DEMARGINALIZING KNOWLEDGE THROUGH PLACE-BASED LEARNING:

EXPLORING THE EDUCATIONAL EXPERIENCE AT THE LO‘I

A THESIS SUBMITTED TO THE GRADUATE DIVISION OF THE UNIVERSITY OF HAWAI‘I IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF EDUCATION

IN

EDUCATIONAL FOUNDATIONS

December 2010

By
Pearl Z. Wu

Thesis Committee:
Hannah Tavares, Chairperson
Eileen Tamura
Julie Kaomea
Acknowledgments

To Uncle Nana, who taught me how to watch things grow.
Abstract

Papa lo‘i kalo, a system of integrated wetland taro patches, are serving as sites of place-based learning for schools and the community. The taro plant and the lo‘i inform students about the traditional knowledge of taro farming and create a space in which the power of learning and teaching is most influenced by the community and the place itself. The educational experience at the lo‘i raises questions about the normative content of curriculum, control of education, and approaches to pedagogy. Using student reflections and an oral history with a taro farmer, this thesis will explore the lo‘i as a critical place that has the potential to reshape students’ understanding of Hawai‘i, its history, and the Native Hawaiian community.
# Table of Contents

Acknowledgments .................................................................................................................. ii  
Abstract ................................................................................................................................... iii  
Table of Contents ..................................................................................................................... iv  
Introduction .............................................................................................................................. 1  
  Understanding Knowledge and its Role in the Curriculum in Hawaiʻi ...................................... 2  
  Charter School Movement ....................................................................................................... 12  
Literature Review ...................................................................................................................... 16  
  Place-based Education ............................................................................................................. 16  
  Traditional Knowledge ............................................................................................................ 17  
Methodology ............................................................................................................................. 21  
  Student Reflections ............................................................................................................... 22  
  Oral History Interviews ......................................................................................................... 24  
Exploring the Educational Experience at the Loʻi: Student Reflections ...................................... 26  
  Role of the Teacher ............................................................................................................... 29  
  Mālama ʻĀina ......................................................................................................................... 30  
  Responsibility as a Hawaiʻi Resident ..................................................................................... 32  
Uncle Nana: the Farmer as Teacher ............................................................................................ 34  
  Learning How Uncle Nana's World Turned ........................................................................... 35  
  The Things Uncle Nana has Taught Me ................................................................................ 39  
Summary and Conclusion .......................................................................................................... 41  
References ................................................................................................................................. 45
Literature Review

Place-based Education

Current actions taken by Indigenous peoples throughout the world demonstrate that a “paradigm shift is under way in which Indigenous knowledge and ways of knowing are recognized as constituting complex knowledge systems with an adaptive integrity of their own” (Barnhardt & Kawagley, 2005, p. 9). By utilizing place and community-based learning, traditional knowledge is becoming recognized as a valid, complex knowledge system important to students’ learning in some communities.

PBL has become a means to decolonize and demarginalize knowledge because it adapts the curriculum to unique characteristics of particular places (Smith, 2002). In Hawai‘i because of its adaptability to place, PBL is frequently used to teach the traditional knowledge unique to certain areas of the island. Place-based learning has also been effective for the following reasons:

- Reduction of alienation and isolation by providing a culturally familiar setting for learning.
- Increased engagement, motivation, and mastery of skills.
- Enhancement of self-concept.
- Acquisition of strategies to effect social change.

(Senechal, 2008, p. 103)

Since the Hawaiian Renaissance and the 1978 Constitutional Convention, Hawai‘i has experienced a proliferation of Hawaiian place-based education programs throughout the state. Many mālama ‘āina programs based on traditional practices of fishing and taro farming have emerged. Mālama ‘āina based programs are a form of place-based learning that focuses on caring for the land. These concepts such as aloha ‘āina, love of the land,
and mālama ‘āina, caring for the land, stem from the traditional model established at the time of Wākea. Since the kalo plant is the elder sibling of Hāloa, the first Hawaiian ali‘i nui, a relationship was established that the younger siblings, the Hawaiian people, must care and protect their older brother, the kalo plant. Thus, lo‘i based programs embody this concept of mālama ‘āina and help nurture the notion that the kalo plant is the elder sibling of the Hawaiian race.

