EXPLORING PRESCHOOLERS’ SENSE OF PLACE AND EARLY CHILDHOOD
PLACED-BASED EDUCATION IN HAWAI‘I

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ABSTRACT

Guided by Vygotsky’s sociocultural theory and the community of learners model, this exploratory, qualitative study was framed by the notion that preschoolers’ learning and development are affected by interactions between individuals and environments within social and cultural contexts. The purpose of the study was to gather educators’ perceptions of 3- to 5-year-old children’s sense of place and to capture how educators viewed, planned, and implemented place-based education in Hawai‘i. More specifically, the study aimed to uncover how preschool teachers defined and identified young children’s sense of place and how they addressed children’s sense of place in place-based lessons. Thirteen educators, who taught either at preschool classrooms in urban areas of O‘ahu or in a rural area of Maui, participated in the study. These educators shared their perceptions and experiences during semi-structured individual interviews, and supplemental data were collected through classroom observations, videos, and classroom artifacts. A total of 11 main themes were derived from the data using constant comparison analysis. Findings showed that comfort, security, consistency, and children’s backgrounds all influenced sense of place development in young children. Sense of place was perceived as developing in early childhood, and the findings indicated that it was multidimensional. Additionally, children’s sense of place affected their places, development, and learning. With regards to place-based education, the study indicated that teachers’ goals were to cultivate connections, collaboration, and care. Place-based lessons took place at the school as well as in the local community and environment, and the content of lessons varied. Teachers provided children with hands-on experiences, made learning exciting and fun, and instilled a sense of responsibility and commitment to community in children. Educators shaped the physical and social conditions during place-based lessons that affected children’s sense of
place. Furthermore, educators’ perspectives about place-based education changed over time. Ultimately, the study found that sense of place is affected by not only the learning environment but also the people within and associated with it, and that it may be developed positively through meaningful place-based lessons.
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CHAPTER 1

INTRODUCTION

Places shape people. All behavior is situated in and constructed of spaces within which places lie (Low & Lawrence-Zúñiga, 2003). From birth, we try to make sense of the world around us. We experiment by manipulating objects within places, and we apply meaning by realizing how our emotions and feelings are affected by those places. We may develop a strong sense of belonging to one place, multiple places, or different places over time. As we enter the school context, the educational philosophies and approaches that educators adopt can influence how we relate to our places. Having a feeling of rootedness may lead to deep care and concern for a place, and engender a sense of responsibility (Kudryavtsev, Stedman, & Krasny, 2012; Tuan, 1974) which may influence how we act on or within that place. Our connectedness to a place, or our sense of place, contributes to our understanding of our surroundings, others, and ourselves, and the educational contexts that we are exposed to in early childhood play a major role in setting the foundation for our developing sense of place (Gandy, 2007).

Rationale for the Study

Interest in sense of place is not new and many researchers have stressed the importance of it, but the terminology used is rarely consistent or well-defined (Gruenewald, 2003a; Hutchinson, 2004; Kudryavtsev et al., 2012; Lim & Calabrese Barton, 2010). Sense of place, topophilia, place-affiliation, place-bonding, and insidedness—just to name a few terms—are used interchangeably, and with varying definitions, which is partially due to the fact that they are discussed in different fields of study (Kudryavtsev et al., 2012). Sense of place is often discussed as an aspect of larger topics and is rarely the focal point of studies, especially in areas of early childhood and education (Gruenewald, 2003a; Hutchinson, 2004; Lim & Calabrese
Barton, 2006). Most sense of place studies have focused on adults, and the applicability of findings from studies with adults to younger populations is unclear; there has been little research attention on documenting and exploring young children’s sense of place and how it might matter in educational contexts (Gruenewald, 2003a; Lim & Calabrese Barton, 2006).

Examining preschool experiences is worthwhile because in general, preschool education produces positive effects on children’s learning and development and is linked to long-term improvements in school success, including higher achievement test scores, lower rates of grade repetition and special education, higher educational attainment, along with reduced delinquency and crime in childhood and adulthood (Barnett, 2008). Preschools, like other schools, are imbued with meaning and serve as channels of ideas and practices within which cultural knowledge, norms, values, attitudes, and skills are appropriated by children (Hutchinson, 2004). The educational philosophies within classrooms and schools affect all of this as they consist of beliefs about the nature of the educational processes and provide an underlying rationale for the curriculum and methods of a particular approach to teaching. The adopted philosophies influence the way that educators interact with their students, arrange their classrooms, and select teaching and learning materials. Reciprocally, educators also influence educational philosophies as they modify pedagogical strategies and beliefs according to the current needs and desires of their students.

The educational approach of interest for this study is place-based education, and the philosophy behind place-based education highlights the relationships between students and places and how those connections can develop strong communities (Sobel, 2004). A placed-based education approach contextualizes instruction and learning for students by including local phenomena with which students are familiar or are surrounded. In particular, place-based
lessons aim to incorporate students’ places, which might involve the unique people, histories, cultures, and physical environments of those places. Additionally, developing sense of place is an important goal for place-based education (Sobel, 2004).

The Study

Hawai‘i is unique in that it is composed of individuals with diverse experiences, cultures, beliefs, and values that might influence how teachers create place-based lessons and ways that young children develop their sense of place. There is little research on place-based education and sense of place in early childhood settings located in Hawai‘i. In the context of this research, *sense of place* refers to the connections between people and places, and the meanings that explain those connections (Gruenewald & Smith, 2008; Kudryavtsev et al., 2012; Sobel, 2004), while *place-based education* refers to a locally-focused model of education that uses the local community and environment as resources for learning and where educators serve as guides for a student-centered learning process (Smith, 2002; Sobel, 2004).

Purpose of the Study and Research Questions

I attempted to address the lack of available research on young children’s sense of place and early childhood place-based education in Hawai‘i. The purpose of this study was twofold: first, to gather preschool educators’ perceptions of 3- to 5-year-old preschool children’s sense of place; and second, to capture how educators viewed, planned, and implemented place-based education in Hawai‘i. The specific research questions that guided this study were:

1. How do preschool teachers of 3-to 5-year-old children who have used place-based education define preschoolers’ sense of place?

2. How do these teachers apply that definition to identify their preschoolers’ sense of place?
3. How do these teachers address children’s sense of place in place-based lessons or units?

Sharing preschool teachers’ perspectives about sense of place can provide insights to how 3- to 5-year-old preschool children in Hawai`i connect to places and how that could be meaningful for instruction and learning.

**Theoretical Perspective**

This study was framed by sociocultural theory (Vygotsky, 1978) and the Community of Learners model that has been proposed as an extension of Vygotsky’s theory (Rogoff, Matusov, & White, 1996).

**Sociocultural theory.** Sense of place is the connection that individuals have to places (Gruenewald & Smith, 2008), and place-based education aims to strengthen the connection that students have to their places (Sobel, 2004). From the sociocultural theoretical perspective, connections, relationships, and interpersonal interactions are intertwined with the learning process (Lave & Wenger, 1991; Vygotsky, 1978). Learning and development cannot be separated from social and cultural contexts (Vygotsky, 1978). Interactions, either with other individuals or the environment, that affect learning are interwoven with, and affected by values, beliefs, emotions, experiences, and cultural contexts (Lave & Wenger, 1991; Vygotsky, 1978). With this as a basis, the concepts of sense of place and place-based education in this study were explored with the perspective that children’s connections are powerful in the learning process (Sobel, 2004), and that the contexts in which connections are created should be considered. Children’s connections, for example, relationships based on feelings about places and individuals, affect how excited, motivated, and involved they will be in their learning (Phillips & Shonkoff, 2000). Those relationships and their effects are influenced by surrounding conditions,
such as the rules and expectations for behaviors, the types of lessons that educators plan, and individuals with whom children interact.

Furthermore, social interactions are catalysts in children’s development (Damon, Lerner, & Eisenberg, 2006). Social interactions, especially with more capable individuals, enhance children’s learning and development (Vygotsky, 1978). More capable individuals such as educators can play an important role in facilitating or scaffolding children’s learning. For instance, educators can scaffold children’s understandings by asking children questions or expanding on their thoughts during conversations to get a grasp for what children already know about a place, and then design lessons to further that knowledge. They can facilitate children’s learning appropriately if their interactions lie within children’s zone of proximal development, which is the area between what children can do on their own and what they can accomplish with assistance. For this study, I looked at how social interactions might have influenced children’s development of sense of place and teachers’ planning and implementation of place-based lessons.

**Community of learners model.** Many place-based lessons involve individuals beyond the classroom including family and community members (Sobel, 2004). The community of learners model, which extends from the sociocultural theory, considers learning as a process where all participants—for example, teachers, parents, children, and community members—have a shared responsibility and engage in joint endeavors (Rogoff et al., 1996). Participation from children in the community of learners model differs from that of a traditional adult-run model (Rogoff et al., 1996). The traditional adult-run model views learning as a function of one-sided action by adults and tends to produce learners who compare their performance with others, execute tasks with little personal interest, and seek the criteria by which adults will evaluate their
performance to be better than that of other children (Rogoff et al., 1996). With the community of learners model, learners seem to develop deeper understandings of the information. According to Rogoff et al. (1996) learners:

appear to learn how to coordinate with, support, and lead others, to become responsible and organized in their management of their own learning, and to be able to build on their previous interests to learn in new areas to sustain motivation to learn. (p. 410)

From the perspective of the community of learners model, individuals create understanding through relationships—with others, places, and objects. These relationships are strengthened if those individuals, places, and objects represent investment in a common vision. For example, educators who have a strong investment in the values of the community that is parallel to that of their children’s will be more influential in strengthening their children’s positive sense of place than educators who are not as invested.

**Overview of the Study**

In the next chapter, I provide a review of the literature that informed this study. The chapter covers literature on: a) place; b) sense of place; c) place and development in childhood; d) place-based education; and e) The Standards for Effective Pedagogy and Mohala Nā Pua.

Chapter 3 outlines the methodology for the study. I provide a description of the settings and participants, preparations for data collection, and data sources. I purposefully selected 13 teachers as participants because they were affiliated with the Center for Research on Education, Diversity and Excellence (CREDE) project and had some experience with place-based education. I reviewed lesson plans, visited classes, and piloted the interview questions with the Education Coordinator in preparation for data collection. The primary data source included individual interviews. In addition, class observations, video record review notes, and classroom artifact
review notes served as supplemental data sources. Following the data sources section, I explain my procedures for data analysis and disclose my role as a researcher. I describe the process of analyzing the data using the constant comparison analysis approach. The iterative process consisted of me reading the transcribed interviews, coding the transcripts, and refining the codes into major themes. Throughout the chapter, rigor and credibility of data collection and findings were established by visiting classes before data collection, piloting the interview questions, conducting member checks, using data triangulation, gathering rich and thick descriptions, having a second coder, engaging in peer debriefing, creating reflective commentaries, basing the findings on multiple educators’ perspectives, and keeping an audit trail.

Chapter 4 summarizes the results. I share the themes revolving around sense of place and place-based education in early childhood that came from the constant comparison analysis of the data sources: interview transcripts, observation notes, video notes, and classroom artifacts notes. The six main themes for the topic of sense of place were (a) influences of sense of place development; (b) existence; (c) comparison to later years; (d) multidimensionality of sense of place; (e) indicators of young children’s sense of place; and (f) effects of sense of place. Regarding the topic of place-based education, the five major themes were (a) goals of place-based education; (b) shaping young children’s sense of place in place-based education; (c) place-based education takes place at the school, and in the local community and environment; (d) place-based education content; and (e) effects of place-based education. Some of the main themes, for both sense of place and place-based education, also had subthemes.

The final chapter is a discussion of the results. I provide an overview of the study, summarize the major results, tie the findings to past literature, describe potential contributions of
the findings, discuss the implications of the study, report several limitations of the study, and suggest future directions for related work.
CHAPTER 2
REVIEW OF LITERATURE

Places are influential in how individuals develop and understand themselves in relation to the world around them. Individuals apply meaning to places which may affect their motivation to act on their places. Looking at what place may mean to children may help educators see what they can do to extend and support children’s experiences in order to increase the chances of positive outcomes, whether that be academically, socially, or personally. The following literature review examines the meaning of place, sense of place, place and development in childhood, and place-based education.

Place

Before delving into the topic of sense of place, I will discuss the literature on place. There are many definitions for the concept of place, and they vary between and within fields. Place has been frequently discussed in fields such as anthropology (Low & Lawrence-Zúñiga, 2003), geography (Tuan, 1974), sociology (Sutton, 1996), architecture (Pearson & Richards, 1994), and philosophy (Husserl, 1962). If you ask individuals to think of the word “place” their thoughts may gravitate towards spatial representations of a home, school, or office for example, along with the feelings and emotions associated with those places. Individuals may be more likely to name places that they have been to or frequented more so than places that they have never been or with which they have little experience. Places to some individuals may be distinguishable from one another but may not necessarily be separated by distinct visible boundaries.

The concept of place is a complicated system involving physical, biological, and psychological states of an individual, and a particular individual’s thoughts and feelings towards
a place may be historically, culturally, politically, and socially influenced, both implicitly and explicitly (Gruenewald, 2003a, 2003b; Lim & Calabrese Barton, 2006; Low & Lawrence-Zúñiga, 2003; Theobald & Siskar, 2008). Moreover, individuals’ perspectives on places can be shared or individualized. Hutchinson (2004) explained that place can be individually or socially constructed:

Place can be understood as an individually constructed reality—a reality informed by the unique experiences, histories, motives, and goals that each of us brings to the spaces with which we identify. Yet place can also be understood as a socially constructed reality. The boundaries that define spaces and the utility to which spaces are put are often shared and understood by a community of individuals. Even our emotional connections to places (e.g., to home, school, church, or summer camp) have communal origins that are integral to a full understanding of “this place.” (p. 11)

There can be shared meanings of places, but multiple understandings will result. The idea of place extends beyond a basic, unidimensional notion. Spatial, temporal, and contemporary contexts add to the multidimensionality of place, and it may be useful to consider these contexts when thinking about how learners connect to their school place.

**Spatial contexts.** With regards to spatiality, places are understood by their purposes, functions, and meanings that learners and teachers attribute to such places (Hutchinson, 2004). How teachers, students, parents, and administrators make sense of places—both in individual and collective manners—will influence how they use those places. Classrooms, cafeterias, playgrounds, and courtyards within a school are known for serving particular purposes, can have different functions, and carry various meanings for different groups. A playground to teachers may be a place to track time, children’s behavior, and safety concerns; whereas, a playground to
children may be a place to exert energy, socialize, and play. This playground place tells teachers and children how to use that place and where they should go within it. Sense of place empowers and constrains how individuals approach, use, and value the surrounding places.

**Temporal contexts.** Concerning temporal contexts, our perception of time plays a role in how we understand place. Time constructs, limits, and contextualizes the meanings that we attribute to places (Hutchinson, 2004). There are certain periods during the school year when time seems to go by quickly and other times when it seems to pass slower. During times when there are a lot of things to accomplish, such as tests or upcoming events, time seems to move at a quick pace. The school year is marked by the first day, breaks, and the last day. In areas where annual seasonal changes occur drastically from one another, weather may influence the type of activities available to children—indoor and outdoor play, for example. Within a day, time influences when children arrive to school, certain activities take place, and parents pick up their children, establishing a routine that contributes to how meaning is created for that place.

**Contemporary contexts.** Furthermore, contemporary contexts have affected individuals’ rootedness to places because of advances that caused prominent shifts in the way individuals experience and live their lives (Kudryavtsev et al., 2012). Technological advances with the Internet, for example, are altering our notions of place, community, and self (Hutchinson, 2004; Kupfer, 2007; Smith 2007). Some researchers view these advances negatively with the belief that technology is making children apathetic to their natural place, and suggest that they are not able to connect to, understand, or care about their environment (Louv, 2005; Smith, 2007). Modern technological communications—such as online social networking and video chat—connect individuals virtually in ways that were not widely possible just 20 years ago. Kupfer (2007) explored what he termed “placelessness,” questioning the current value of
place and how our sense of place is being transformed and affected by non-tangible components. What once required physical face-to-face, real world contact to communicate is being replaced by technological advances that provide virtual places. Currently, it is unclear as to how this shift in communication and lifestyles will affect individuals’ notions of identity and how they fit into places, especially for those who are born within recent years into a time when ways of communicating are so qualitatively different than what older generations experienced throughout their lives.

**Self-identity.** Beyond spatial, temporal, and contemporary contexts, places impact how we perceive ourselves. That is, identity formation is contextualized in places. Identity formation is influenced by the needs of individuals in relation to the place in which they grow, learn, and then make contributions (Erikson, 1963). Individuals’ relationships with others and the role of culture in places also affect how self-identities emerge. Flum and Kaplan (2012) explained identity as an integrative concept that is “developed in the place between the individual and the social context” (p. 244), involving both internal and relational processes. Internal processing of what individuals think about themselves and how they think that others perceive them, and relational processing of how the self is understood within social, cultural, and historical contexts contribute to an overall understanding of the self. Identity connects the self and the external world, or places.

Self-identity is negotiated through interactions within places that influence individuals’ views, beliefs, and emotions (Hutchinson, 2004; Low and Lawrence-Zúñiga, 2003). How individuals view and understand themselves may also vary depending on the place—home, school, community park, for instance. Children who view their role as important in creating and maintaining a school garden may start to see themselves as being helpers, that their role in the
classroom and school is important. Their beliefs about whether they are good at building blocks, operating tricycles, or molding clay will dictate where children spend their free time. If they understand themselves as being good at riding tricycles and not at building blocks, and they enjoy riding tricycles but dislike building blocks, they may choose to spend proportionally more time in the tricycle area rather than block center. They may also associate riding tricycles with enjoyment and pride and thinking of that place as an area of emotional safety and protection from other areas associated with less desirable activities. Places through which children understand themselves contribute to their socialization, depending on whether the places are shared or contested. Children are more likely to socialize with those who are in the same places as them, partaking in similar activities. Their senses of attachment and meaning for a place contributes to a felt sense of place (Hutchinson, 2004).

**Sense of Place**

Succinct definitions of sense of place are elusive, but much research on the topic stems from Steele’s (1981) conception that sense of place is “the pattern of reactions that a setting stimulates for an individual” (p. 12). It is the subjective set of meanings and emotional attachments to places that are held by individuals or groups (Resor, 2010; Semken, 2005). I am defining sense of place, in the context of this dissertation, as the connection, understanding, and belonging to the place in which an individual lives (Gruenewald & Smith, 2008; Kudryavtsev et al., 2012; Sobel, 2004). A place, such as “home” can evoke sentimental feelings associated with thoughts of family, holidays, or objects that hold emotional value. Some predictors of sense of place are: age or an individual’s position within the life course, length of residing at a place, and physical attributes of places (Cuba & Hummon, 1993; Jorgensen & Stedman, 2006; Stedman, 2003). Adults tend to think about places in geographical terms; whereas, younger individuals
may associate places with social groups. The longer an individual resides in a place, the more likely that individual has developed significant relationships with other individuals in that place and to the physical attributes of that place (Tuan, 1977; Relph, 1976; Jorgensen & Stedman, 2006). Physical attributes can refer to natural features like streams or hills, and influence sense of place (Stedman, 2003). Although these variables have been identified as predictors of sense of place, they were discussed in environmental and geographical studies. Therefore, other considerations across different fields, such as early childhood and education, could add to this body of knowledge.

With regard to educational contexts, Semken and Butler (2008) explained that a sense of place that has strong personal meanings and attachments should be used as the foundations for curriculum. If most of the children within a classroom have strong ties to the neighboring stream, using the stream as a topic of investigation to teach various concepts across different subjects may be meaningful for the children. Having meaningful connections encourages students to be active learners who are motivated to learn (Seneschal, 2007; Sobel, 2004; Woodhouse & Knapp, 2000). If there is a positive association between sense of place and the curriculum it is likely that students will enjoy and value the concurrent learning processes.

