach in research that gathers mo‘olelo through images designed for Hawaiian-focused research.

**Mo‘olelo:** Story, tale, myth, history, and tradition.

**Mo‘opuna:** Grandchild.

**Mo‘okū‘auhau:** Genealogy.

**Na‘au:** Intuition or inner being, often referred to as the "gut" or emotional center.



**Nene:** Hawaiian Geese.

**Nīnau:** To question or

inquire. **‘Ohana:** Family.

**‘ōlelo Hawaii:** Hawaiian Language.

**‘ōlelo no‘eau:** Wise saying or

proverb. **Pahu:** Container.

**Pāna‘i:** Payback, reward, or reciprocate, whether good or bad.

**Pehea Ke Anilā?:** How is the weather?

**Pili:** To cling, stick, or adhere. It denotes closeness and a relationship that is not easily disrupted.

**Pilina:** Relationship or connection. It implies a deep lasting connection.

**Piko:** Umbilical cords or centers, symbolizing essential connections in Hawaiian culture. There are traditionally three piko, representing spiritual, physical, and emotional connections.

**Pono ‘ole:** Wrong, used to describe actions that lack ethical integrity or cultural sensitivity.

**Pu‘u:** Cinder cone, peak, hump, mound.

**Tutu:** Grandmother.

**Wa‘a:** Canoe, a vital mode of transportation and an important cultural symbol in Hawaiian society.

**Waihona:** A vessel or container, used metaphorically in the context of hair-holding mana.

**Glossary of Māori words**  
**Definitions from (Te Whāriki – Early Childhood Curriculum),**  
**or a definition that was cited in the thesis.**

**Hinengaro:** Cognitive.

**Hui:** Gathering.

**Kaiako:** Teachers.

**Kaupapa Māori:** A Māori approach that assumes the normalcy of being Māori – language, customs, knowledge, principles, ideology, agenda.

**Kōhanga Reo:** Māori-medium early childhood center.

**Kura Kaupapa:** Primary school operating under Māori custom and using Māori as the medium of instruction.

**Mokopuna:** Grandchild, young child.

**Pūrākau:** Traditional Stories.

**Te Reo Māori:** The Māori language.

**Tikanga Māori:** Māori ways of doing.

**Tinana:** Physical.

**Tribal Hui:** Gathering

**Wairua:** Spiritual.

**Whānau:** Family and community.

**Whānau:** Extended family.

**Wharekura:** Secondary school run on Kaupapa Māori principles.

**Whāriki:** Woven mat.

**Whatumanawa:** Emotional.

## **Appendix F: Our Research Adventure**

# Our Research Adventure: What Makes Mālamapōki‘i Special?



Aloha, explorers!

Today, we're going on a special adventure called research.



What is research, you ask? Well, it's like a treasure hunt for answers to a question!

The question we will answer is,  
“What makes Mālamapōki‘i special?”



We will use Mo‘oki‘i to tell our story  
with pictures.



Mo‘o means story, tradition, or legend.  
Ki‘i means image, picture, photography,  
illustration.



[illegible]



You can draw and take pictures of special things at our school, things that make you want to be at school.



What are some things you might draw or photograph?

After everyone has a picture, we will all look at the pictures together.



Then, with the help of our makua and kumu we will be like detectives and sort the pictures into groups.

When we are pau our beautiful pictures will be displayed for everyone to see, to show everyone what makes Mālamapōki‘i special.



We will work together, hand in hand, to  
complete our research and answer the  
question What makes Mālamapōki‘i special?