Using place-based education also allows teachers to contextualize cultural practices and minimizes the tendency to have translated cultural programs that do not consider epistemology. Educating students about Hawaiian cultural traditions through place-based learning is a cultural and political assertion on the status of traditional knowledge and the important relationship Hawaiians have had and continue to have to land. At the same time, however, essentializing cultural traditions such as taro farming, as monoliths for understanding Hawaiian culture and identity should be avoided. In other words, just because a student does not identify with the lo‘i does not make them any less Hawaiian. Regardless, providing students’ access to these experiences is important because it may help some students look more complexly at self-identity and Hawaiian epistemology.

**Traditional Knowledge**

Traditional knowledge, often referred to as traditional ecological knowledge (TEK) in scholarly works, is defined as having a "knowledge base acquired by indigenous and local peoples over thousands of years through direct contact with the environment,” including an “intimate and detailed knowledge of plants, animals, and
natural phenomena, the development and use of appropriate technologies for hunting, fishing trapping, agriculture, and forestry, and a holistic knowledge, or ‘world view’ which parallels the scientific discipline of ecology" (Bourque & Inglis, 1993, p. vi).

Traditional ecological knowledge (TEK) is commonly placed in opposition, if not subordinate, to science. TEK and science, based on different principles, should not be in opposition, but rather as two different ways of looking at things, each appropriate in different contexts.

Van Eijck and Roth argue that the science and TEK are not in opposition, but “incommensurable forms of knowledge each useful in specific local contexts” (2007, p. 926). By criticizing the hierarchy between TEK and science and discussing notions of truth, Van Eijck and Roth suggest that power has played a role in the marginalization of TEK. Van Eijck and Roth point out that the recalibration of TEK and science is necessary since a knowledge system is based on a truth, which is dictated by those in power.

The concept of “truth,” rooted in the supposed opposition between TEK and science, affects what bodies of knowledge are favored in schools. Knowledge, in other words is based on a “truth” that is influenced primarily by those in power and this power has lied in the hands of the majority who from their perspectives visualize their truth as the only truth. PBL in Hawai‘i shifts the truth to one based on traditional knowledge and by doing so raises questions regarding notions of truth embedded within the educational system of Hawai‘i and school curriculums.

For the purposes of this thesis, I will use the term “traditional knowledge” to
describe the knowledge of taro farming that the farmers share with students that come to
visit. Although the term refers to a knowledge system of indigenous people, I am not
suggesting that “traditional” knowledge is ancient and never changing. Green’s
explanation of tradition depicts well this complexity. She states that tradition has come to
represent a “pre-colonial time when Indigenous peoples exercised self-determination.”
According to Green, “tradition is neither a monolith, or is it axiomatically good, and the
notions of what practices were and are essential, how they should be practised, who may
be involved and who is an authority are all open to interpretation” (Green, 2007, p.26-
27).

Traditional knowledge has struggled to find its place in the academic world. The
knowledge and the value of knowledge and truth have been guided, in recent decades, by
what schools and universities have chosen to omit out of their curriculum. If we look
back to the historical educational context, it becomes evident how traditional knowledge
was slowly eliminated with the introduction of formal schooling and the banning of the
Hawaiian language.

Lo‘i-based programs emerged as part of greater movement connecting Hawaiians
back to the land and to the culture. These lo‘i-based programs are being used as
classrooms to teach traditional practices and are also providing a context to understand
Hawaii’s history. Lo‘i have become part of the educational experience in two different
ways. On the one hand, schools are using community-based lo‘i for subsistence or
commercial farming, and on the other hand they are also building lo‘i on school
campuses. Many of these loʻi are located on Hawaiian-focused charter school campuses. Some schools with loʻi include UH Mānoa, Ānuenue, and Hakipuʻu Learning Center. Some examples of loʻi in the community are Kaʻala farms, Papahana Kualoa, Waiʻāhole, and Kahana Valley loʻi. This study will focus on a loʻi-based education program, located in the Kahana community, whose main focus is subsistence farming.
References