Since sets of meanings and emotional attachments may be individualized and subjective, a sense of place about a particular location for one student that is positive may be negative for another. While the neighboring stream may evoke positive feelings for most of the children in the class, thinking about the stream may arouse negative feelings for a child who had a vivid traumatic experience when he almost drowned in it a year ago. Educators should be careful not to assume that a sense of place has a universal meaning (Resor, 2010). Acknowledging that the same place can evoke different meanings promotes taking steps towards intentional inclusivity.
Although there are multiple perspectives of sense of place, Kudryavtsev et al. (2012) explains that, in general, sense of place is composed of two key concepts: place attachment and place meaning. According to Kudryavtsev et al., “place attachment reflects how strongly individuals are attracted towards places, while place meaning describes the reasons for this attraction” (p. 233).

**Place attachment.** Place attachment is the connection between individuals and places or the extent to which places are important to individuals, involving place dependence and place identity (Eder & Arnberger, 2012). Place dependence refers to the degree to which a place fulfills an individual’s needs by providing settings for preferred activities (Farnum, Hall, & Kruger, 2005). Individuals may feel attached to their community park, for example, because it is a place where they prefer to carry out their favorite activities—playing sports with friends, taking walks with their partners, and spending time outside with their children. Place identity encompasses how much a place is a part of personal identity or exemplified in the definition of self (Cuba & Hummon, 1993; Farnum et al., 2005). I, as an example, am attached to the city of Rialto—the place I grew up—because Rialto reflects the kind of person I understand to be myself. Place attachment is commonly measured by surveys with Likert scales that include items with statements like “this is the place for what I like to do” and “I feel like this place is a part of me” (Kudryavtsev et al., 2012).

Place attachment can develop directly or indirectly. Individuals can develop attachment to a place through direct experiences with that place, usually through frequent encounters or over long periods of time (Tuan, 1977), as was found with studies that utilized regression analysis (Moore & Scott, 2003) and structural equation modeling (Lewicka, 2005). Individuals can also develop attachment to places by learning about them through indirect sources—such as books,
documentaries, or other individuals. White, Virden, and van Riper (2008) claimed that individuals can develop strong place attachments to a place they have never visited if that place serves as a setting in which they can achieve their goals. For example, snowboarders who can only achieve their preferred goals on mountains with snow may develop feelings of attachment to other snowy mountainous places, even if they have not visited them before, because those places may afford them the unique setting in which to achieve their goals (White et al., 2008).

Additionally, individuals can form varying levels of emotional ties to places. They may simply recognize that a place exists, make sacrifices in order to enhance the place, and become attached to places, whether or not they have actually visited them (Semken et al., 2009; Semken & Brandt, 2010).

**Place meaning.** Place meaning deals with the symbolic meanings that individuals ascribe to settings—understanding what a place means to individuals and the kind of place it is to them (Kudryavtsev et al., 2012). Creating meaning for places involves motivational aspects which include goals, preferences, values and emotions (Bott, Cantrill, & Myers, 2003). Meanings may be rooted in the physical settings, objects, and activities but they are not a property of them; meanings exist through human intentions and experiences (Relph, 2013). As with the general concept of place, place meaning is multidimensional. It can be affected by cultural, social, political, and economic factors, for example (Ardoin, 2006). Further, different individuals may associate different place meanings to the same location (Stedman, 2008). I may be more likely to think of Honolulu, Hawai‘i as a place for my education, surfing, and friends, whereas another person may have different place meanings for Honolulu involving environmental activism, cultural diversity, and community outreach programs.
Similar to place attachment, the development of place meaning may occur through both direct and indirect experiences with places (Kudryavtsev et al., 2012). Manzo (2005, 2008) found that experiencing repeated and diverse direct experiences contributed to place meanings, while other researchers inferred that place meanings can be created indirectly through conversations, literature, and films (Basso, 1996; Tuan, 1977).

Place meaning has been measured using quantitative, qualitative, and the combination of both quantitative and qualitative methods—through surveys using Likert scales (Stedman, 2002), open-ended surveys (Jacobs & Buijs, 2011), and combined open-ended surveys with in-depth interviews (Smaldone, Harris, & Sanyal, 2008) respectively. Some closed-ended items that measure place meaning include: “My community park is a place to escape from daily stressors.” On the other hand, open-ended questions may ask individuals to explain what a particular place means to them or to describe memorable places. Some researchers had individuals draw maps of places (Sampson & Gifford, 2010; Sobel, 2004), and others had individuals tell stories about places of meaning (Davenport & Anderson, 2005). Please refer to Figure 1 for a depiction of the connections between concepts related to sense of place.

In studies that did not differentiate place attachment and place meaning, researchers have used interviews, mapping, autophotography, content-based think-alouds, participant observation, and collections of students’ work as data sources to investigate children’s sense of place (Derr, 2002; Lim & Calabrese Barton, 2006, 2010; Sobel, 2002). Sense of place studies that involved younger children focused on 6- to 15-year-olds (Derr, 2002; Lim & Calabrese Barton, 2006, 2010; Vickers & Matthews, 2002)—no known studies focused on preschool children.
Figure 1. Sense of place is an overarching term that consists of place attachment and place meaning which are not mutually exclusive. Place attachment is composed of place dependence and place identity.

**Place and Development in Childhood**

A place to a child may mean one thing, while that same place may mean something completely different for another child or adult (Stedman, 2008). Teachers and children may share a preschool classroom, yet, children may view the classroom as a place for interacting with friends and experimenting with unfamiliar toys, while teachers may see it as a place for intentional instruction and promoting children’s development. This is in part due to the role that each individual may play in that particular place, but can also be affected by an individual’s
development. Addressing development attempts to uncover the rich intricacy of children’s place-making experiences in education (Hutchinson, 2004).

All the domains of children’s development and learning—physical, cognitive, social, and emotional—are important, and they are closely interrelated (National Association for the Education of Young Children [NAEYC], 2009). Their development and learning in one domain affect and are effected by what occurs in other domains. For instance, when young children gain the ability to crawl, they acquire new opportunities to explore their environment. Changes in their mobility affect their cognitive development as they start learning more about the place, what lies in it, and the relationships between objects, people, and the environment. As they become increasingly curious about different things in their environment, they may start to explore the area more and as a result, develop the muscles that allow them to become even more mobile. As another example, when children’s language skills develop it influences their ability to engage in social interaction. They may start communicating more with others and through those experiences, their linguistic abilities further develop. Teaching children well involves considering and nurturing their development and learning in all domains (Bransford, Brown, & Cocking, 1999; Phillips & Shonkoff, 2000).

**Physical development.** In early childhood, between the ages of 2 and 5 years, gross- and fine- motor skills improve greatly and the brain develops to better integrate information about movements and balance (Darcey & Travers, 2006). Physical development affects interactions with others and conceptions of self. For example, children whose physical development is less advanced than their peers may influence the comfort educators have allowing those children to freely roam the playground. As a result, those children’s feelings and thoughts about themselves may discourage them from exploring different places. In addition, children’s
development of perceptual abilities, such as their sense of motion, and senses of taste, touch, sight, hearing, and smell are affected by what they do in places (NAEYC, 2006). Activities within places that promote the use of children’s senses can be powerful modes of learning that may influence their sense of place (Sobel, 2004). With their senses, young children explore and manipulate materials in their environment to understand the world around them (Brillante & Mankiw, 2015). When they run around the park, climb the trees, smell the floral fragrances, and touch the insects, not only are they exercising their perceptual and physical abilities, but they are also learning about their connections to those places and things.

**Cognitive development.** Cognitive development deals with children’s search for meaning, including the understanding of their relationships with their surroundings in addition to the objects or individuals within those surroundings. Hutchinson (2004) stated that the ability to differentiate the self from surrounding objects and environments is the first lesson about place in childhood. From a Piagetian standpoint, children start to understand this difference as they encounter experiences that test object permanence. Children ages 2- to 7-years-old are often in what Piaget (1964) termed the preoperational stage, such that concrete experiences facilitate the development of knowledge and symbolic thinking. This stage is characterized by egocentrism and children’s difficulty with principles such as reverse thinking, decentering, and conservation. With egocentric thinking, children believe that their understanding of the world is how others think as well; at this point, children have not yet achieved the ability to differentiate themselves from others and external objects. Young children in this stage struggle with tracing back steps or past thoughts (i.e., reverse thinking), thinking about more than one thing at a time (i.e., decentering), and comprehending how changes in physical appearances do not necessarily mean that characteristics of an object are different (i.e., conservation). From this perspective,
children’s sense of place would be difficult to study. Hutchinson (2004) claimed that children should be able to distinguish how they are separated from the external world, and to take others’ perspectives in order to develop a concept of place.

The Piagetian standpoint infers that young children do not yet have the abilities that allow them to understand the concept of place. Other researchers, however, have found that children can generate abstract, coherent, and causal representations given exposure to experiences that facilitate the development of these abilities (Carey, 2009; Gopnik, 2012; Gopnik & Meltzoff, 1997; Siegler, 2006; Spelke, Breinlinger, Macomber, & Jacobson, 1992; Wellman & Gelman, 1992). They also can demonstrate their ability to consider others’ points of view in simple and practical contexts (Siegler, 2006). From birth, young children interact with their environments to test hypotheses, analyze patterns, and integrate new information to prior knowledge, developing skills associated with deduction and causal relationships (Gopnik, 2012).

Places contribute significantly to children’s cognitive development, as they provide settings within which children explore and interact with their surroundings (Wilson, 1997). For example, interactive activities with objects or others—such as play—occur in places. Play opportunities promote creativity, self-regulation, and other underlying fundamental skills for later development (NAEYC, 2009; Vygotsky, 1978). Play also pushes children to think abstractly, take different perspectives, represent things symbolically, and communicate and cooperate with others while becoming aware of themselves in relation to their environment (Bergen, 2002). All of these skills are important in developing a sense of place.

Personal experiences are the foundation for children’s development (Phillips & Shonkoff, 2000). Since some children are exposed to more experiences in certain situations than others, not all children may be egocentric as Piaget suggested in every circumstance (Gelman, 2000;
Siegler, 2006). With repeated exposure to similar events, children create rich representations of similarities and differences across their experiences (Lind, 1998), which assist with their development of more complex skills and thoughts. Preschools are often the first public places that children come to know intimately (Wilson, 1997). They provide experiences that encourage the development of foundational skills that influence later learning. Being that experiences affect cognitive structures and abilities, intentionally exposing children to more experiences that promote such would increase the likelihood that children can separate themselves from the external world, allowing them to develop a concept of place.

**Social and emotional development.** In order for children to learn about, and care for their places, they first should have opportunities to develop emotional bonds for them (Sobel, 1996). In early childhood, creative processes such as exploration and imagination enable children to forge emotional relationships to places and people (Erikson, 1963; Sobel, 1996, 2004). The development of feelings and a sense of place, contributes to children’s overall social and emotional development and is an essential aspect for learning and teaching (Brillante & Mankiw, 2015; Kellert, 2005; Piaget, 1963).

According to Erikson’s (1963) psychosocial development theory, preschool children are becoming more assertive and taking more initiative to achieve autonomy. Their advancing language and motor skills allow, and drive them to be more active in investigating their social and physical environments. Opportunities for exploration and play support children’s desire to take initiative which affects their social and emotional development (Erikson, 1963; Vygotsky, 1978). Children’s increased motivation to explore places may lead to more sophisticated understandings and attachments to those places, contributing to their sense of place.
Children’s place perceptions advance as they exchange language, develop emotional relationships, and receive cultural and societal values in places (Hutchinson, 2004). Through language, children begin to affiliate certain words with places, providing more organized meanings for them. The social contexts in a space within which children interact contribute to how they understand those places. Children create meaning through sense of place experiences and may learn that, “the dramatic play center is where I have fun with my friends,” and continually choose to go to that place to engage in desirable interactions with friends. Choosing a place such as the dramatic play center helps children learn how to collaborate, share, and negotiate with others. Children learn the conventions of interactions within different places: “I can run around with my friends outside. I am supposed to be quiet in mom’s office. I can talk freely with my friends in preschool during lunch.” They are exposed to cultural and societal values that shape how they act and think.

Prior to entering preschool, children spend most of their time with caregivers and adults (Wilson, 1997). For most children, preschool is the first place where they interact with peers on a regular basis. This significant change in social settings provides children with new experiences that propel their social and emotional development. As discussed in the seminal work of Parten (1932), the progression in children’s development can be observed through their play. Most preschoolers’ social interactions take place through play at school, and as children get older they tend to interact more with their peers. Younger preschoolers are often found engaging in solitary play where they play alone or with toys. They then tend to engage in parallel play such that they play alongside their peers, but with little interaction. With increased levels of social awareness, experience, and interacting with others, children will likely engage in associative play: sharing, taking-turns, and taking interest in what their peers are doing. As their social awareness
becomes more sophisticated they usually participate in cooperative play in which they play together to achieve a common goal. Although children are surrounded by more peers and their social interactions increasingly become more sophisticated, adult influences are still important in early childhood (Flum & Kaplan, 2012).

Teacher – student relationships in the early years predict later outcomes such as sociability with peers and teachers, visual and language skills, prosocial behavior, aggression, withdrawal, attitude and involvement in school, and adjustment to school (Jennings & Greenberg, 2009). Strong, supportive relationships with teachers predict higher levels of children’s sociability with peers and adults (Jennings & Greenberg, 2009). Positive relationships with teachers—where there is minimal conflict and lots of closeness and support—promote children’s motivation to explore and their interests in lessons (Davis, 2003). Teachers who are caring and who affirm children’s potential and desires to explore contribute to children’s confidence and overall identity development (Flum & Kaplan, 2012).

Teacher – child relationships are affected by the physical set up of the room and the curriculum teachers implement (Davis, 2003; Hutchinson, 2004). How a place is arranged and what activities or lessons children experience communicates certain expectations to children about how they are expected to interact with others, both peers and teachers. The meaning children create within these places through their relationships with their teachers influences their attitudes and feelings about others, themselves, and school.

**Place-Based Education**

The pedagogy of place-based education has strong impacts on the development of learners’ sense of place (Gruenewald & Smith, 2008; Sobel, 1998, 2004). Teachers can cultivate relationships between children and their communities by creating curriculum that includes local
resources, environment, and community into educational experiences (Smith & Williams, 1999). If children develop a strong, positive sense of place throughout their educational experiences, they will more inclined to understand, and care for their place (Gruenewald & Smith, 2008; Sobel, 2004).

The tenets of place-based education are based on a student-centered and holistic approach to education by incorporating learners’ experiences and community into their formal educational experiences (Sobel, 2004). Place-based education considers children’s place, or their immediate surroundings and implementing that knowledge into instruction. By its nature, place-based education adapts to the unique characteristics of specific places (Smith, 2002). Its practices and purposes are often connected and compared to experiential learning, contextual learning, problem-based learning, constructivism, outdoor education, indigenous education, democratic education, multicultural education, community-based education, critical pedagogy, and other approaches that involve context and the value of learning from specific places (Chinn, 2011; Gruenewald, 2003a; Resor, 2010; Riggs, 2004; Semken & Butler Freeman, 2008; Semken et al., 2009; Seneschal, 2007; Smith, 2002, 2007; Sobel, 2004).

Places that directly relate to children’s lives are a primary resource for learning, providing children with the nexus between what they already know and new concepts. Children can better understand a lesson about plants’ life cycles when they can observe the garden outside of their classroom than if they were to just read a book about plants’ life cycles, for example. After learners gain knowledge from their immediate world, or their place, the scope of their learning can expand outward (Sobel, 2008). That is, learning is more relevant when the focus is first on more concrete then abstract topics.
Sobel (2004) provided a definition of place-based education:

Place-based education is the process of using the local community and environment as a starting point to teach concepts in language arts, mathematics, social studies, science and other subjects across the curriculum. Emphasizing hands-on, real-world learning experiences, this approach to education increases academic achievement, helps students develop stronger ties to their community, enhances students’ appreciation for the natural world, and creates heightened commitments to serving as active, contributing citizens. (p. 6)

Place-based education decreases the division between school and home by integrating learning in authentic, relevant, real-world experiences that children value (Smith, 2002). Schools provide a “relational web, a system of relations that creates meaning” (Flum & Kaplan, 2012, p. 241), and when school experiences are relevant to children—as is a major purpose of a place-based approach—children are more likely to actively participate in their learning (Dubel & Sobel, 2008; Smith, 2002). Place-based education can bring communities and schools together, while also engaging children in the place they live and in the learning process (Powers, 2004). A place-based approach taps into children’s sense of place which is integral in further facilitating their understanding of new concepts and their connectedness to the world. As it aims to provide an environment that nourishes children’s awareness and supports their learning through familiar places, a place-based approach would make an appropriate means to examine what sense of place may look like in young children.

**Characteristics and themes of place-based programs.** It is difficult to describe what exactly place-based education looks like in preschool or kindergarten to twelfth grade classrooms because “place-based education is by its nature specific to particular locales” (Smith, 2002, p. 6).
Therefore, generic curricular models are inappropriate and by definition there should be no specific curriculum for place-based education. Although this is the case, there are common characteristics, themes, and elements among place-based learning efforts that can be adapted to different settings (Hall, 2004; Smith, 2002; Woodhouse & Knapp, 2000). Since place-based education grounds learning in both local phenomena and students’ lived experiences (Smith, 2002), they tend to focus on nature and cultural studies (Hall, 2004; Smith, 2002; Woodhouse & Knapp, 2000).

Several place-based education efforts have focused on nature, incorporating and investigating local phenomena with which students are surrounded. The Environmental Middle School of Portland, Oregon, for example, created a curriculum that focused on local rivers, mountains, and forests (Smith, 2002; Sobel, 2004). Middle school students visited the rivers and conducted observations of the surrounding plant and animal life, and investigated water quality. From there, students expanded their scope of learning from local to global by eventually studying rivers in other parts of the country, then the world.

Smith (2002) provided another example where teachers, administrators, parents, and community members in Fairbanks, Alaska reshaped a local elementary school curriculum to use their natural surroundings as a basis for students’ studies in mathematics and science. By using students’ valued place to teach them mathematics and science concepts, students’ developed deep scientific understandings and problem-solving skills. The connection with local nature and instruction facilitates students’ learning (Hall, 2004; Woodhouse & Knapp, 2000). These studies included aspects of students’ sense of place with regards to their community and natural surroundings that further connected them to their communities, and taught them how to identify problems, propose solutions, execute action, and then reflect on their learning process.
In addition to the natural environment, place-based education includes social and cultural environments as well. Having a curriculum that is inclusive of the learners’ cultures communicates that their values, beliefs, and traditions are important and respected (Chinn, 2011; Barnhardt & Kawagley, 2005). The greater the cultural difference between home and school the more likely students will be disengaged, disconnected, and alienated (Chinn, 2006). With the adaptive nature of place-based education, incorporating cultural practices and knowledge may help overcome the disjuncture between school and home settings (Smith, 2002). Local culture and history are useful subjects in place-based science education because it directly relates to students’ and teachers’ lives. By including local culture in instruction:

What [teachers and students] learn is closely tied to their own experience, connecting them more directly to their place and providing them with opportunities to share their projects and creations with appreciative local audiences. Unlike curricula drawn from elsewhere and transmitted by a school system more concerned about the perpetuation of national rather than local knowledge, these school studies build on the familiar and extend it. This curricular focus also validates the culture and experience of students’ families, acknowledging them as worthy of inquiry. (Smith, 2002, p. 588)

Using local culture makes learning more meaningful as students can directly analyze problems or research information. Examining cultural knowledge is especially significant for indigenous groups, who tend to have a deep and enduring sense of place and relationship to the land (Barnhardt & Kawagley, 2005).

Through placed-based learning efforts that have incorporated indigenous cultures’ values of intergenerational relationships and elder knowledge, students interviewed elders and other community members for information that helped them create resources such as reports, journals,
and websites (Smith, 2002). The Foxfire Project that originated from Georgia prompted students
to investigate and write about local cultures (Resor, 2010; Smith, 2002). These writings were
then turned into magazines and journals to share with the community. Similarly, *Kamai* and
*Elwani*, two compilations of articles by students and teachers, and a website created by Yup’ik
students on Native Alaskan cultural practices provided insight on the importance of integrating
Native Alaskan culture and knowledge into the Alaskan school systems (Smith, 2002; Resor,
2010). Participating in these place-based projects helped learners understand their community’s
values and how they fit in within that place.

In a multi-site, cross-cultural review of place-based case studies conducted by Chinn et
al. (2010), Thai, Chuukese, and Taiwanese educators found that place-based approaches led to
increased student interest, motivation, and learning through contextualized, personally relevant,
and authentic, peer and cross-generational communication. The Thai educators focused place-
based science lessons on water quality, ecology of rice fields, ethnobotany, and endemic
mosquito-borne diseases in three schools, one located in Bangkok and the others in rural rice-
growing communities. The Chuukese educator centered her teachings to Chuuk students on
breadfruit, which is a chief crop in traditional Chuukese culture. In Taiwan, the educators
developed place-based lessons on culturally important plants, musical instruments, and activities.
Regardless of country or group, all educators found that the cultural-historical, human-in-
ecosystem, and problem-based orientation characteristic of place-based learning tends to support
critical thinking, civic engagement, and individual and group agency. This cross-case study
showed that place-based education can be applied across various cultures, languages, and ages.

In Hawai‘i, educators addressed the importance of using indigenous knowledge—for
example, farming, fishing, and hunting—as a foundation in inquiry and to build ecological
knowledge (Chinn et al., 2011). Teachers who were knowledgeable about local science related resources, stories, places, and place names engaged diverse students’ interests and promoted learning. Students examined native and invasive species relevant to their place via field trips, local research experiments, and interviews with elders. Students also had access to resources including local agencies, organizations, and colleges to assist with their investigations. Situating the learning of students of Hawai‘i in local places, cultures, and issues validated students’ backgrounds while issuing them the skills for learning across multiple domains.

When aspects of learners’ personal lives are part of their education, they are motivated to learn and interact in a manner that will benefit their own development and their community (Flum & Kaplan, 2006). Flum and Kaplan (2012) shared:

> [W]hen the school opens the gates to view the student as a ‘whole person’ and accommodates what matters to students in the curriculum, students are given the opportunity to touch their experiences, dilemmas, conflicts, thoughts, and are encouraged to be reflective about the material they study. They search for meaningfulness, share with peers, and create meaning together. They engage simultaneously in identity development and academic learning. This kind of educational action, the experience of reflectivity and ensuing growth, is likely to contribute to their self efficacy in future identity related work. Ability to cope with uncertainty is enhanced. Some structural foundations are laid. In turn, such capacities and exploratory skills, flexibility, and openness to experience may assist students in adapting constructively, with minimal experience of turmoil, and in a relatively evolving manner, when they encounter future life transitions. (p. 244)
Places provide settings for experiences. Experiences in school are shaped by the interrelationships between curriculum, teachers, peers, parents, physical location, and community and societal values. The experiences in early childhood have cognitive, social, emotional, and motivational impressions on adolescence and adulthood (Flum & Kaplan, 2012). As such, it is worthwhile to expand research on influences within, and derived from early childhood classroom practices that also affect children’s development and their subsequent outcomes.

The Study

The literature reviewed covered information on place, sense of place, place and development in childhood, and place-based education (Gopnik, 2012; Gruenewald, 2003a, 2003b; Hutchinson, 2004; Kudryavtsev et al., 2012; Lim & Calabrese Barton, 2006, 2010; Piaget, 1964; Semken, 2005; Smith, 2002; Sobel, 2004; Vygotsky, 1978; Wilson, 1997). However, information on sense of place and place-based education is lacking in early childhood and educational contexts. The current study on exploring preschoolers’ sense of place and place-based education adds to this body of research, and in relation to local settings. I conducted this research in Hawai‘i through the Mohala Nā Pua project in which teachers used a place-based approach.

The Standards for Effective Pedagogy and Mohala Nā Pua. The Center for Research on Education, Diversity and Excellence (CREDE) Standards for Effective Pedagogy serve as a tool for promoting students’ engagement within classrooms by helping teachers improve their instruction and attend to diverse groups’ needs (Tharp, Estrada, Dalton, & Yamauchi, 2000). Within the classroom, the CREDE Standards help teachers utilize effective instructional strategies that maximize their assistance to children during the learning process (Yamauchi, Im, & Schonleber, 2012). Generally, the Standards were created on a basis that is sensitive to the
diversity of culture, language, and ethnicity with the goal to identify commonalities that unite individuals (Tharp, 1997). The CREDE Standards for early childhood are:

Standard 1—Joint Productive Activity  
Standard 2—Language and Literacy Development  
Standard 3—Contextualization  
Standard 4—Complex Thinking  
Standard 5—Instructional Conversation  
Standard 6—Modeling  
Standard 7—Child Directed Activity. (Yamauchi et al., 2012)

Incorporating the CREDE Standards, Yamauchi (2011) and colleagues implemented Mohala Nā Pua to develop and evaluate place-based science curricula for Hawaiian children. The project involved four school sites, 25 teachers, and 480 children who were enrolled in the sites over the two academic years. The goals of the project were to

• develop place-based science curricula at each site that integrated the CREDE Standards  
• provide high quality professional development to early childhood educators on place-based science and CREDE  
• promote children’s school readiness, access to science education, science learning, and positive attitudes toward science  
• promote preschool and elementary school teachers collaboration to promote Hawaiian children’s transition to kindergarten  
• disseminate project findings to other educators, teacher educators, and researchers. (Yamauchi, 2011)

The teachers in the Mohala project each developed and implemented place-based science curricula that were individualized to their specific site. For example, the Maui Preschool located on the island of Maui centered their place-based curriculum on the ocean. The teachers recognized and then addressed their children’s interests in the ocean for science lessons about the beach shoreline, fishing, and organisms in and around the ocean.

During the 2013-2014 school year of which the present study took place, teachers were no longer required to implement place-based lessons, but many continued to do so, particularly at two preschool sites: Maui Preschool and University of Hawai‘i at Mānoa Children’s Center.
Some teachers continued to focus their place-based lessons around the subject of science while others did not. From these two sites, a total of 13 teachers, 10 from UHMCC and three from Maui preschool, continued to implement place-based lessons, and all served as participants in the study.

Prior to collecting data for my dissertation research, I was hired for a few months in 2013 to help with data collection and analysis of the Mohala project of which my advisor was the principal investigator. I also attended two workshops that were held for the teacher participants of the project, and interacted mainly with UHMCC teachers. I did not, however, have direct interactions with those at Maui Preschool prior to my dissertation research.
CHAPTER 3

METHODS

Using the literature review as a basis, I proceeded to investigate teachers’ perceptions of young children’s sense of place, how they have identified their preschoolers’ sense of place, and how teachers have addressed sense of place in their place-based lessons. In this section I describe the settings and participants, specific data sources and procedure, and data analysis method. In addition, I include an explanation of my role as a researcher.

Settings and Participants

The study took place during the 2013-2014 academic school year. Thirteen teachers from two schools, Maui Preschool and University of Hawai‘i at Mānoa Children’s Center (UHMCC), served as participants. I purposefully selected 13 teachers as participants because they were affiliated with the CREDE project and had some experience with place-based education. A total of 112 children comprised the teacher participants’ classes but were not direct participants. However, some children’s behaviors, verbalizations, and representations from the classroom observations and video recordings were included in data analysis. The teachers were participants of the Mohala project mentioned in the previous chapter (Yamauchi, 2011).

Maui Preschool. Maui Preschool is a private, church-affiliated preschool that is funded solely by tuition, and located in a rural area of Maui. According to the director of the preschool, 90% of the children are of Hawaiian ancestry (K. K. Hai, personal communication, September 23, 2015). The preschool is an extension of the Wailuku church and both are located on the same property. The church created the preschool in 1980 due to a growing membership of young families who voiced their needs for care and education for their young children. Maui Preschool initially only served children whose families were church members, but that has since
changed. Currently, families do not need to be affiliated with the church to apply for children’s entrance, or for children to attend the school. While the children did not need to be affiliated with the church, church members received priority enrollment, followed by children whose family members attended the preschool. The staff knew all the children and their families well, describing their preschool as being very close and family- and community-oriented. Although it was not mandatory for children and their family members to partake in church activities, it was encouraged.

During the 2013-2014 academic school year, Maui Preschool served 32 children between the ages of 2- and 5-years-old, and two children and their families were members of the church. Maui Preschool had three full-time teachers whose education degrees ranged from high school diplomas to bachelor’s degrees, and classroom teaching experience ranged from 6 months to 25 years. All teachers were female, and their ages were between 34 to 48 years (see Table 1 for specific teacher demographics). Two identified as Hawaiian or part Hawaiian, and the other Caucasian. The teachers worked with all children enrolled at the school. The children were often split into three different groups and rotated between each teacher throughout the day. At times, two teachers or all three would work together to facilitate large group activities or lessons. The teachers taught in one large, rectangular classroom that was sectioned into three areas that were separated by furniture.

**University of Hawai‘i at Mānoa Children’s Center.** UHMCC is a preschool funded by state general funds, tuition, grants, parent fees, fundraising, and donations. The first form of the center was established in 1899 by Samuel and Mary Castle, who were both proponents of progressive education (Kobayashi, 1983). The Castles enlisted the help of family friend and philosopher, John Dewey, to set up the Center and personally selected and trained the Center’s
first teacher. The early mission for the center to strive for the best and most enlightened education continues today. In 2013-2014 UHMCC consisted of nine classes located in an urban area of O‘ahu, and served families who were affiliated with the University of Hawai‘i at Mānoa as staff, faculty, or students. Seventy-five percent of enrollment spaces were reserved for university students’ children while the remaining 25% were for children of staff members. Families interested in enrollment applied for space on the center’s waiting list and were contacted as space became available. The backgrounds of families at UHMCC reflected the diversity of the university community, where an estimated 42% of the children were Asian or Asian American, 40% European or European American, 15% Pacific Islanders, and the remainder represented a combination of African American and Latino backgrounds (L. Au, personal communication, January, 30, 2014). School administrators estimated that 32% of all children spoke English as a second language.

During the 2013-2014 academic school year, the main preschool, also called the “Big House,” was located at the university and hosted six classes, while three satellite sites at nearby elementary schools each hosted one class. Ten teachers—six from the main site and four from two of the satellite sites—participated in the study. The UHMCC Education Coordinator participated in a pilot interview. The teachers’ educational degrees ranged from bachelor’s to master’s degrees, and classroom teaching experiences ranged from 1-22 years. Eight teachers and the Education Coordinator were female, two teachers were male, and their ages were between 28 to 62 years (see Table 1 for specific teacher demographics). The participants identified as being Japanese (n=2), Caucasian (n=5), Korean (n=1), and Asian-Caucasian mix (n=3). The teachers had classes of either 2-, or 3- to 5-year-old children.
### Table 1

**Summary of Teacher Demographics**

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Site</th>
<th>Age</th>
<th>Highest Degree Earned</th>
<th>Teaching Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amelia</td>
<td>UHMCC</td>
<td>33</td>
<td>Master’s degree</td>
<td>6.5 years</td>
</tr>
<tr>
<td>Kaitlyn</td>
<td>UHMCC</td>
<td>44</td>
<td>Master’s degree</td>
<td>2 years</td>
</tr>
<tr>
<td>Anna</td>
<td>UHMCC</td>
<td>62</td>
<td>Bachelor’s degree</td>
<td>9 years</td>
</tr>
<tr>
<td>Sean</td>
<td>UHMCC</td>
<td>28</td>
<td>Bachelor’s degree</td>
<td>1 year</td>
</tr>
<tr>
<td>Emma</td>
<td>UHMCC</td>
<td>30</td>
<td>Bachelor’s degree</td>
<td>7 years</td>
</tr>
<tr>
<td>Amanda</td>
<td>UHMCC</td>
<td>42</td>
<td>Bachelor’s degree</td>
<td>10 years</td>
</tr>
<tr>
<td>Charlotte</td>
<td>UHMCC</td>
<td>35</td>
<td>Bachelor’s degree</td>
<td>1.5 years</td>
</tr>
<tr>
<td>Mia</td>
<td>UHMCC</td>
<td>45</td>
<td>Bachelor’s degree</td>
<td>20 years</td>
</tr>
<tr>
<td>Scarlett</td>
<td>UHMCC</td>
<td>37</td>
<td>Bachelor’s degree</td>
<td>17 years</td>
</tr>
<tr>
<td>Jake</td>
<td>UHMCC</td>
<td>53</td>
<td>Master’s degree</td>
<td>7 years</td>
</tr>
<tr>
<td>Aubrey</td>
<td>Maui Preschool</td>
<td>34</td>
<td>High school diploma</td>
<td>6 months</td>
</tr>
<tr>
<td>Sophia</td>
<td>Maui Preschool</td>
<td>40</td>
<td>Bachelor’s degree</td>
<td>3 years</td>
</tr>
<tr>
<td>Layla</td>
<td>Maui Preschool</td>
<td>48</td>
<td>Associate’s degree</td>
<td>25 years</td>
</tr>
</tbody>
</table>

*Note.* Names listed are pseudonyms.

UHMCC educators attempted to create a home-like environment, and it was common for UHMCC classes to interact with each other. Classes at the main site frequently worked together during activities. The satellite classes also came to the main site for various activities such as university campus walks, school-wide plays, and cultural celebrations. The main site hosted indoor and outdoor areas which all teachers could use for instruction. Educators encouraged children to explore all areas: indoors, outdoors, and surrounding community areas. The Center
Director and Educational Coordinator knew the names of most of the children and visited the classes throughout the day. Similarly, the children seemed to be familiar and comfortable with the teachers and administrators, and it was typical to find children conversing and playing with children or educators from different classes. The frequent interaction among various educators, children, and environments embodied the center’s goal to:

- develop and maintain a curriculum that emphasizes collaboration among children and adults, infused with a sense of place (Mānoa Valley; the Waikiki ahupua‘a) which honors Hawaiian culture and values while celebrating life through art, music, drama, literature, movement, science, real work, real play, and close relationships. (University of Hawai‘i at Mānoa Children’s Center, 2015, “Mission and Goals,” para. 7)

**Preparation for Data Collection**

Before collecting data for the study, I reviewed lesson plans, visited classrooms, and conducted a pilot interview.

**Lesson plans.** I had access to and reviewed three teachers’ lesson plans from the 2012-2013 academic school year to help me frame my thinking about place-based education at UHMCC and Maui Preschool, and preschoolers’ sense of place. From July to September in 2013, I reviewed five lesson plans from two teachers, and three lesson plans from the other teacher. Not all teachers had developed lesson plans because some had joined the project late. The lesson plans listed teachers’ goals and objectives; the reasons that they chose particular activities; how the teachers thought the activity was place-based; background information on how the idea came about; how the activity met standards, benchmarks, and performance indicators; a brief description of the activity; and how the activity addressed the CREDE Standards. The teachers wrote their own lesson plans and instructional coaches from the Mohala
project assisted teachers with their lesson plans by providing feedback. Instructional coaches provided feedback by writing comments and asking questions. Lessons included planting seeds, caring for plants, cooking with plants and herbs, preparing the garden bed, investigating attributes of plants, identifying and sorting seeds, and comparing grass versus weed characteristics.

**Classroom visits.** Shenton (2004) suggested that researchers familiarize themselves with the culture of participating classes and teachers to minimize the likelihood of conducting research based on unjustified preconceptions. With that in mind, I visited Maui Preschool and UHMCC classrooms before collecting any data. From these visits, I gathered an understanding of the physical and social settings, and I received opportunities to have informal conversations with teachers and interactions with children. The visits also allowed the teachers and children to acclimate to my presence. Moreover, I aimed to develop trusting and comfortable relationships with the teachers and children, as creating relationships of trust are critical for gathering accurate depictions of information that are used to answer research questions (Lincoln & Guba, 1985).

From September to December in 2013, I conducted classroom visits. I visited the UHMCC classes approximately three times each, but Maui Preschool only once because it was more difficult for me to go to a neighbor island. During the visits, I sat and observed at the back of the classroom during the course of instruction, assisted teachers and children throughout various activities, played with and read to children during outdoor play, and casually chatted with the teachers. The duration of classroom visits ranged from two hours to entire eight hour school days. I took some notes during the visits, but did not video or audio record any interactions.
**Pilot interview.** Following the classroom visits, I conducted a pilot interview in January of 2014. Pilot interviews can help to test and refine one or more aspects of interviews (Yin, 2011). I piloted the interview questions with the UHMCC Education Coordinator who provided feedback afterwards. The Education Coordinator did not believe that any of the interview questions or content needed to be modified, but suggested giving the teachers other opportunities after the interview to elaborate on answers and continue the conversation. Additionally, the Education Coordinator stated that she enjoyed the interview as it helped her to explore how sense of place may be different from early childhood to adulthood. She believed that discussing sense of place across different developmental stages would evoke further thought towards gaining comprehensive understandings of viable, diverse, and developmentally appropriate instructional approaches for preschoolers, and move teachers away from using “watered down older kid curricula.” Concerning my technical approaches to interviewing, she stated that she liked how I summarized or restated her comments because doing so would allow the interviewees to confirm whether what they were trying to communicate was accurate. From her feedback about opportunities for continued conversations, I informed the teachers immediately following their interviews that they could talk to me at a later time or email me if additional thoughts arose. I was also more mindful about my technical approaches and ensured that I reiterated interviewees’ responses during each interview.

**Data Sources and Procedure**

This study was exploratory, and used qualitative strategies. I conducted a qualitative study because I wanted to gather insights into experiences and the meanings attached to those experiences of selected individuals; qualitative research is apt for answering process-oriented questions, such as *how* questions (Leech & Onweugbuzie, 2007). This area of study benefited
from a qualitative approach since it sought to examine how teachers perceived children’s sense of place and place-based education in Hawai‘i.

As a means to establish rigor in this qualitative study, I chose to use different data sources to triangulate my data (Golafshani, 2003; Lincoln & Guba, 1985; Patton, 2002; Shenton, 2004). Using different data sources can assist in making a study more credible and ensure that findings are rich, comprehensive, and well-developed (Lincoln & Guba, 1985; Patton, 2002). For this study, the data sources included interviews, observations, videos, and classroom artifacts.

In January of 2014, all of the participants signed an informed consent before partaking in the study (see Appendix A for the consent form). I introduced myself and described my research to the participants prior to data collection. For most of the UHMCC participants, I delivered this information directly at a staff meeting. Since the Maui Preschool participants were located on a different island and I could not meet with them in person, I emailed the preschool director my personal and research introductions and asked for permission to recruit her teachers. The director granted permission, and I sent the teachers an email with the same information I provided the UHMCC participants.

When I introduced myself, I shared how I am from California, came to Hawai‘i in 2009 for the master’s program in educational psychology at the University of Hawai‘i at Mānoa, and then decided to pursue my doctorate degree in the same department. I stated that my research interest was in early childhood, and that I have worked in several preschools as a graduate assistant for behavior modification and literacy development projects. I also shared that on a personal level, I enjoyed working with preschool children as I found their excitement and interest for learning fascinating.
In describing my research, I informed the participants that I wanted to gather information on educators’ perspectives of children’s sense of place and how place-based education was addressed in instruction. I explained how my study would consist of classroom visits, interviews, observations, and video and classroom artifacts review, and I briefly discussed what each aspect would entail. I stated that the study was anticipated to span approximately six months. Furthermore, I spoke about my intentions: how this study was for my dissertation and that I hoped to publish my findings in the future.

When the educators at UHMCC volunteered to participate, I answered the teachers’ questions and recorded their information including their names, email addresses, preferred form of contact, whether they were still implementing place-based lessons or units, and the best day and time to interview them. I sent emails describing my research to the two teachers who could not attend the meeting.

**Interviews.** After the pilot interview, I interviewed the 13 teachers individually which took place between January and March of 2014. The interviews were 30-60 minutes long, with a mean of 44 minutes. I conducted individual, one-on-one interviews since I was interested in the details about each teachers’ perspectives and experiences (Plano Clark & Creswell, 2010). As this study aimed to capture teachers’ insights, it was appropriate to use interviews. Through interviews, researchers can overcome “distances both in space and time” and “reach areas of reality that would otherwise remain inaccessible such as people’s subjective experiences and attitudes” on past events or faraway experiences (Peräylä, 2011, p. 529). Interviews provide a platform for participants to share their opinions, elaborate on statements, explain their reasoning, and clarify their responses in ways that are unique to them. With interviews, participants are not as confined to specifications that may be inherent in some data collection methods such as
surveys that provide predetermined answer options. Participants are even less confined with semi-structured interviews over structured ones (Harrell & Bradley, 2009).

Semi-structured interviews are a means to gathering rich, detailed answers with standardized questions and probes in a style that is conversational (Harrell & Bradley, 2009), and can provide reliable, comparable, qualitative data (Cohen & Crabtree, 2006). Although the same questions are covered, the specific unfolding of semi-structured interviews look different between participants as feelings, emotions, and meanings behind thought and actions vary among participants and elicit individualized sub-questions or probes by the interviewer (Harrell & Bradley, 2009). Some benefits of semi-structured interviews are that they provide opportunities for identifying new ways of seeing and understanding the topic of study, and it allows participants the freedom to express their views in their own terms (Cohen & Crabtree, 2006). I used semi-structured interviews to allow teachers to talk openly without too much structure. The educators helped me understand what was relevant and important to them regarding preschoolers’ sense of place and place-based education in early childhood.

The semi-structured, individual interviews for this study consisted of a series of open-ended lead questions with a few sub-questions, and some were followed by optional probes in case I needed elaboration or clarification (see Appendix B for the interview questions). My dissertation committee provided input about the amount and wording of interview questions. I also created each interview question with the research questions in mind (see Table 2). I audio recorded the interviews and then transcribed them for analysis. The interviews were transcribed verbatim, excluding utterances such as “um” or “uh.” I used pseudonyms to replace participants’ real names.
### Table 2

*Research Questions in Relation to Interview Questions*

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Interview Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How do preschool teachers of 3-to 5-year-old children who have used place-based education define preschoolers’ sense of place?</td>
<td>IQ 1, IQ 2, IQ 3</td>
</tr>
<tr>
<td>2. How do these teachers apply that definition to identify preschoolers’ sense of place?</td>
<td>IQ 4, IQ 5, IQ 6, IQ 7</td>
</tr>
<tr>
<td>3. How do these teachers address preschoolers’ sense of place in place-based lessons or units?</td>
<td>IQ 8, IQ 9, IQ 10, IQ 11, IQ 12</td>
</tr>
</tbody>
</table>

*Note.* IQ = interview question.

After the interviews, I conducted member checks to determine the accuracy of the transcripts and my initial interpretations (Leech & Onwueguzie, 2007; Lincoln & Guba, 1985; Saldaña, 2009; Shenton 2004). Member checking involves the researcher showing the data and interpretations to the participants for assessment of accuracy, which can increase the rigor and trustworthiness of the findings. Leech & Onwueguzie (2007) referred to this process as descriptive triangulation. With that in mind, I followed up with the teachers to verify that the interview transcripts were consistent with what they said during the interviews (Shenton, 2004). I sent the teachers the transcripts from their interviews via email and asked them to review the transcripts for accuracy. I included notes or questions for teachers to clarify any discrepancies or parts of the audio recording that were inaudible for me. In addition to sending them a copy of the transcript, I provided each teacher with a hard copy as well. I talked to each teacher in person about the transcripts, and if available, I shared preliminary codes. The teachers had opportunities to clarify any areas of confusion and question my interpretations.
Since the teachers were involved with the larger CREDE project, I anticipated that there would be a chance that they might have answered questions in a way that they believed was what I wanted to hear. As a way to guard against the possible threat of social desirability, I emphasized at the beginning of each interview that I wanted their genuine opinions and that there were no correct or incorrect responses. I explained that their narratives were important and that there was no formal structure about how they should answer the questions. Moreover, I informed the participants that they could withdraw from the study at any time.

**Observations.** Observations provided a different perspective on the topics that teachers discussed during their interviews and served to supplement the interview data. Between February and April of 2014, I observed classes of teachers who had 3- to 5-year-old children and those where teachers continued to implement place-based lessons. After the 2012-2013 school year, some teachers were relocated to different schools, classrooms, or had different positions. As a result, I observed four classes—with seven teachers. Two of the three UHMCC classes and the Maui Preschool class that I observed had teachers that worked in pairs. I observed the Maui Preschool class twice, three UHMCC classes three times each, and the three UHMCC classes together at once, for a total of 12 observations over five months. To reduce bias and lack of representativeness, I made observations on multiple occasions for each class (Yin, 2011). Refer to Table 3 for a summary of the number of observations per class.

I took the perspective that observations were not completely objective. As the researcher, I was a part of the environment, often interacting with teachers and children, and not a removed outsider looking in, and as such, I was a participant observer at times (Lofland, Snow, Anderson, & Lofland, 2006). There were several times, for example, where I helped children with activities, and engaged in conversations with teachers and children. Throughout the
observations, I took notes using a template that I created with suggestions from Yin (2011). I aimed to create thick descriptions (Ponterotto, 2006) of each observation by including information about the location, date, time, site, individuals involved, setting, general notes, and flags or important notes. At the beginning of each document, I listed my research questions with the goal of keeping myself focused on the questions that I was trying to answer. I created electronic copies and printed out hard copies for taking notes during observations (see Appendix C for a template of the data collection form). In addition to those aspects, I looked for examples of how teachers addressed children’s sense of place through their interactions with children, the lessons that they taught, and the way they arranged the physical learning environments. After each observation, but within the same day, I went back and wrote a detailed narrative on the data collection form. The observation notes were data sources for analysis. See Appendix D for an example of a completed data collection form.

Table 3

<table>
<thead>
<tr>
<th>Class</th>
<th>Number of Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maui Preschool</td>
<td>2</td>
</tr>
<tr>
<td>UHMCC 1</td>
<td>3</td>
</tr>
<tr>
<td>UHMCC 2</td>
<td>3</td>
</tr>
<tr>
<td>UHMCC 3</td>
<td>3</td>
</tr>
<tr>
<td>All UHMCC</td>
<td>1</td>
</tr>
</tbody>
</table>

Note. I observed the Maui Preschool class twice, three UHMCC classes three times each, and the three UHMCC classes together at once, for a total of 12 observations over five months.

Videos. As a part of their participation in the larger CREDE project, researchers video recorded teachers implementing place-based lessons. For this study, I viewed eight videos during the months of June and July 2014 of six teachers—four teachers at UHMCC and two teachers from Maui Preschool—who participated in the study. The videos were from the 2012-
2013 academic school year and videos were not available for all teacher participants because some joined the project late. While watching the videos, I took notes that were used to augment data from the interviews and observations. I took notes on aspects such as teacher-to-child ratio, the physical setting, the topic of instruction, and teachers’ and children’s behaviors and conversations. As a part of the data analysis, I coded the video notes. See Table 4 for summary of the number of videos by teacher and site.

Table 4

Summary of Videos by Teacher, Site, and Number

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Site</th>
<th>Number of Videos</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charlotte</td>
<td>UHMCC</td>
<td>1</td>
</tr>
<tr>
<td>Mia</td>
<td>UHMCC</td>
<td>1</td>
</tr>
<tr>
<td>Scarlett</td>
<td>UHMCC</td>
<td>1</td>
</tr>
<tr>
<td>Jake</td>
<td>UHMCC</td>
<td>1</td>
</tr>
<tr>
<td>Sophia</td>
<td>Maui Preschool</td>
<td>2</td>
</tr>
<tr>
<td>Layla</td>
<td>Maui Preschool</td>
<td>2</td>
</tr>
</tbody>
</table>

Note. Four teachers who were video recorded were from the UHMCC main site, and the other two were from Maui Preschool. There was one video for each of the UHMCC teachers, and there were two videos for each Maui Preschool teacher.

Classroom artifacts. As another supplemental data source, I looked at classroom artifacts to examine what children’s sense of place might look like, how teachers identified children’s sense of place, and how teachers addressed children’s sense of place in their lessons. I took pictures and notes of classroom artifacts during my observations to supplement interview and observation results. Artifacts included photos, wall hangings, posters, books, charts, and children’s representations. Examples of children’s representations were artwork, sculptures, and
journal entries. Pictures of these examples were included in the observation documents. I used
the notes I wrote to describe the artifacts for data analysis. I received consent from the
Education Coordinator at UHMCC and the Director of Maui Preschool to take photographs
during my visits. Both individuals also shared that parents consented to my taking photographs
of their children during school hours.

Data Analysis

When I transcribed the semi-structured interview recordings, wrote my observation notes,
and summarized the video recordings, I engaged in preliminary coding. I created the preliminary
codes inductively as they emerged from the data, and they were not identified prior to analysis
(Miles & Huberman, 1994; Saldaña, 2009). I noted some commonalities that I noticed within
and across data pieces, writing most of my comments by hand in the document margins if I
printed out hard copies, or by using the “review” function on Microsoft word processor to add
comments electronically. Other times I recorded different words, phrases, and codes in a
notebook as they came to mind, being cognizant of not relying on my memory to remember what
I was thinking for future writing (Saldaña, 2009). I “pre-coded” by using a variety of circling,
highlighting, and underlining words and sentences that were significant to me at that time
(Boyatzia, 1998).

After I had all my video and observation documents and interview transcripts typed, I
printed the documents and read them all. I took additional notes as thoughts arose. As
mentioned in the aforementioned interview section, I asked teachers to verify the accuracy of the
transcripts, and then I proceeded to code the data with a computer program, QSR-N6. I chose to
use a computer program because it “efficiently stores, organizes, manages, and reconfigures data
to enable human analytic reflection” (Saldaña, 2009, p. 22). I uploaded all my transcripts, video
notes, and observation notes to the program, and analyzed the data from there.

I used the constant comparison analysis approach (Corbin & Strauss, 2008) to analyze the
observation and video notes and interview transcripts. Through constant comparison analysis,
the researcher reads through the entire set of data, chunks data into smaller meaningful parts, and
compares relationships between categories to create themes (Corbin & Strauss, 2008; Leech &
Onweugbuzie, 2007). I highlighted different passages or sentences by assigning codes to them.
During this first iteration of coding, reams of data were brought into manageable chunks and
insights were brought to the words and actions of the participants (Anfara, Brown, & Mangione,
2002; Leech & Onweugbuzie, 2007). With QSR-N6, I was able to apply more than one code to
the same passage.

When I finished the first iteration of coding, the QSR-N6 program pulled all the different
excerpts for each code into one document. For example, I created a code called “Children’s
Backgrounds” and the program generated one document for that code where the excerpts that I
highlighted and designated across all the different transcripts and notes as “Children’s
Backgrounds” populated into one document. The document listed the different excerpts
indicating which transcripts or notes they came from, the percentage of that data source was
coded as “Children’s Backgrounds,” and the percentage of the total documents that was coded as
“Children’s Backgrounds” overall. See Appendix E for an example of a “code document” from
the initial coding process.

Once I finished my first round of coding, I printed all the different code documents and
read through each one. From those documents I created a codebook. The codebook included the
name of the code, a brief definition, and exemplars of that code (MacQueen, McLellan, Kay, &
Furthermore, the codebook was organized to indicate whether some codes were subsets of others. For example, the different codes that were subsets of “Multidimensionality”—such as “Physical,” “Community Sense,” “Shared,” and “Individual”—were indented to show that they fell under the general code of “Multidimensionality” (refer to Appendix F for the initial codebook). The QSR-N6 program also generated a code tree which arranged the codes so that the broader codes superseded its subsets (see Appendix G for the initial code tree).

I went through the first code book, reviewing and reanalyzing the initial codes. From this process, new codes were created abductively—they developed iteratively—and I started to look for pattern variables that led to categories (Anfara et al., 2002). The third iteration consisted of my review of the second codebook to further compare excerpts within and between codes, relating categories to each other, and subsequently refining and developing the categories (Anfara, et al., 2002). Throughout the analysis process, I frequently asked myself research-related questions to remain focused. I kept a copy of my research questions and goals for this study in sight as I thought about the data and while I was coding (Auerbach & Silverstein, 2003). In addition, I considered Emerson, Fretz, and Shaw’s (2011) general list of questions to guide my coding:

- What are people doing? What are they trying to accomplish?
- How, exactly, do they do this? What specific means and/or strategies do they use?
- How do members talk about, characterize, and understand what is going on?
- What assumptions are they making?
- What do I see going on here? What did I learn from these notes?
- Why did I include them?
- What strikes me?

The fourth iteration was the final one. I sorted and compared the codes and categories continuously until all the data fit into a core category, and no new codes or categories could be created (Creswell, 1998). Themes resulted as an outcome of coding, categorization, and analytic
reflection (Saldaña, 2009). I used the final iteration as a guide for organizing and reporting the results in the next chapter. See Appendices H-J for the second to final code trees.

After I analyzed the data, I aimed to gain consistency by asking another researcher who was not affiliated with this project to code the interview transcripts. The researcher was a doctoral student who had taken advanced qualitative methods courses and who had experience with coding transcripts. Before the researcher coded any documents, I explained the definitions I created for the various codes. We had a discussion about the codes, and the researcher asked several clarifying questions. He then stated that the codes and their definitions were clear to him and did not have any concerns. I randomly selected 10 percent of the total transcripts (Weston et al., 2002) for the researcher to code. After the researcher coded the documents, I checked his codes with mine. The researcher’s coded reports matched mine with 88% percent accuracy, which meets the minimum standard of 75% that deems the coding consistent (Weston et al., 2002).

Additionally, I used peer debriefing to assist in gaining credibility. Lincoln and Guba (1985) defined peer debriefing as “the process of exposing oneself to a disinterested peer in a manner paralleling an analytic session and for the purpose of exploring aspects of the inquiry that might otherwise remain only implicit within the inquirer’s mind” (p. 308). The purposes were to probe for bias, obtain deeper understandings, and provide opportunities to test emerging findings. Additionally, peer debriefing created a space for expressing emotions and frustrations, while receiving support from peers. Throughout my research process, I had conversations with two different individuals who were doctoral students in a different education department, both of whom were not associated with my study.
My Role as Researcher

For this study, I was the major instrument of data collection and analysis. My background, qualifications, and experience influenced the lens through which I collected and interpreted data (Miles & Huberman, 1994; Yin, 2011). Academically, I have training in psychology and education. I have worked in preschool settings as a graduate assistant researcher, but I have no formal experience as a preschool educator. Not being a formal educator in the research settings may have led me to make incorrect assumptions and interpretations. On the other hand, the lack of formal experience may have allowed me to take a different perspective on the research topics.

Even though I was not an educator at UHMCC, I did previously work with several CREDE participants at the main site for my master’s degree research. From that study, I gained experience in conducting interviews—individual and focus group—and in doing qualitative research. After my master’s research, I observed some of the CREDE teachers at UHMCC once a week for a semester to fulfill a class requirement. Furthermore, I was hired for a few months in 2013 to help with data collection and analysis of the Mohala project of which my advisor was the principal investigator. I also attended two workshops that were held for the teacher participants of the project, and interacted mainly with UHMCC teachers. I did not, however, have direct interactions with those at Maui Preschool prior to my dissertation research. My previous work with UHMCC and lack of experience with Maui Preschool could have potentially led to bias, in that my interpretations of the UHMCC teachers’ comments and behaviors could have been more accurate than that of Maui Preschool teachers. To minimize misinterpretations and guard against potential bias, I conducted member checks and enlisted help from the second coder. I asked teachers to clarify what their behaviors and comments meant when I observed their classes and
reviewed their interview transcripts. Additionally, I sought clarification on other items such as children’s work, classroom arrangements, and lessons.

To be cognizant of my study’s development and the role I played throughout the research process, I kept analytical memos and journaled (Saldaña, 2009; Shenton, 2005). I wrote reflective commentaries about participants, phenomenon, and the progression of the study. I recorded my initial impressions of each data collection session, patterns that emerged in the data, and the generation of initial findings. Sometimes I wrote about how I was personally feeling with the thought that my mood could possibly affect my perception and interpretation of information, or my project’s unfolding in general. Reflecting and writing memos served as “reality checks” of my thinking processes (Saldaña, 2009). I also kept thorough accounts of how I collected and analyzed the data. I recorded days and times during which I visited classrooms, interviewed participants, observed classes, watched video records, coded data, and documented data- and analysis-related thoughts. Moreover, I retained raw data: observation notes, interview transcripts, pictures, and other data sources. My intention in organizing and keeping all these records and thus creating an audit trail, was to create transparency and provide a chain of evidence that could provide insight to my role as a researcher (Lincoln & Guba, 1985; Miles and Huberman, 1994; Shenton, 2004).
CHAPTER 4
RESULTS

In this chapter, I present the results from my constant comparison analysis of the interview transcripts, and notes from class observations, video record review, and classroom artifact review. As stated previously, the purpose of this study was to capture: (a) teachers’ perceptions of 3- to 5-year-old preschool children’s sense of place, and (b) how teachers viewed, planned, and implemented place-based education in Hawai‘i. The findings were drawn from data that addressed these research questions:

1. How do preschool teachers of 3-to 5-year-old children who have used place-based education define preschoolers’ sense of place?
2. How do these teachers apply that definition to identify their preschoolers’ sense of place?
3. How do these teachers address children’s sense of place in place-based lessons or units?

The teachers provided key insights into their perceptions of children’s sense of place, and their place-based instruction. In the following sections, I discuss themes regarding the two topics. For sense of place, the main themes were (a) influences of sense of place development; (b) existence; (c) comparison to later years; (d) multidimensionality of sense of place; (e) indicators of young children’s sense of place; and (f) effects of sense of place. Regarding the topic of place-based education, the main themes were (a) goals of place-based education; (b) shaping young children’s sense of place in place-based education; (c) place-based education takes place at the school, and in the local community and environment; (d) place-based education content; and (e) effects of place-based education. Some of the main themes, for both sense of
place and place-based education, also had subthemes which I discuss in more detail below. See Table 5 for a summary of the themes and subthemes for sense of place and place-based education.

Table 5

*Summary of Themes and Subthemes*

<table>
<thead>
<tr>
<th>Topic</th>
<th>Themes</th>
<th>Subthemes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sense of Place</td>
<td>Influences of sense of place development at school</td>
<td>Comfort and security</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consistency</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Children’s backgrounds</td>
</tr>
<tr>
<td></td>
<td>Existence</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Comparison to later years</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Multidimensionality of sense of place</td>
<td>Physical</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Emotional</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Individualized</td>
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<tr>
<td></td>
<td></td>
<td>Social</td>
</tr>
<tr>
<td></td>
<td>Indicators of young children’s sense of place</td>
<td>Verbalizations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Behaviors</td>
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**Sense of Place**

The following sections on sense of place address the first and second research questions. The sections disclose teachers’ perspectives on young children’s sense of place in general, and how teachers identified their children’s sense of place. From the data analysis, six major themes emerged with regards to sense of place: influences of sense of place development at school, multidimensionality of sense of place, existence, comparison to later years, indicators of young children’s sense of place, and effects of sense of place. Under the influences of sense of place development theme, (a) comfort and security, (b) consistency, and (c) children’s backgrounds are subthemes. The multidimensionality of sense of place theme is explained with the subthemes: (a) physical, (b) emotional, (c) individualized, and (d) social. Additionally, the indicators of young children’s sense of place theme contains (a) verbalizations, (b) behaviors, and (c) representations as subthemes. Lastly, the effects of sense of place theme consists of three subthemes that are named (a) influences on places, (b) socioemotional development, and (c) deepens learning. Plase see Table 4 for a summary the themes and subthemes of sense of place.

**Influences of sense of place development at school.** The three most commonly cited influences of sense of place development by teachers were comfort and security, consistency, and children’s backgrounds.

**Comfort and security.** When speaking about sense of place, teachers mentioned how sense of place development is affected by how comfortable and secure children are in their environments, both emotionally and physically. If children felt safe at school they were more likely to develop a strong, positive sense of place for school. One teacher, Aubrey, explained that if children did not feel secure they would have a difficult time connecting to the school place (Interview, 2/24/14). If children had a difficult time connecting, then “they are not going to be
able to learn” (Aubrey, Interview, 2/24/14). Aubrey further explained that other people, especially teachers, affected whether a child deemed a place comfortable at school. She believed that teachers should “bring a home-away-from-home” feel to the classroom to help young children relate to the school place positively (Aubrey, Interview, 2/24/14).

Another teacher, Mia, echoed similar thoughts when she stated that young children “have a harder time connecting [at school] especially when they first start” because they are not comfortable (Interview, 2/6/14). Assuming that children had a strong sense of place at home, involving parents and other family members, and elements of children’s home in school would help children establish trust and comfort in the teachers and the school environment. Mia talked about how bridging the home to school gap to make children feel comfortable could be done by having children bring “family pictures, possibly something special that they made, asking families to share what they do, what they know, what their interests are and bring those interests to the classroom” (Interview, 2/6/14).

Consistency. Teachers also agreed that consistency at school affected children’s development of sense of place. Having consistent conditions helped children to create a sense of place, while inconsistent conditions were barriers to a developing sense of place. Mia remarked, “I think when children know what to expect, [their sense of place] can branch out” (Interview, 2/6/14). According to Mia, if children knew what to expect, they had consistency, then they could spend their efforts on getting to know others—their friends and teachers—and focus on how they fit in that place. If they did not have consistency, children exerted energy in trying to sort confusion they had about what was expected of them or what was going to happen in the day. Children seemed anxious and needed more help to become comfortable when they lacked
consistency. Given this reasoning, Mia explained that she was intentional about “keeping the
school life consistent” for children (Interview, 2/6/14).

Aubrey talked about consistency as well, but elaborated on how daily school routines
were a form of consistency for children. Aubrey, along with many of the other teachers,
established set routines outlining everyday activities such as when children would have meals,
storytelling sessions, and play time. Aside from activities, Aubrey explained how teachers’
interactions with, and attention to children were routine to children as well. She explained that
some children might not have received consistency in other aspects of their lives and having that
consistency in teachers helped them learn to connect to teachers who they associated with their
school place, affecting their overall connection to school.

*Children’s backgrounds.* Another factor that teachers talked about with regards to sense
of place development in young children was the contexts from which children came. In the
preschool years, school is often the first regular social setting away from home that children
experience. It is common in Hawai‘i for children and their families to have moved from
different physical locations. Children entered school knowing different languages. They came
with different cultures, values, and experiences. In addition, they had individual and unique
personalities that they brought to school. Children’s backgrounds affected how children
connected to their surrounding place, including the people and everything else associated with
that place.

Kaitlyn believed it was “a big key” to “observe and get to know the kids because [sense
of place development] starts with that” (Interview, 2/6/14). Jake shared the same sentiment,
teachers “could learn a whole lot more if [they] understood where [children’s] families were
coming from” (Interview, 2/4/14). Charlotte also stressed the importance of teachers recognizing children’s backgrounds:

I think the role of the teacher is to learn about the children and where they’re from and know where they’re coming from for their sense of place. … I think that they grow up in a culture, in the culture of their family that influences their sense of place especially when they’re as young as preschool [age]. When they come into preschool, the sense of place that they have is being with their family and so it’s the practices and culture—cultural beliefs that their family has. And so when they come into [school], that sense of being comes with them. So I think that’s where their sense of place comes from is the home. And that’s why it’s important to include that when you’re thinking about moving forward with the group of children. (Interview, 1/31/14)

Children’s backgrounds were important for informing teachers about how they could assist children in connecting to their school and the learning process. Knowing about their children’s backgrounds helped teachers build on what children already knew, and made learning relevant and interesting for different children.

In discussing children’s backgrounds, Emma shared about one notable child. The child, Samantha¹, lived in a different country before moving to Hawai‘i, and that place emphasized individual work with regards to school. Samantha’s home life also valued independence, along with being quiet and focused. Emma described Samantha as someone with the personality that liked to “sit there [to do work] and focus, whereas others kids [in her class typically did not]” (Interview, 3/13/14). Prior to entering preschool in Hawai‘i, Samantha was used to the expectation that children be calm, quiet, and focused. Emma stated that knowing that about Samantha’s background placed Samantha’s behavior at school in context. Without that

¹ All children’s names were replaced with pseudonyms.
information, Emma could have perceived Samantha’s behaviors as indicators of Samantha having a hard time connecting to school; Emma said that she probably would have thought that Samantha was withdrawn. When in reality, Samantha’s behaviors had nothing to do with her being withdrawn, but simply that she was raised with different values than most of the other children in Emma’s class. Understanding children’s backgrounds aided teachers in making correct interpretations about children’s behaviors.

Existence. When thinking about whether all children had a sense of place, some teachers believed that not all children did. Sophia mentioned, “Sometimes you see kids who aren’t connected with their environment or they don’t know what to do” and so it is difficult to say that those children have a sense of place (Interview, 2/24/14). Like Sophia, Jake talked about children who “have attachment issues,” those who, although rare, are “simply not attached to the home, they’re not attached to parents, they’re not attached to anything” (Interview, 2/4/14). He explained that if children did not have the ability to attach to anything, then they could not have a sense of place. He provided an example of a child with autism who lacked attachment ability, and how because of that, he could potentially not have had a sense of place.

On the other hand, most of the teachers stated that all children did have a sense of place, even if there was a perceived lack of children’s connection to places. Mia explained that it could be “tricky” to see children’s sense of place (Interview, 2/6/14). Another teacher, Amelia expanded on a similar thought and said that sense of place did exist, but that children may just not have been able to clearly show, and even less so to verbalize their feelings and thoughts yet (Interview, 2/3/14). So, children might actually have felt connected to a place but were not able to outwardly express those connections in a way that teachers understood. This could make it difficult for teachers to tell that there were connections between children and their places.
Kaitlyn reassuringly said, “I don’t think there’s a lack of [sense of place] in early childhood even if you cannot see it” (Interview, 2/6/14).

Most of the teachers agreed that all children had a sense of place, but that it was developing in the early years. Sean said “I think every child has one. It’s just more or less defined” depending on the child (Interview, 2/6/14). Sense of place at school could be strong for one child, but weak for another. Some children were quicker to connect to places than others. Expanding on this opinion, Aubrey said that all children had a sense of place, but that it might not be as prominent when they encountered a new place, like when children entered preschool for the first time (Interview, 2/24/14). Mia concurred: “I don’t think it’s always here at first. … I can’t think of any [children] who haven’t had a sense of place, but I think they often need more help connecting when they are [at school]” in the beginning (Interview, 2/6/14).

Amelia also believed that sense of place “continually develops” and said that teachers should “build upon it” to create experiences for children that help them connect (Interview, 2/3/14). Kaitlyn added: “I think that it is something that needs to be developed, just like learning” (Interview, 2/6/14). So while children might first come to school with a weak sense of place for the school, their sense of place could grow over time and with the help of teachers. The more experiences that children had, the less they thought “this is just a place I go to school,” and started feeling that “this is a place where I do this and where I do that, and I made these friends, and I had these experiences. It becomes more than just a school. It becomes more than just a classroom” (Amelia, Interview, 2/3/14). With the experiences, children started seeing it as their place—a place that means something special to them.

**Comparison to later years.** The teachers shared their thoughts on whether sense of place was different in early childhood than in the later years. They drew on their knowledge
about how young children developed, but the ways in which they related that knowledge to sense of place varied. All of them agreed that children were more concrete and had limited experiences in early childhood than in the later years, but disagreed about whether sense of place was more stable in early childhood or in later childhood to adulthood.

In Aubrey’s opinion, sense of place was “more established in later childhood to adulthood than in early childhood, although it could always be developing” (Interview, 2/24/14). She believed that people were more certain about their connection to places, making their sense of place more stable when they were older than when they were young. Jake had a similar outlook: “Older children and adults have already established their identities. Older children and adults have already established patterns of dealing with others. Patterns have already been set and they’re really hard to change” (Interview, 2/4/14). Jake viewed sense of place as being more stable as children aged. Children started to notice patterns with their connections to places and people, and according to Jake, those associations would become rigid over time. Their thoughts and feelings about what a place meant to them would be harder to change. In early childhood, children’s sense of place were flexible and easier to mold. Jake understood young children’s sense of place as being unstable because young children were more receptive and open to taking in information when they were younger than when they got older.

Alternatively, Charlotte said that because “sense of place is more narrow and concrete in early childhood than in the later years,” young children’s sense of place would be more stable than older children or adults’ (Interview, 1/31/14). Mia agreed with Charlotte and added, “Sense of place in early childhood is more stable than in older children or adults because there is more consistency and predictability in early childhood” (Interview, 2/6/14). Children’s sense of place tended to be heavily influenced by home and school, and they usually would not have yet had
many experiences that extended beyond those two areas. Young children’s sense of place were not affected by as many experiences as the sense of place of those who were older (Emma, Interview, 3/13/14). From this perspective, sense of place was more stable in early childhood than it was later because their thoughts and experiences were not as complex or vast.

Drawing on cognitive development perspectives, Amanda stated, young children’s sense of place was affected by their thinking in the “here and now,” whereas older children and adults’ were affected by broader experiences and topics (Interview, 3/13/14). With that reasoning, she explained that sense of place becomes more complex over the years because people start relating to the same places in different ways and also connect to multiple places. In thinking about social influences, both Charlotte (Interview, 1/31/14) and Mia (Interview, 2/6/14) spoke about how young children’s sense of place were influenced by what and who were associated with home, and when they grew older their sense of place was more so affected by school and peers. Their experiences with different places and people would grow which would provide more opportunity for intricate connections.

**Multidimensionality of sense of place.** In describing young children’s sense of place, the teachers believed that sense of place had varying aspects and thus, was multidimensional. Sense of place was tied to the physical environment, had emotional components, and was individualized. Additionally, sense of place involved social aspects that included relationships with the place and other individuals.

**Physical.** Sense of place was tied to physical environments. From Aubrey’s perspective, “sense of place for the kids would be their understanding of their surroundings, their place here in the school, the community, and extending out from that” (Interview, 2/24/14). Sense of place was “just knowing or being aware of your environment … knowing where you live which is not
necessarily only at home, but the school too” (Sophia, Interview, 2/24/14). The teachers said that the physical environments that children would likely connect to the most in their preschool years were the home, school, and usually more immediate surrounding communities. How the children connected to different physical places depended on accessibility to places and the opportunities that adults provided for children to explore those places (Charlotte, Interview, 1/31/14).

*Emotional.* Teachers believed that children’s sense of place were not just about children knowing that they existed in a place. It was about them being in a place, the connections children had to the place, and the different emotions that those connections evoked. Teachers talked about how children’s sense of place involved the emotions children felt for places. Mia said sense of place “was that emotional relationship” between the child and place (Interview, 2/6/14). Amelia expanded on similar thoughts and described a positive sense of place as those feelings that make a place a second home to them, where they “feel that they are important and that they belong … like [they] matter in this place” (Interview, 2/3/14). Sense of place was the connection between a child and place that brought meaningfulness to the child. For instance, a child could feel emotions such as love or sadness, both positive and negative feelings and to varying degrees when thinking about how he or she connected to a place. Furthermore, Scarlett discussed how those emotional connections that children had with a place affected how comfortable they felt and informed children about the actions they could take within that place (Interview, 2/3/14). If they had positive connections to a place and were comfortable within it, Scarlett believed that children were more likely to feel confident to try new things and to learn more about the place, in addition to learning more about who they were and how they fit in that place.
**Individualized.** Furthermore, many of the teachers talked about how young children’s sense of place was individualized. Children came to school with perspectives and experiences that were unique to them. Each child had been exposed to different experiences, had unique backgrounds, and carried individualized lenses from which they viewed their worlds (Emma, Interview, 3/13/14). Sophia shared her take on sense of place being individualized:

> Well I think every child’s [sense of place is] going to be different regardless. I mean, you know, everybody’s environment beyond the preschool is different and everyone’s experience is different when they come here. So I think it will always be different [for each child]. Like if I look at my children, you know, they grew up differently. Even though we’re in the same home. … Even though we all live in the same place, it’s different for every child no matter what.  

> (Interview, 2/24/14)

Every child’s sense of place would be different albeit they underwent the same experiences in a place as others; children still had their individualized interpretations of those shared experiences. A class of fifteen children could have taken a trip together to the neighborhood park, played the same games, ate lunch together, and listened to the teacher read a book, but each child would interpret the experience in his or her own unique way.

**Social.** Children’s sense of place involved social connections. More specifically, children’s sense of place was affected by the social interactions they had with others within places. Sean mentioned that “sense of place is [children’s] parents. It’s their friends” (Interview, 2/6/14). Sense of place had to do with the people who were in, or affiliated with those places, who co-created experiences with children within a place. As an example, Mia elucidated a similar belief:
It could be that a person is [a part of] sense of place. With teachers or with other children. Everyone. [The relationships] with the adults and the child. … The main teachers, the student assistants, people walking through, with families, children with children. So relationships. (Interview, 2/6/14)

Sense of place extended beyond the relationships that children had with physical places. It involved the relationships they had with other people that gave those places meaning. When they thought about school, their thoughts would likely have included the physical aspects like the playground and classroom, along with the social interactions that they had with their teachers and friends. They might think about how a teacher helped them learn how to tie their shoelaces or how a friend played their favorite games with them on the playground.

**Indicators of sense of place.** The teachers discussed different indicators that helped them identify young children’s sense of place. Teachers identified children’s sense of place through children’s verbalizations, behaviors, and representations.

**Verbalizations.** Some teachers said that indicators of children’s sense of place came from what children said, the conversations children had with each other and with teachers, and children’s responses to teachers’ questions. Layla observed “[children] exchanging thoughts and ideas, and you see them making connections” (Interview, 2/24/14). Likewise, Kaitlyn felt that she knew what children’s sense of place were when they talked about their connections. She recalled children saying things like, “This is my school. This is my home” (Interview, 2/6/14). For some children, it was like they felt that school was another home to them; they connected closely to school and verbalized those thoughts. Additionally, Amanda said she gauged children’s sense of place “through what they were exploring when they talk. … communicating and having conversations with them that’s how we can assess their sense of
place, their understanding of place” (Interview, 3/13/14). Both Amelia and Layla discussed how children’s responses to their questions about what they knew about a place, how they felt within a place, and what the place meant to them furthered the conversations. Although teachers got a sense of how children connected to places through children’s verbalizations, they also identified children’s sense of place in other ways.

**Behaviors.** Another way that teachers identified children’s sense of place was through children’s behaviors. Layla shared how some of the children were not as verbal and that she saw their connections through their actions (Interview, 2/24/14). Mia specified actions as “when children gravitate to [places] in their environment at school or what we share with them … and what they play with … who they play with” (Interview, 2/6/14). It was the way children looked at and moved towards things. Mia observed how enthusiastic and comfortable children were in their place. Amelia spoke to the positive connections children had with places, and said she could tell when children cared for a place because they got excited (Interview, 2/3/14). Children would eagerly run to different places, like to their favorite part of the park that the class frequented, for instance. Another example came from Charlotte who shared how the children in her class felt a great sense of place to a Japanese garden that they visited often.

I could tell by the excitement that when the children knew we were going to their special place—we were going back to the Japanese garden—they would get excited. So I knew that they connected with that. They had a special connection with that place. (Interview, 1/31/14)

Charlotte explained how children fidgeted with anticipation of arriving at the garden. They jumped up and down. The children talked among themselves, pointed out something new they noticed or shared a memory they had from the last visit. From her observations of the
children and their behaviors, Charlotte knew that the children really enjoyed being at the Japanese garden.

Furthermore, Amanda expressed her thoughts about how some of her children were not as verbal as others:

So even though they’re not verbally speaking to us, they’re observing when they’re there at the place, they’re still taking it in. And I think they still understand what a sense of place is even though they’re not verbally telling us. But you can see that they’re observing. They’re standing back. But I still think that they’re connecting. It doesn’t mean that they don’t. (Interview, 3/13/14)

Most of the teachers agreed that although the children’s verbal skills grew immensely throughout their preschool experiences, they talked more and asked more questions, their behaviors, expressions, and actions were still very telling for teachers. Their body language—nonverbal communication between each other, with teachers and the place—sometimes said more than any words could describe (Amelia, Interview, 2/3/14).

**Representations.** One other way teachers said they identified children’s sense of place was through children’s representations. Some examples of children’s creations or representations were the artwork that they created. Children made drawings of their surrounding places. Charlotte and the children brought art supplies on their class trips, like to the Japanese garden, and the children drew their individual versions of the garden. Charlotte’s children created drawings of the Japanese garden during each of their visits, and Charlotte posted their work on the walls of the classroom. From the display, the children, their families, and visitors could see the children’s work. The display also served as a reminder for children of their experiences and helped to continue their conversations about the garden for days after the trips.
In addition to their individual artwork, Charlotte encouraged the children to make a large mural of the Japanese garden together. The children drew and colored on a big poster paper and Charlotte posted their creation on the wall as well. As they found out more about the garden through their conversations and other visits, they added more to the mural. Charlotte believed that the visits, process of creating work, both individual and communal, and displaying the artwork in the classroom, added to children’s a sense of place of the Japanese garden (Interview, 1/31/14).

In Sean and Kaitlyn’s class, the children’s sense of place were captured through pictures. Sean, who also had a personal hobby of photography, frequently documented children’s experiences at places such as the school, park, canal, and other places that they visited. He shared the pictures with the children and their families and posted them throughout the classroom. In addition to taking pictures himself, Sean shared that he also often gave the children cameras so that they could take pictures when they went on trips. After the children had some practice with taking pictures themselves, he said that the pictures that the children took told him what each child found interesting. On their trips to the canal, for example, some children took pictures of the water, others took pictures of their friends, and yet others took pictures of the fish that they spotted. Similar to many of the other teachers’ classes, Sean and Kaitlyn’s children did a lot of artwork both as a class and individually. The children each had their own portfolio with the artwork that they created. Their portfolios contained drawings, paintings and pieces of assorted materials glued onto paper. Other work, usually the larger ones, were displayed throughout the class and included drawings, paintings, and sculptures. Like Charlotte, Sean and Kaitlyn believed that the representations that children put so much effort into creating served as tangible, visible reminders for children of what was meaningful to them (Interview, 2/6/14).
Effects of sense of place. In addition to providing their thoughts on what young children’s sense of place was, the teachers talked about the effects of sense of place. Most of the educators felt that children’s sense of place influenced the places with which children were connected, affected children’s socioemotional development, and deepened children’s learning.

Influences on places. The relationship between children’s sense of place and their places were bidirectional; children’s sense of place were affected by the environment, and the environment was affected by children’s sense of place, as well. Sean described this relationship: “[sense of place] would be how the children see themselves in relationship to the world, with different cultures and different environments, and it’s how they affect it and how it affects them” (Interview, 2/6/14). Sean explained that children’s sense of place was how children viewed themselves in their worlds. The relationship told them whether their connection was one that brought positive or negative feelings, or something in between. It helped children determine whether they wanted to eventually give back to, make improvements on, or invest time and effort in the place. Several of the teachers talked about how sense of place affected children’s feelings of ownership, pride, and belonging for the places where they grew up in. If those feelings were positive and strong, children would be more likely to dedicate efforts to improving those places throughout their lives.

Socioemotional development. Sense of place in early childhood helped children connect with places and people that they associated with those places. Those connections that children made at this age were the beginning of how they gathered “a sense of community with other people, those who had that same shared experience, had that same special place” (Charlotte, Interview, 1/31/14). Young children’s sense of place involved the interactions that they had with others within that place. They learned more about socializing with other peers and adults at
school. They learned that they were not the only ones in the school place; they shared that place with others—friends and teachers—and all of them impacted the place to some degree, both individually and collectively. Children started to learn more about how others might have the same common interests. They likely experienced conflicts, and learned how to navigate them. Young children’s sense of connection to places affected how they interacted with others, which in turn affected their sense of place (Jake, Interview, 2/4/14).

Along with having ties to social development, sense of place affected the emotional development of children. Charlotte disclosed, “I think that it is really important for their emotional development and spiritual development, their connection with nature” (Interview, 1/31/14). In her interview, Anna thought back to her earliest connections and said, “I’ve always been connected to my home and my place, my sense of place” (Interview, 2/3/14). She recalled how her connection to home, many years ago, still affected her today. Her sense of place in early childhood helped her learn about caring for a place and the people who made that place special. Scarlett also reflected on her early experiences and shared:

[Sense of place is important] for life. I mean really being connected to the place where you live, the place where you grew up, I think there’s so much strength in it that can carry you through so much. I mean I think back to my own life experiences and the strong connection I had with my place by being in it and having freedom explore thoroughly and develop a love for it. You know, I think of it as a connection to the land and a connection to the environment because it’s not a surprise that that’s something important for this generation and all the ones to come. I mean there are lots of things happening in our environment and I think connecting children to having a love of the earth and the place that they live in is going to plant those seeds, like I said earlier, to carry out through their
life and think a little bit more about their connection to everything that they’re involved
in. (Interview, 2/3/14).

When children learned to connect to, and care for a place and the different aspects of that place,
those processes might have set the foundation for how children continued to do such for other
places in their later years.

**Deepens learning.** Teachers believed that when children were connected to their places,
and really cared for them, they were more invested in their learning than if they did not feel
connected or did not care. Charlotte remarked, “It allows for a deeper kind of learning to occur
when a child has a strong sense of place. They feel more connected to what they’re learning
about” (Interview, 1/31/14). She explained that when teachers used places that children cared
about and knew well as reference points to teach a lesson, children would be more likely to care
about their learning. When children cared, they were interested and stayed motivated throughout
the learning process. If they knew the place well, they would have something with which to
compare new information.

During her interview, Kaitlyn talked about how her children had a strong sense of
attachment to the canal that was located near their school (2/6/14). The class took trips to the
canal frequently, and over time, Kaitlyn found that the children constantly talked about the canal.
Kaitlyn took their strong connections to the canal and created several lessons from which she
believed, assisted with their learning across a variety of subjects. She used their sense of place to
extend their knowledge in areas of science, mathematics, art, and language. She positioned her
teaching around the canal where children learned about animals, habitats, waves, and tides. They
learned about sustainability and how to care for the environment. They created paintings and
sculptures out of items they collected from the canal. She believed that because of their
connections to the canal, her lessons were deeply meaningful for children and the information they learned would stay with them for years to come.

**Place-Based Education**

In the next few sections, I share the results that address the third research question. The third research question sought to identify how teachers addressed children’s sense of place in place-based instruction. The following sections describe what teachers thought about place-based education, how they planned and implemented place-based lessons, and how they included children’s sense of place throughout. Five main themes about place-based education resulted from the data analysis: goals of place-based education; shaping young children’s sense of place in place-based education; place-based education takes place at school, and in the local community and environment; place-based content; and effects of place-based education. For the theme goals of place-based education, connections, collaboration, and care are a subtheme. The shaping young children’s sense of place in place-based education theme contains the subthemes (a) social conditions, and (b) physical conditions. The theme place-based education takes place at school, and in the local community and environment has subthemes: (a) school campus, (b) local community, and (c) local environment. Under the theme place-based content, (a) learning about the self, (b) content including children’s backgrounds, (c) plants in the environment, (d) abstract concepts, (e) local place, culture, and legends, and (f) Hawaiian values are subthemes. The subthemes of Hawaiian values are (a) Mālama and (b) Kuleana. The last theme that I discuss is the effects of place-based education which is broken down into sections (a) on children, and (b) on teachers. See Table 4 for a summary of the place-based education themes and subthemes.
**Goals of place-based education.** The teachers had several goals that guided their planning and implementation of place-based lessons. From the perspectives of the teachers, the goals of place-based education involved helping children connect to places and others by situating their learning in places with which children were familiar; having children learn how to work together both with those in their school and others in the community; and helping children learn to care for their places and everything involved with those places.

**Connections, collaboration, and care.** When the teachers talked about their goals of place-based education, the themes of connections, collaboration, and care surfaced. Charlotte stated that her main goal with place-based education was “to connect children to larger issues by starting with things that are happening close to them and contextualize what they already know” (Interview, 1/31/14). She wanted children to learn by creating a nexus between the surroundings they knew well and new concepts she was trying to teach. Similarly, Kaitlyn hoped that place-based education would increase children’s consciousness of their environment and instill a strong connectedness to it. She believed that through place-based lessons, children would care for their place and learn that they could have an impact on their place—that they could make a difference (Interview, 2/6/14). Furthermore, Jake expressed:

> [Place-based education] recognizes the individual and where the individual is coming from. So we can take their knowledge and their perspective and we can combine that into what we are doing here in school, making things personally relevant. And that is one of our keys is to be collaborative and personally relevant and intentional. So you have to identify all of those things. You have to talk to the parents and invite them in in order to be able to identify commonalities and differences and places where accommodations
need to be. And we start to build our community here and we start relating that to the broader community. (Interview, 2/4/14)

Jake strove to make learning personally relevant for the children. He was intentional about including children’s backgrounds and interests in his instruction and interactions with children. Like Charlotte, Jake talked about wanting to create that connection from what children already knew, especially from their home, to the new things he wanted them to learn. He emphasized the importance of him and other teachers collaborating with families and using that as a foundation for helping the class connect to the larger community. One child’s father might be a carpenter who could share with the class his thoughts on how they could build a better garden bed for their playground. He might even have been able to come back at another time to have the children assist him with building the garden bed. From those experiences, the children could come to learn the different things that carpenters built. Jake also wanted children to collaborate with their peers, teachers, and other adults and learn from others’ thoughts and opinions. While exploring their school garden, children might have different thoughts about how to identify plants or how to care for plants. And in having the opportunities to work with each other, children could hear others’ opinions and share their own.

Layla shared her perspective:

I want them to be able to make connections, to be able to get a better understanding of things around them, and help them with what they know and kind of build on that, and expand their knowledge and where they’re at and that will help them strive, I think, later on. … Just seeing what the kids get out of it and what they take home, the knowledge they take home and share with their families. And the families come back and say that they didn’t think that their child could be learning this … That they have children that are
older who were learning that kind of stuff when they were in elementary school. And then even when we went on excursions, went out there into the community and how much our kids learned about the ocean when we went to the aquarium. And things that they could recall and things that they were making connections with, it caught other people’s attention of “wow!” you know … I mean just getting that kind of interest and that kind of accomplishment at such a young age. (Interview, 2/24/14)

Similar to Jake, Layla spoke to the value in children’s connections to their places. Those connections helped to facilitate learning and could affect their futures. They shared their knowledge with their families, and families came back to the schools to share with the teachers their children’s accomplishments. Layla was intentional about getting her class out into the community and helping them extend their knowledge, while also hoping that the community got to know the children.

Moreover, Scarlett’s goals emphasized that children care for their places:

Even at 3 years-old you can get that basic foundation that everything around me is accessible to me and that community is full of resources and good people. Another goal is just establishing that sense of connection to the place where you live. And in the long run, that’s going to possibly turn into really caring about your home and your environment, and planting those little seeds of everything we need is right here and we are a community. And that that will always be true hopefully for these children. So it’s kind of—there’s a small picture and then there’s the larger picture of just that way of seeing the world and seeing your place in it. (Interview, 2/3/14)

Scarlett’s “small picture” referred to children knowing about their place with regards to their immediate surroundings: that they knew who was around and what resources were
available. Concerning the “larger picture,” Scarlett wanted children to have that connection to where they lived. She wanted them to love their place and give back to the community.

The teachers, in general, wanted children to strengthen their connections to each other and their place. They aimed to create lessons that increased children’s awareness of their surroundings from which their thoughts and love for places could grow. The teachers kept these goals in mind as they planned and implemented their place-based lessons.

**Shaping young children’s sense of place in place-based education.** Throughout their place-based lessons, the teachers felt that they had the potential to shape their children’s sense of place through the social and physical conditions that they set for children.

**Social conditions.** Teachers arranged the social conditions which shaped children’s sense of place. Teachers determined how they worked with children and how children worked together during different activities. Depending on the educators’ goals for children’s learning, some activities would call for children to work by themselves, others for children to interact in small groups of two to four children, while others would call for the large, whole class group. Then there were times when teachers would work with children one-on-one.

One-on-one interactions and those in small groups allowed teachers to work closely with the children, have intimate conversations with them, and learn about children and their interests (Scarlett, Interview, 2/3/14). Kaitlyn said that with small groups “we can really have a more intimate conversation. We can do a lot of talking, you know. … there will be sharing moments (Interview, 2/6/14). Kaitlyn believed that she and children had more opportunities to have “sharing moments,” or chances for a child’s voice to be heard, when in small groups. Anna concurred stating that small group and one-on-one opportunities gave children a space to express their feelings, thoughts, and ideas (Interview, 2/3/14). In these types of social arrangements,
children did not need to compete to have their voices heard as much as they might in large group settings. The teachers talked about how it was relatively easy to see what the children were interested in and how connected they felt to a place when they worked with children one-on-one or in small groups.

While one-on-one and small group interactions had their benefits, Scarlett spoke to the value of large group interactions (Interview, 2/3/14). She explained that working with the large group, or whole class, was good for establishing a shared group experience and identity. When they took class trips around the school, out to the neighboring park, or to different community locations, they had a shared group experience. They engaged in conversations with each other while on their trips. Both teachers and children pointed out interesting observations to each other. They took those experiences back to the classroom where they reflected on and reenacted that experience in different ways, either with or without prompting.

For example, Scarlett said that when they came back to the classroom after a visit to the local grocery store, she was intentional about engaging the children in class discussions about what they observed at the store and facilitated conversations about local and nonlocal foods, composting, and gardening. She encouraged the children to reflect on their experiences at the store and related their comments back to their school garden. She documented what they said, usually by drawing symbols or pictures in addition to writing words, on large poster paper while they spoke. The poster gave children a visualization of their thoughts and served as a reminder of their trip and conversations. Even without prompting on her end, she found that children would talk about their trip with one another in the classroom and on the playground. She observed children pretending to be at the grocery store during their make-believe play, and believed this was an indication that the prior lessons and experiences resonated with them.
Scarlett felt that these large group experiences contributed to their connectedness to the place and each other, and said it was essential to have a balance of large and small group interactions for learning (Interview, 2/3/14).

Evelyn observed that many of the teachers with whom she worked usually set specific social conditions, such as group sizes for activities, but that they were also flexible (Interview, 1/30/14). The teachers were open in allowing different people—volunteers, interns, family members, teachers, and student assistants—to engage in the teaching and learning processes. It was not uncommon for parents to come to the classroom to share about themselves and their families’ backgrounds, such as cultural traditions (Observation, 2/20/14) and home recipes (Observation, 3/6/14). As people are a part of children’s understandings of places, working with different individuals affected their sense of place.

Additionally, Evelyn spoke about how she noticed that the social conditions would change when teachers moved between being “a developmental Piagetian teacher as a facilitator, to a more Vygotskian teacher as a participant” throughout the year (Interview, 1/30/14). Children’s sense of place were influenced both by teachers leading activities and teachers learning together with the children. When Sophia taught her children about varying sand grain sizes from three different beaches (Video, 11/15/12), and Mia taught her children how to plant seeds in their school garden (Video, 1/23/13), they served as facilitators in the children’s learning process. Sophia knew how the three different sand grains varied in size and Mia knew of the planting process, and so both teachers taught children about those concepts and processes. When teachers were out on trips, like at the lo’i they were participants; they learned with the children about Hawaiian legends, how to “feed” the soil, and how the water flowed from one patch to
another (Observation, 2/19/14). The social conditions in which children learned were affected by the different people and those people’s interaction with children.

**Physical conditions.** With regards to the physical environment, teachers were instrumental in the physical layout of children’s learning environment. They arranged the physical conditions which shaped children’s sense of place. Within the classroom, teachers positioned furniture and other materials to create centers, or specific function areas. Many of the teachers gave children their own place for displaying the representations they created or storing items from home they wanted to bring with them to school, such as their favorite toy. They decided which materials and toys to include in the classroom. The teachers also decided where they would physically have their lessons take place, whether it was another classroom, the school yard, or surrounding community. Evelyn spoke about how she preferred to have lessons both inside and outside of the classroom depending on her goals (Interview, 1/30/14). The physical conditions in which lessons took place influenced the way children learned. If the teachers wanted the children to learn about gardening processes, taking them outside to feel the dirt, water, and plants gave them a different experience than reading a book about gardening to them in the classroom (Mia, Video, 1/23/13).

In the classroom, elements like décor affected the learning experience. Jake mentioned that he liked to include items that were interesting for children in the classroom, or other things that children could relate to which were usually things from home (Interview, 2/4/14). Jake included children’s pictures with their families in his classroom to create a “homelike” environment for the children. Like many of the other teachers, he wanted school to be a second home for them. As such, the classrooms had sofas, lamps, rugs, and throws like you could see in a home. The teachers included cultural pieces that families brought to honor children’s different
backgrounds. They had pictures of children and their families in frames on the end tables and hanging on the wall (Observation, 2/20/14). Having items from home created a sense of community and comfort for children, which Jake believed helped children learn. When children were comfortable and happy, they did not have much to worry about; there was not much that impeded them from making connections to their place, others, and learning.

The teachers and children at UHMCC and Maui Preschool shaped their schoolyard to encourage learning and teaching in various ways. Both the UHMCC “Big House” and Maui Preschool campuses housed school gardens that children, teachers, and families made (Observation, 4/15/14; Observation, 4/4/14). At the “Big House,” an outdoor learning space named the Hale, which means house or building in Hawaiian, was also located on the schoolyard. In another area of that schoolyard, there was an area for the chickens that the children and teachers raised. The playground also housed a replica of a stream located in their community. When this study took place, they were in the process of creating a lo‘i, or taro patch. The schoolyard’s outdoor learning place helped teachers extend lessons on irrigation, gardening, and raising animals right outside their classrooms. Teachers believed that the children took pride in caring for the plants, animals, and playground when they could gain access to them daily and easily (Scarlett, Interview, 2/3/14).

**Place-based education takes place at school, in the local community and environment.** Place-based lessons occurred at the school, in the local community, and in the local environment.

**School campus.** Teachers situated some place-based lessons at school. Several of the teachers at the UHMCC “Big House” location used the garden located in their schoolyard for place-based lessons. Children learned how to plant seeds. They cared for the plants, monitored
plant growth, and recorded their observations (Mia, Interview, 2/6/14). When the plants matured, one class picked some of the greens that they planted for a cooking lesson (Scarlett, Interview, 2/3/14). During one lesson, Scarlett took the children to the garden to investigate the properties of rocks and dirt. The children investigated the soil and dirt directly by touching and comparing the soil already in the garden bed and the new soil that they planned to transfer to the bed. With her class, Charlotte used the garden as an observation point from which children noted which insects and bugs were on the plants and in the garden, and the class discussed which were good or bad for the plants (Interview, 1/31/14). For another lesson, Mia took some of her children out to the garden to examine the attributes of different pumpkins and talked about the plants’ lifecycles (Video, 1/23/14).

Basing her lesson at the patch of grass next to her classroom, Mia created a lesson on identifying the differences between grass and weeds (Interview, 2/6/14). The children investigated, discussed, and documented their findings. Mia had pictures of, books about, and tools for examining grass and weeds. She created a picture graph for children to mark what plants they thought were desired (i.e., grass) and undesired (i.e., weeds). At other parts of the schoolyard, Charlotte and Jake used the stream that the children and teachers made on the playground to encourage discussions about their class visits to the nearby stream (Interview, 1/31/14; Interview, 2/4/14). They also talked about the stream water: where the water came from, where it went, and how it sustained other animals’ lives.

Teachers, Kaitlyn and Sean, being located at one of the satellite sites took a different approach to place-based lessons around their school campus. They frequently took children around the larger elementary school campus, beyond their preschool playground. Kaitlyn and Sean wanted the children to become familiar with their surrounding place. During one
observation, Sean led the children on an adventure where they followed the water pipes at the school because one child asked where the water pipes led which evoked curiosity from the other children (Observation, 3/13/14). On their trip, they made and documented their observations of what was located on the school property such as gardens, animals, trees, and mounds of dirt.

Another place-based lesson that took place at the school place was when a visitor came to tell the children stories and legends (Observation, 2/20/14). The storyteller shared legends about Hawaiian gods and goddesses to teach children moral lessons and provide explanations about how lava, volcanoes, and mountains came to existence on the islands. The lesson extended the discussions that teachers had with children about Hawaiian culture.

*Local community.* In addition to the school campuses, place-based lessons occurred within the local community. While describing place-based education, Emma said “place-based education is when you connect what children are learning with where you are and the community around you” (Interview, 1/31/14). Emma believed it was important for children to learn about their community which involved nature, community centers, restaurants, and people in the community (Interview, 3/13/14). The interpretations along with the implementation of place-based lessons varied across teachers and some examples of local community places from which place-based lessons took place included fire stations, grocery stores, the zoo, the aquarium, and the surrounding university campus.

Charlotte recalled a time she had to take the class guinea pig to the community’s veterinarian’s office when he got sick (Interview, 1/31/14). Charlotte recorded her experience and shared with the children the duties of a veterinarian. Charlotte facilitated conversations around the veterinarian’s office and the different animals that they had at the school, and used that as an opportunity for further conversations about different community workers.
At times, the ideas for place-based lessons arose unexpectedly. Emma shared how a lesson came from an incident where children noticed that a kitten was stuck in a tree located in their playground (Interview, 3/13/14). The teachers encouraged children to brainstorm solutions on how to help the kitten. The children decided that they should call the fire department and witnessed fire fighters save the kitten. From that incident, Emma recalled the children being highly interested in the fire fighters. They were pretending to be them during dramatic play. Emma and her teaching partner Amanda overheard the children excitedly talking about the fire fighters on numerous occasions.

Subsequently, Emma and Amanda decided to help them make that connection to the community. Amanda expressed how she wanted to have children not only learn about fire fighters, but to also build a relationship with them (Interview, 3/13/14). Emma and Amanda took the children to visit the fire fighters several times. It was easy for them to take the children to the station as it was right down the road. The children learned about the different things that the fire fighters did. They got to see their station, equipment, and truck. While at school, the children looked for the specific truck assigned to that station—Engine Number 29—every time they heard sirens. Emma explained that it was an experience that she and Amanda extended since the children became very connected to fire fighters. The fire fighters and the station was a constant conversation topic. They continued the conversations and used those opportunities to talk about different workers located in their community. They changed the classroom activity centers and included materials, like fire fighter costumes and toy fire trucks, to support children in remembering the experience and encourage conversations about community workers.

As a different example, Scarlett liked to tie in food with her place-based lessons (Interview, 2/3/14). She stated that they gardened and cooked at the school, but she wanted the
children to also “look at our larger place, farmer’s market or Whole Foods to learn about local and organic foods … look at what’s around us and that is accessible” (Interview, 2/3/14). She wanted the children to experience the grocery store in a different way than they normally would with their families, so she set up tours with the various workers at different grocery stores. The workers explained the different food products that were in the store to the children. They talked about organic, local and nonlocal foods. While at the Whole Foods grocery store, Scarlett compared the different herbs and greens to the ones that families have brought into the class or to the ones that they grew themselves in class or out in the school garden (Observation, 4/2/14). She also invited parents to be a part of the experience and to share their thoughts about cooking and gardening. At the store, children got to touch different plants and fruits, and the tour guide talked to them about different products and where the products came from. From visits to the grocery stores, Scarlett wanted the children to know that there were many resources and good people within their community.

For the children at the UHMCC schools, the university campus was a part of their surrounding community that the teachers often had the classes visit. Sean and Kaitlyn took children to the university campus several times. One of the trips’ purposes was to visit children’s parents who worked on campus so that the class could learn about what their classmates’ parents did for work (Observation, 2/10/14). They learned more about each other and their backgrounds. The other purpose of their trip was to have children find the different art sculptures at the university, take pictures of them, and have discussions about the different characteristics and then compare them to the sustainability artwork that they were creating in class.
During one observation, Jake and Charlotte decided to take the class on a walk to see if the children could identify different plants throughout the university campus (4/17/14). They were teaching the children about different plants and wanted them to learn more about the plants that live in Hawai‘i. Jake and Charlotte handed each child a picture of a plant and asked the children to search for their specific plant on their walking trip. The children looked from their pictures to the different plants to see if they matched, and whenever they found a match they would exclaim with excitement that they did. Jake and Charlotte would then review the plant with the class. When they came back to their school, Jake and Charlotte talked to the children more about the different plants that they saw and asked whether they saw those plants anywhere else. The teachers felt that taking the children to different community locations helped them create strong connections to that community.

**Local environment.** In addition to using school campuses and local communities, the teachers situated place-based lessons within the local environment. They created lessons that included places such as the beach, ocean, streams, canals, and gardens. Lessons about the beach were common across classes. Living in Hawai‘i, many of children were familiar with the beach. Sophia talked about how she found several of her children talking about the beach while they were in the sandbox located in their playground (Interview, 2/24/14). The children were pretending that they were at the beach, and Sophia brought a book on the seashore to the children. She then brought different ocean books to let the children look through them and see what they were interested in. Sophia asked them questions about what they did at the beach and the children talked about swimming, fishing, and building sandcastles. From there, Sophia created a unit on the shoreline. They talked about the shore and the sand at the beach. They went over different types of sand grains and varying locations where sand was found. The
children compared the sand at school, the beach, and their homes. Sophia talked about how this unit helped the children learn more about their local environment, which included their home with their families, the school, and the island.

Other aspects of the local environment that teachers explored were the nearby streams. Several teachers, Jake, Charlotte, and Anna took children on trips to the stream to investigate which way the water flowed and what they could find within and around the stream (Interview, 2/4/14; Interview, 1/31/14; Interview, 2/3/14). Jake shared, that:

> Learning about the stream is really great because it connects everything. We can go back to the water and we can see how water connects with everything. You need to protect the water because it … affects everything along the stream. Then we can use that argument for a whole series of things in relationships and things like that. And when we connect it back to the stream, they understand that. That’s why we have a model of the stream on the playground. (Interview, 2/4/14)

After spending some time on learning about the stream, Jake felt that children knew a lot about it. Having recreated a replica of the stream on their playground, the children had a concrete reminder about the stream and easy access to revisit what they learned. They learned about the stream that was located right in their local environment and could use what they learned to apply that to other streams on the island, and to various concepts about how different plants and animals are interdependent on one another.

Furthermore, Charlotte and Jake took children to the local lo‘i or taro patch several times. They created lessons about the lo‘i to teach the children about the plant’s lifecycle, gardening, and cooking. They also connected the information about the lo‘i to information about the stream that the children already learned about. Charlotte shared:
[The children] planted and harvested kalo and then we used it in cooking in the classroom …. We made a mural up on the board with the different stages of kalo and then a goal is to recreate the lo‘i on the playground. So we already have the recreation of the Mānoa stream on the playground and then it ends at the beach. And so just down in that area there are some garden boxes and so Jake and I were hoping that the children are going to turn those into a lo‘i patch. That’s the goal. (Interview, 1/31/14)

Not only did Charlotte and Jake take the children to visit the lo‘i patch, they created ways for children to continue learning back at school. They created a mural together in the classroom and planned to make their own lo‘i on the school playground.

Charlotte also took children to explore the different gardens in their surrounding local environment. The children were already familiar with the garden at their school, and Charlotte wanted them to learn about different types of gardens. She took the children on walks to the Japanese garden to show them that, unlike their garden at school, this garden was not for growing plants. The Japanese garden was a landscaped area with water, fish, rocks, sand, stone lanterns, plants, and a bridge. The children learned about how the garden connected to the nearby stream through a water pump system, and got to observe it directly. Charlotte took the children back to the garden several times so that children could make multiple observations and gain several experiences to help them connect to the place.

In addition, Sean elaborated on his early place-based lessons at the nearby park and canal. Sean believed that preschoolers learned and retained information best when lessons were hands-on, when children could physically visit places. He enjoyed being able to point out the different plants and animals at the park to the children when discussing how trees grow and what animals cohabitate in the area. At the canal, Sean said that he liked explaining the concept of tides and
water flow when the children could observe the varying water levels from visit to visit. Sean stated that he, his co-teacher Kaitlyn, and the children would document their observations of the canal while they were there. When they went back to the classroom, he and Kaitlyn engaged in conversations with the children about the canal. Kaitlyn also had the children represent what they understood about the canal by having them draw a large map. Kaitlyn found it interesting that children included depictions of trash in their map and how the children, through conversations, frequently brought up how trash was commonly seen in and around the canal which led to projects on sustainability throughout the year. Sean and Kaitlyn used the experiences with those places to build children’s science, mathematics, linguistics, social, and other domains of learning and development. Sean mentioned that children could learn about all the different concepts he and Kaitlyn wanted to teach inside the classroom, but that children “don’t really grasp [information] as well as when we go outside and see it actually happening” (Sean, Interview, 2/6/14).

**Place-based education content.** Early childhood place-based education content varied. For most teachers, their thoughts on place-based education changed over time which affected the content they chose to cover. Many of them spoke about how they wanted to relate things to children on a concrete level in order for them to build a foundation before moving to more complex ideas or introducing them to broader areas beyond what was immediate.

**Learning about the self.** For young children, Emma explained that the children should learn about themselves first before their surrounding environment. Emma believed that people are a part of places, including the children themselves, and so she wanted each child to be aware of the “self.” In describing place-based education, Emma stated, “We wanted to branch out to the community, but we focused on [the children] first” (Interview, 3/13/14). In Emma’s class,
the children learned about themselves, their bodies, and their unique characteristics. They traced their bodies on large poster papers. The children also observed their own faces and then drew them. Emma facilitated activities on children’s “favorites”—favorite animals, activities, colors, for example—to show that they could have different preferences from one another because they were different, unique individuals. Emma stated that the major purpose of her “Me, Myself, and I” curriculum was to have children learn about who they were so that they could then start to understand how they were a part of their place or places. When children focused on themselves first, they would have a basis to compare how they related to the surrounding physical environment. Emma stressed the importance of the children having those understandings about themselves before she “branched out” to include topics about the school, their homes, and the surrounding community and environment.

*Content including children’s backgrounds.* The educators shared how the content of their place-based lessons incorporated children’s backgrounds. Sean talked about how including culture is important in Hawai‘i because there are so many children from different places, from the mainland and other countries (Interview, 2/6/14). He believed that the teachers and children needed to learn more about each other before teachers could create lessons that could be meaningful to how they viewed their place together. Amelia also spoke about how valuable it was to create a home-school connection in order to contextualize learning for children (Interview, 2/3/14). She stated that children brought their backgrounds and experiences from their home lives to the class. So, if the teachers could relate what they are teaching to that which children were familiar—their backgrounds—it helped the children understand the material better than if they had nothing to contextualize the new information (Amelia, Interview, 2/3/14). Correspondingly, Mia stated, “I try to keep it close to home” (Interview, 2/6/14). Like Sean and
Amelia, she believed that every child was different because his or her experiences at home were unique. The children brought their unique experiences and backgrounds to school, and “they talk about it, or express interest in it,” and end up sharing it with the rest of the class (Mia, Interview, 2/6/14). Mia often took interests that came from children’s backgrounds and added them to her curriculum so that children and their families could learn from each other. One child, for example, shared about lion dances around Chinese New Year—a tradition that he and his family were a part. Mia took that as an opportunity to educate other children about this practice and encouraged that the other children and their families share how they celebrated the new year.

Similarly, Charlotte shared that her class learned about each other and where each of them were from, before exploring other topics. Charlotte discussed how it was necessary to bring in the cultural backgrounds of all children to the classroom because even though everyone in the class lived in Hawai‘i, each of them had different experiences of what living in Hawai‘i meant. Those experiences were affected by their cultures and where their families originated. She had children create posters about where they were from, that addressed who they were and what was special about them. As a part of their sharing, Charlotte believed that the parents and families needed to be involved. Charlotte created a unit that was on breads from around the world based on where the children were from, and Charlotte had the children work with their parents in obtaining special bread recipes that were “cultural to their family” (Charlotte, interview, 1/31/14). By having the children work with their families, Charlotte believed that it brought each child’s background into the class and that it helped them all come together. It assisted the children in establishing a place at the school, in their class that had a piece of everyone, including their families.
**Plants in the environment.** As mentioned in previous sections, some other content examples of place-based lessons were related to plants and gardening. Most teachers used a variation of “seed-to-plate” unit for their place-based lessons. Their activities and lessons included planting seeds in peat pellets in the classroom, caring for the plants and observing them grow, transplanting plants to the school garden, tasting and cooking with the herbs that they grew, and visiting local farms and grocery stores (Scarlett, Interview, 2/3/14). Another teacher also focused on gardening and covered information about identifying and sorting seeds, grass, and weeds (Mia, Interview, 2/6/14). Moreover, Charlotte used the school garden to teach children about harmful versus helpful bugs and insects for plants. Through these activities, the children learned about what was needed to help plants grow. They learned about the cycle of planting seeds, growing plants, and cooking and eating plants.

**Abstract concepts.** Although most place-based education content focused solely on the surrounding physical place, Charlotte believed that children’s immediate surroundings could be a basis from which children could start learning about abstract concepts. For example, Charlotte spoke of how she and her class were having a conversation about civil rights around Dr. Martin Luther King Jr. day (Interview, 1/31/14). The class talked about how Rosa Parks faced discrimination on buses because she was African American and not allowed to sit at the front of the bus. One child, Jason, made a connection between discrimination and the shuttles that ran routes in the university community. Jason said, “I know something about buses. I know something that happens today that is not fair. Children can’t go on the Rainbow Shuttle” (Interview, 1/31/14). From Jason’s comments, the other children became curious about whether Jason’s claims were true. Charlotte decided that it would be interesting to take the children on an expedition to test Jason’s claims. They walked onto the university campus where one of the
major Rainbow Shuttle stops was located. While the class was at the shuttle stop, they decided to ask five different shuttle drivers about whether children were allowed on the shuttle. One by one a shuttle would pull up to the stop and some of the children would approach the driver and ask, “Excuse me, can children go on the shuttle?” and then run back to the rest of the group with the driver’s response. Charlotte explained that the children would be so excited and exclaim, “what did he say?! What did he say?!?” The class received different answers from the drivers but in the end learned that as a young child you would need an adult with you to ride the bus. Some of the children believed that was not fair and a form of injustice. Jason thought that he was correct—that young children could not go on the shuttle—because the whole class could not go on the bus together, and another child, Ashley, challenged Jason’s claims by saying that young children could ride them since she rode the shuttle with her mom in the past. Then, different children started sharing their personal experiences with the shuttle and other buses. The experience at the Rainbow Shuttle stop continued the conversation about fairness and the children were “really into it” (Charlotte, Interview, 1/31/14). Charlotte said that following the experience, on a different day, she saw the children sitting together on one of the mats in the classroom and they had big building blocks all around them. The children were playing the “Rainbow Shuttle.” They were pretending that they were all going on a field trip on the Rainbow Shuttle, representing their experience at the shuttle stop in their dramatic play.

Charlotte explained that this lesson was place-based because the university campus and the shuttle stops on campus were located in their place. Many of the children were familiar with the university because their parents were affiliated with the university either as students, staff, or faculty and so the children visited the area often. She used the physical place to further their discussion about inclusivity. Charlotte felt that Jason’s connection sparked a place-based lesson
that stemmed from more abstract and complex ideas than what she would normally view as being place-based at this age level.

**Local places, culture, and legends.** Through the interviews, the educators talked about the importance of including the local culture and values in their instruction. As Evelyn stated, "Hawaiian culture is tied to the physical environment, and the legends and stories, the language, food, and plants …. We have to maintain responsibilities in Hawai‘i: to respect the culture that was here before and to co-create a new experience" (Interview, 1/30/14). Ways that teachers showed the value of including local culture were by planning lessons around or creating opportunities for children to learn about topics such as lo‘i which are irrigated terraces, especially for kalo, or taro (Van Dyke, 2008), and ahupua’a which are political land districts that usually stretch from the mountains to the sea (Van Dyke, 2008).

In the excerpt below, Anna explained the emphasis on Hawaiian studies and provided an overview of the different topics that the various teachers at UHMCC explored:

We were able to add the lo‘i. … Once we were able to add that part, the Hawaiian studies … started to come together. Because we’ve done some field trips already. We’ve gone to … the Castle home up in the valley which is really nice. It has a heiau there. It has a beautiful view of the valley. So you could look at the ahupua’a from there. And same from Pu‘u Pia. The little hill right there that’s between the two. The amphitheater of the valley in the back. There’s a little pu‘u that you can hike up and look at the whole valley. So we did a lot of hiking, a few bus trips, and incorporated it back into the classroom and there was a lot of recreating. Initially we also worked on volcanoes, and we built the volcano that’s in the playground which has turned into the source of our stream, which then becomes the lo‘i that the children made. They built it themselves.
after having gone to the lo‘i. So they recreated their experience that they just had and
starting to role-play or be you know, involved in their environment in a different way, not
just the environment but recreating it for themselves. … We studied this place,
this Mānoa ahupua‘a. We decided to start doing not just lo‘i but gardens, Hawaiian
gardens. Gardens in this valley were the most prevalent thing that was here at one point
in time, Hawaiian and Chinese planters. But really Hawaiians were more gardeners than
they were—the way we describe farming like on the mainland. It’s different. It was a
part of their lives every day. So we wanted it to be part of the children’s lives everyday
too. But we would do specific activities in the classroom and bring it to a more critical
conceptualization for them to build on more specifics. You know like bringing in – I
mean if we were doing art, we might be doing art elements and then once we do that, take
it back outside. And work with it outside. And then in the summer we moved to the
ocean. So we went all the way from the top of the mountain down to the ocean, and then
we went into the ocean. And the fact that they live in Hawai‘i, a lot of them are just
learning English because they’ve just arrived, and they’re from Asia, or India, or Africa,
anywhere. So in getting that sense of place I thought was really appropriate because even
though they’re from someplace else and their understanding of what we might be saying
is limited, they certainly do refer to things [that we learn about in school] …. However,
they understand now a whole lot about what other cultures need, not just here. So we
kind of went from our own sense of place with that class to what other cultures
experience. Because there were so many children who could share where they came
from. You know, like “in my home in Korea, this is what we do during Chinese New
Year.” And then the parent would bring in a costume, read a story. We always get the
parents to come in as much as possible, maybe cook something, or teach them a
song. One family taught them a game that they played as kids. So they’re touching back
to their roots at the same time. But anyway that’s pretty much how it started. It was an
ongoing process. (Interview, 2/3/14)

Anna emphasized how critical it was for children to learn about Hawaiian culture—to
learn the history, explore the land, and recreate that knowledge. The children needed to have an
understanding of these elements that are parts of the land to start thinking and learning about
where they stand in the place so that they could connect to it. She and the other educators valued
the hands-on experiences and took the children on walks and field trips while explaining the
history of and information about the different places to the children. They wanted children to
explore the land by encouraging the children to play in the areas and wonder about the places,
hoping that they become curious and interested. The educators guided children through activities
that would build their understanding of the places, by having them engage in artwork and
recreate their own versions of the different places they visited on their own playground. Anna
explained that the goals of the teachers were to not only have children learn about the local
environment and culture, but to also tie that knowledge with children's own backgrounds and to
involve their families.

The two main teachers who created lessons on the lo‘i were Jake and Charlotte. Jake and
Charlotte were invested in exploring the lo‘i in a variety of ways to teach different concepts to
their children, and to have children learn about Hawaiian history and traditions, making them a
part of the local culture. In one observation, Jake and Charlotte, took the children to the
nearby lo‘i (2/19/14). The lo‘i was located on the other side of the university from UHMCC
within walking distance. When the children and teachers arrived at the lo‘i, Auntie Jane, a
worker at the lo‘i, approached the tent and introduced herself. She started by singing a morning song that contained a few Hawaiian words and asked the children to sing along. After the song, she asked Jake what they were interested in getting out of the visit. Jake explained that the preschool had taro plants growing and that they wanted to create a model of the lo‘i like the one they were visiting.

Jane then began to explain to the children where the lo‘i came from. She taught children different Hawaiian words with associated hand gestures. For example, she made a motion with her hands and arms that started from mid-torso and extended outward and said “papa.” Telling the children “papa” meant earth. She then extended her arms, above her head and motioned downwards while saying, “wakea” and explained that “wakea” meant sky. She told the children that “papa” and “wakea” came together to create “babies” which she explained were the islands of Hawai‘i. She then had the children count to eight. The children counted to eight and Jane paired each number with one main Hawaiian island: Kaho‘olawe, Hawai‘i, Ni‘ihau, Kaua‘i, Maui, Moloka‘i, Lana‘i, and O‘ahu. She went further to explain how “wakea comes together with ho‘ohokukalani, meaning stars, to make taro, or Halo haka lo kapali.” Jane also said that they came together to make Hāloa kanaka which are all of the people of Hawaii. She told the children that they need to take care of one another, the earth, sky, land, everything. Jane said mālama ‘aina: take care of the land. After Jane told the children the story of how the taro was created, she asked them to find and collect leaves and to put them in a bucket that she placed on the dirt. The children were given about 10 minutes to collect leaves.

When the children filled the bucket with leaves, Jane explained to the children that they would be throwing the leaves into the lo‘i to “feed” it and that they would also be walking around in the mud to help push the leaves into the mud. The children chose whether or not they
wanted to get into the mud. The children who wanted to walk around in the mud got to do so, while the other children went with Jake to another area of the lo‘i and sat down on a small hillside. Jake reminded his group that their intention was to eventually build a lo‘i of their own at UHMCC and pointed out the structure of two lo‘i patches. He asked the children to look at where the pipes were located within each patch. He directed their attention to how the pipe was secured, explaining that the grass and dirt held it in place. He then referred to the holes of the pipes as “maka,” or eyes. Jake told the children how there were two maka in every patch. One that brings water into the patch and one that drains the water. He recapped by saying that there were two maka, and that they now knew how to keep the maka in place, and that they could use leaves to “smash it into the ground.” Jake asked what purpose the leaves served and the following exchange between Jake the the children occurred:

Jake: How are we going to do that on our playground? What happens to the leaves when you stick them into the ground?

Child: Eating them.

Jake: Who is eating them?

Child: Kalo!

Jake: How does the kalo eat the leaf? It doesn’t have a mouth.

Child: Kalo comes up and eats it with its mouth.

Jake: I have never seen a kalo with a mouth. It is not an animal. Here’s my question: what happens to the leaf? What happens to the leaf when you stick it into the ground?

Child 2: I think the people is pushing into the leaf.

Jake: And what happens when the leaf gets pushed into the mud?

Child 2: They eat.
Jake: Who eats?

Child 2: The lo‘i.

Jake: The lo‘i eats it? And turns it into?

Child 2: Mud!

Jake: Mud? The leaf is going to decompose. Peter, there is a pile near your campus that
you like to climb on a lot by the green box. What is that pile?

Child 2: The compost pile.

Jake: The compost pile. What happens to the leaves in that pile?

Child 2: It disappears.

Jake: They don’t disappear. What do they do?

Child 3: They decompose.

Jake: They decompose and they turn into?

Child 3: Compost.

Jake: But what is compost then?

Child 2: Compost is when it is dirt.

Jake: Ahh! So the leaves decompose into dirt. That’s what it’s doing here. The leaves
are decomposing into dirt. The water on top of it turns it into mud. Right? You got
it? So in our lo‘i on the playground, we’re going to have to get water in
there. And? And?

Child 1: Dirt!

Jake: Oh cause we already have dirt? But we gotta feed that dirt. So how are we going to
feed that dirt?

Child 1: Water!
Jake: And?

Child 2: Leaves!

Jake: Leaves! That’s right. So we’re going to put the leaves in. We’re going to grind them into the ground so that they can create compost and then we’re going to put water on top of it and then we have the delicious mud—the healthy mud—so that we can plant our kalo. Okay?

Children: Yay!

Jake: Got it? So we got two things that we have to do. What do you think we have to do? What two things do we have to do [directing is question to a different child]? Do you remember?

Child 4: Compost.

Jake: We have to compost the inside and we have to make the maka. Are you ready? Let’s go see over there so that we can see how it works.

Jake and children left the little hillside and walked towards some of the other lo‘i patches that were closer to Charlotte and the rest of the class. As the children were walking from one lo‘i patch to another, Jake pointed to a maka and said “So that’s one maka. Where’s the other maka?” The children point to the corner that is diagonally across from the first maka. Jake repeated this process, pointing at and then questioning about maka, in two other patches. Some of the children were able to point out where the maka were located. Jake stopped walking and asked the children who were following him to look at his clipboard. He flipped his clipboard so that the back of it was showing. He had a piece of paper that was taped to the back of the clipboard and compared the rectangular shape of the paper to the shape of the lo‘i patch. He asked, “if this is one maka [pointing to one corner of the paper], where is the other maka?”
Some of the children pointed to the corner diagonally from the one Jake pointed to, while others pointed to different areas of the board. Jake then pointed to different corners to see if the children understood where the second maka were supposed to be located. As Jake was doing that, the two children who were furthest away from him were observing the lo‘i patch next to them. One of the children said to the other, “there is a maka here. Look, Jason.”

Jake and Charlotte brought the children to the lo‘i to show them what lo‘i look like and to provide them with experiences to learn about Hawaiian stories, plants, and irrigation. Through his interaction with the children in this lesson, Jake talked children through what they should consider when building their lo‘i on their campus playground. He explained the purposes of gathering leaves, composting, and water pipes. Jake related what they were learning about at the lo‘i back to concepts they knew about at school: putting the leaves in the patches were nutritious for the plants like the composting they did back at school. He used the Hawaiian word "maka" to describe the water pipes, giving children another way and different vocabulary to think about the pipes: the holes of the pipes as eyes and there being two of them in each patch. Jake directed children’s to look at the pipes and through his verbal exchange with them, explained that they were "pipes" in English and connect it to the word "maka" in Hawaiian. He walked children through the different patches to point out the locations of the pipes and drew a diagram on his clipboard to reinforce that information in a different way. At the end of the observation, one child stated to another while pointing to one of the pipes, "there is a maka here. Look Jason" imitatating Jake, a possible indicator of him learning from what Jake modeled as he was able to transfer that experience.

Jake and Charlotte provided children with the hands-on experiences with planting and caring for kalo at the lo‘i patch. They used visits to the lo‘i patch as a basis for other lessons
within the classroom and on the school playground. With cooking, art, gardening, and building activities, Jake and Charlotte found different lessons to link to their experience at the lo‘i and were intentional about creating ways to remind children of their experiences. Creating a communal mural for the classroom and working on a replica of the lo‘i on the playground, Jake and Charlotte helped the children contribute their individual efforts while also encouraging them to work together to make collective representations that everyone could enjoy.

Similar to the lessons on the lo‘i, Charlotte talked about her unit on the ahupua‘a. During her interview she stated:

[We did a] whole long, big project about the ahupua‘a and took [the children] there and asked, "Where does the water come from? Where is the water going?" Those kinds of questions about following the stream. That was really fun. That was within a bigger idea of a garden system so we were looking at garden systems along the stream. And we started with our school garden so we had a butterfly garden and we did the whole life cycle of a butterfly. Then we looked at our food garden. The seed-to-plate concept with the food garden. After that, we looked at the Japanese garden and how that is not a food garden which is up on campus. We took them to the lo‘i where we worked in the taro patches and saw the connections between the Japanese garden at the stream and followed the stream from there. (Interview, 1/31/14)

Charlotte provided opportunities for the children to gain direct experiences with the ahupua‘a in which they are a part. They explored the stretch of land from mountain to sea, looking at the water flow and path of the stream. They talked about agriculture and how it compared to other systems that they already learned about. Charlotte aimed to help children learn about varying gardens and the multiple uses of gardens in the places that they have
explored, extending their knowledge about how one similar term, “garden,” can have so many different purposes and goals.

Another way of including the local culture in place-based education was by building relationships and sharing stories and legends that have origins Hawai‘i. Relationships and social connections are a big part of Hawaiian culture (Yamauchi, 2011). During one of the classroom observations, a visitor, Auntie Val, was invited to share some stories with the children (Observation, 2/20/14). Auntie Val first introduced herself to the children and then asked the children to introduce themselves. After the children stated their names, Auntie Val repeated it and created a motion to go along with his or her name. The children in the group were asked to repeat each name and act out the corresponding motion.

After the introductions, Auntie Val brought out her puppet “friend.” The "friend," named Olu, had a coconut for a head and a face that was painted onto the coconut. Olu had yellowish, orange straw hair. Auntie Val proceeded to tell the children a story about how Olu loved to race her brother Keoki. When Olu won the races against Keoki she would chime that she won and that she was the best. Auntie Val explained Keoki’s reaction after hearing Olu’s chants: he would make a "funny face," with his lips turned down. Auntie Val asked each of the children to make a face of how they thought that Keoki may have felt after hearing his sister sing a song like that to him. The children imitated sad faces.

Auntie Val continued the story, telling the children that Keoki and Olu had a ball and Olu kicked the ball further than Keoki. After playing with the ball, Olu sang the same song about how she won and that she was the best. Auntie Val prompted the children to act out how Keoki felt after Olu again chanted that she won. The next time Keoki and Olu played ball again,
Olu kicked the ball further than Keoki yet again and sang her victory chant once more. This time Keoki did not say anything and went to his room.

Auntie Val then transitioned to telling the children a similar story. She put the puppet away and told the children what she was about to tell them was a really, really old story: an ancient story of Hawai‘i that involved two beautiful goddesses. One was the goddess of fire and volcano. Her name was Pele. Auntie Val got up and moved her body, telling the children that it was fire. Auntie Val asked the children to do the same to create their own way of fire. Children got up made "fire" movements then sat down. Auntie Val explained that the other princess was Poli‘ahu who was up high on a mountain where it is cold. She is ice and snow. Auntie Val spoke of a frozen raindrop and had the children get up to make frozen raindrop shape.

Auntie Val explained how fire and ice and met. She said that two friends, snow sisters, were on a sled. They went up on the top of a hill and sled down. Even though one won, they all had so much they all just sang together. Pele who was watching said to herself, “I can beat them all” and asked the snow sisters if she could play. They agreed and gave her a sled. They all went down the hill and Pele won. Pele sang her song: “I won. I won. You know I’m really number one. I won. I won. I’m really number one. I am the best.” The snow sisters cheered for Pele having won. Pele wanted to race Poli‘ahu and when she did, Pele lost.

Auntie Val asked the children: “What do you think happened to Pele? How did she feel after she lost the race? How do you think Pele felt?”

Child: “Sad”

Auntie Val: “Why?”

Child: “Because he lost the race.”

Auntie Val: “How do you think Pele felt after she lost the race?”
Child: “She got mad.”

Auntie Val [Asked another child]: “How did Pele feel?”

Child: “She probably wanted to race again.”

Auntie Val: “Pele got so angry she kind of became ugly.”

Auntie Val explained how Pele was angry. There was fire coming out. She stomped. The earth opened up. And there was a lot of lava that came out and went all over the land. The lava was hot and burning.

Auntie Val: “What happened to the trees and plants?”

Child: “Died.”

Auntie Val: “What do you think happened to the trees?”

Child 2: “It fell through the cracks.”

Auntie Val: “They died, fell through the cracks, and burned to smithereens.”

Auntie Val continued and said the land was black. Poli’ahu was sad the land was black and offered for Pele to race again and Poli’ahu would let her win. Pele said no, and was upset. Poli’ahu and her friends fled to the top of the mountain where it was cold. They worked together like a family and sent a big blanket of cold snow over the top of Pele’s fires.

Auntie Val: “What do you think happened to Pele’s fires?”

Auntie Val told the children how Pele thought: I lost the race, I put the fire out, and I lost my friends. Pele never saw her friends again and never got to play with them again all because she was a sore loser.

Auntie Val brought Olu back. She asked the class, “What can I do to get my brother back?” Auntie Val asked the children to pair up with another friend and talk to each other about how Olu can talk to her brother.
Auntie Val: “How can Olu get her brother to come out of his room?”

Child 3: “Put a coin in the door lock and open the door.”

Child 4: “Ask how can I help?”

Child 5: “Say I’m sorry and hug.”

Child 6: “Say I love you.”

A couple of the educators believed that traditions and stories like these formed a foundation for teaching children about their place. Hearing legends about how things came to existence, helped children learn more about the physical land and the culture and history of their place. Children in Hawai‘i tended to be familiar with volcanoes and lava, and through a story like this could relate them to the gods and goddess that are so influential to the culture and history of Hawai‘i. The legends also incited wonder and assisted with developing listening and language skills. The social aspects of storytelling helped children share their perspectives and opinions with other adults and children.

Hawaiian values. The educators brought up how Hawaiian values were important in their interactions with children. They included Hawaiian culture in their lessons with children through their incorporation of Hawaiian values, namely mālama and kuleana. There is so much more meaning behind Hawaiian values than what words can capture, but in attempt to do so and generally speaking, mālama means to care for or to protect, and kuleana means privilege, responsibility, and obligation (Pukui & Elbert, 1986; Van Dyke, 2008). Many of the teachers stated that mālama and kuleana guided their instruction and talked about how they wanted those values to resonate with their preschoolers throughout their lives. One of the teachers, Aubrey, provided her reasoning for including Hawaiian values:
We live in Hawai‘i, you know, it’s our culture. … I’ve been incorporating the values which are mālama and we are working on kuleana. And I feel they’re important because with place-based education in Hawai‘i, we need to pull on our culture. We live it. We see it. We breathe it. We’re involved in it. Emphasizing on the values I think, helps the children to grow. (Interview, 2/24/14)

*Mālama.* To live by *mālama* means to operate from a place of care and ethics: to care for, maintain, and protect ourselves, our environment, and the people around us as we all coexist (Pukui & Elbert, 1986; Van Dyke, 2008). One teacher, Aubrey, talked about how young children were inclined to focus on immediacy, and so teaching children mālama aimed to instill gentleness, ownership, and care. Aubrey shared:

Mālama means to take care in Hawaiian. At this [preschool] age they don’t really understand, you know. It’s “I want it, and I’m going to get it,” even if that means punching, hitting, pinching, scratching. So to teach mālama which also means to be gentle is a great way because then they take ownership of that and they have something that focuses that, “oh wait mālama means to take care,” you know what I mean? It brings them back to the present of knowing: “okay, mālama means to take care, it means to be gentle.” So we encourage that or develop that understanding, they grasp it, and then they practice it. It’s really nice because to see a child from being aggressive and then to learn about what mālama is because maybe they don’t know what that is or have the words to describe what that means, but to see them understand it and to see them apply it is wonderful. Because it’s a value that they’ll carry for the rest of their lives. It’s not just now. It’s forever. (Aubrey, Interview, 2/24/14)
For Aubrey, imparting mālama in early childhood helped children learn to take care of themselves and to consider how their actions would impact the wellbeing of their friends. She stressed that the early childhood period is a time for personal growth and an impressionable period when the values that children learn are not just for the present, but are forever; learning values in early childhood have long-lasting effects.

Aubrey also explained how she created a “Mālama Tree” which was a display for children, teachers, and families that showcased when children practiced and applied mālama at school (see Figure 2 for a picture of the Mālama Tree):

We traced their hands and I did a tree, a Mālama Tree. So when I saw them practicing and applying mālama at school, they would get a reward. They would get a hand and we would write what they did and they were able to hang it and let the parents know and show them. We just rewarded them and encouraged them like, “ohh look at your hand! Your mālama hand is hanging on the tree!” They loved it. They couldn’t wait to show their parents. And eventually it went home. … mālama hands. Some of them were hugging their friends, or if they saw that a friend was hurt they would take them and go get an ice pack. They would help clean up. They would participate when the teacher asked them to do something. They really have gotten it. I’m surprised. (Interview, 2/24/14)
Figure 2. Aubrey created a Mālama Tree that displayed how children showed mālama, or care. When children did something to demonstrate mālama, or extended a helping hand, Aubrey wrote what they did on a piece of paper cut out in a shape of a hand and displayed it on the tree so that all children, teachers, parents, and visitors could see their ways of caring.

In a different class, educators, Sean and Kaitlyn, focused on how children could mālama the environment. Sean explained:

Our main thing is mālama and that’s taking care of each other and taking care of the environment. And I guess one way we see is they kind of take responsibility for not only the environment but for each other. I guess that’s kind of where I would see it. They take responsibility. We pick up trash, we care for plants, and those kinds of things.

(Interview, 2/6/14)
In their place-based lessons on sustainability, Sean and Kaitlyn wanted the children to understand the importance of caring, caring for each other and caring for their place. They showed care by reducing their ecological footprint by removing trash and finding ways to reuse items that people discard. Kaitlyn expanded on how their class cared for the environment:

We observe what they’re interested in within the environment and we go from there. So last year it was the Ala Wai canal. We did this focus study on the water flow and where it goes, and trash. It just went into the whole sustainability and the kids at the end of the year really understood mālama. And they had that deep connection to [the canal] and they were really sincere in wanting to help the environment. Every time we would go out they would go, “look trash” and they’d pick it up. We were always cleaning up and they were always aware of where it goes and they were going home and telling their parents and sharing it. So it was really nice to see that we really not ingrained it in them, but it was through them that they learned. It wasn’t something that we were like, “you’re going to learn this.” It wasn’t pushed on them. It was their interest. It came from them because they were interested in it. And we brought it out. … We would go on walks. So we did a map. We did a whole physical map of the Ala Wai. We drew it out and we took the map out to the Ala Wai and they looked. And looked at what we were missing. It just went, you know that’s the place-based right there. (Interview, 2/6/14)

Sean and Kaitlyn took their children’s interest in the canal and provided them opportunities to visit the canal and learn from their observations. Kaitlyn mentioned that the children learned from their own interests and not because she and Sean forced the topic on them. As a class, they identified trash being an issue in their place, and made plans to rid the environment of it. Kaitlyn
and Sean continued to take the children on walks to the canal and encouraged them to explore the area. The children found and collected trash. Kaitlyn and Sean guided the children through lessons and new opportunities that originally came from the children’s curiosities, by revisiting the canal and having children draw their understandings of the canal.

Sean and Kaitlyn extended the lessons further by helping children think about other ways that the trash in their environment could be used. Kaitlyn recalled how excited the children got about making artwork with trash:

And that was like the following Monday after our field trip to the zoo. And what happened was it was still fresh in their minds, animals and everything, and there was this one giraffe, everybody was talking about how this giraffe was peeing. So it became this big topic. … When we came back to school, there was a bulky item dropped off here in the corner and Sean and I have always talked about taking the kids out into the environment and doing a sculpting activity with trash. You know, going on sustainability and mālama is our foundation so we took the kids out and before we went out, we said, “Okay think about”—we showed them some sculptures on the internet and then we talked about what a sculpture is. We asked them what they knew about it and what they thought these sculptures were made out of and then we said “how about if we made one ourselves?” And they got excited. So we took them out right to the corner and we told them, “Okay we’re going to look for things that might look like an animal” because we knew the zoo, right? You know or something that might look like some animal and the first thing they said was the giraffe. [The trash] was a steam machine. Yeah because here’s the neck. “Look it’s a giraffe! A giraffe!” They got all excited and they were so enthusiastic. As soon as we got [the steam machine] they had to start doing it. I mean it
was them. They were pushing it across the street and we ran it in and we told them, “okay wait we have to do sketches.” And so they sketched it out and some of them were having trouble, you know. So we explained shapes. “What shape would the body look like? What shape does the head look like?” So that’s all the cognitive, and the fine motor, and everything coming into play. And it was all based on you know, our environment, and our experience. So I think it’s really very vital for young children to start their education experience that way. (Interview, 2/6/14)

Kaitlyn and Sean wanted to teach their children to mālama the environment. They used their children’s interests in giraffes that they got from the zoo and used that as a launching point for teaching them how to care for the environment. They talked about what trash was, where it went, and how it affected the environment. Kaitlyn and Sean started discussions on alternative uses for unwanted materials (see Figure 3), and encouraged families to get involved by having them save their “trash” such as unwanted cardboard, plastic, and paper. The class reused what was considered trash or junk from others and that they found within their environment and created art projects out of the materials. Through these projects, Kaitlyn and Sean guided children in making art pieces that were inspired by their latest interests, like the giraffe that they saw at the zoo (see Figures 4-6). They started with basic and progressed to advanced activities, documented their progress, and posted those records for reflection. They created art projects from reused materials to learn about other animals, bugs, and insects like spiders, ladybugs, and butterflies.
Figure 3. Kaitlyn and Sean shared that teaching children about mālama was important in having the children think about how they could care for their environment and community. They incorporated the value in different lessons and brainstormed ideas on how to mālama their place.
Figure 4. The teachers documented their activities then posted those documentations on the walls in the classroom which served as reminders for the children, and information for parents and visitors. This wall contained pictures and paragraphs that explained where the idea of building a model giraffe came from, how they created the model giraffe, and what children thought about giraffes.
Figure 5. The beginning stages of the giraffe artwork. At this point, you can easily tell that the pieces of this artwork are from recycled materials.

Figure 6. This is a picture of their finalized giraffe model. The giraffe is made from pieces of an old steam machine, chair, spray can caps, foam, and other “trash” materials.
By listening to the children and supporting their creativity, Kaitlyn believed that the children gained a foundation that made learning exciting and fun. She wanted the children to enjoy coming to school and to carry that enthusiasm and excitement with them through their later years. When children loved learning and school and felt connected to their place, it strengthened positive sense of place which is what Kaitlyn wanted. Kaitlyn elaborated on her main goal for place-based education:

The main goal is to have the kids become conscious of their environment. That they are consciously aware of their environment and that they can have an impact on it as well. You know, they can make a difference. I think that’s the main goal for us is that they have a connection and an understanding of their environment. (Interview, 2/6/14).

One child that came to mind for Kaitlyn was Solomon who had moved on to kindergarten. Kaitlyn talked about how meaningful it was for her when Solomon made her a card thanking her for teaching him mālama. She knew Solomon really connected to the place when “there was a spill in the Ala Wai [when he was in kindergarten] and he had his mom email me because he had to tell me that there was a spill in the Ala Wai. He was really connected to this place” (Interview, 2/26/14). She was happy that he still cared about their place even after moving on from her class. Kaitlyn hoped that all her children learned to mālama themselves, others, and their environment, and that they continued to do such well into their futures.

Kuleana. The essence of the value kuleana is responsibility, privilege, and obligation; our area of responsibility—ourselves, others, and the environment—is a privilege and opportunity to cause growth in ourselves and with those with whom we interact (Pukui & Elbert, 1986; Van Dyke, 2008). Aubrey spoke about kuleana:
We’re working on kuleana and kuleana means to be responsible, and to have a job, and to be helpful. … I asked them to bring what they do at home, and then I shared what they would be doing here at school to bridge that gap from home to school and to bring it together. And so far it’s been good. They’re trying to understand that value as far as, “Okay wait, kuleana means to be responsible for myself and my actions, and I can be a helper and that’s doing kuleana.” Or doing a chore, which is also great to learn because it’s going to build confidence again and yet it’s stuff they do every day. And so that value I think is important as well because again it will continue. And it’s great starting them now at three or four. It’s just going to be wonderful that they’ll take that with them and know that and be able to be gentle and caring and yet be responsible for themselves and to know that they can take the action and make the choice as a kuleana doing it because they’ve learned it. I think that’s a great value for them. (Interview, 2/24/14)

Aubrey was intentional about creating a strong home-school connection when she asked the children to “bring what they do at home” and incorporated that into what they did in the classroom (Interview, 2/24/14). She asked them to share what their home duties were and to do something similar in their class. Having roles and tasks that were their personal responsibilities, helped to build confidence in children. When saying that it was “stuff they do every day,” the tasks were manageable and the children could take on those responsibilities (Interview, 2/24/14). Some examples of children’s kuleana were to feed the fish, check the mail, water the plants, and clean the table after meals. Aubrey created a chart that she displayed in the classroom so that it was clear who was assigned to what responsibility. Aubrey rotated the assignments so that all children had opportunities to take responsibility in different ways (see Figure 7).
Aubrey created a kuleana chart which reminded the children of their responsibilities within the class community. The chart displayed pictures of responsibilities on the left and pictures of the children next to each responsibility who were assigned to that responsibility. For example, two children were responsible for watering the plants located outside and two were responsible for watering the plants located inside the classroom.

Aubrey also helped them think about what kuleana meant to them and wrote their thoughts on a poster. She felt that documenting their comments on a poster and displaying the poster would provide a good visualization and reminder for the children. See Figure 8.
Figure 8. Aubrey asked each child in the class to talk about examples of how they showed kuleana and displayed the poster in the classroom afterwards as a reminder.

**Effects of place-based education.** According to the educators, place-based education provided children with hands-on experiences, engaged children in active learning, made learning exciting and fun, and instilled a sense of responsibility and commitment to community in children. The teachers also talked about how they were affected by place-based education and how their perceptions about it progressed as time passed.
On children. During their interviews, the educators expressed that place-based education provided children with hands-on and direct experiences. With opportunities for hands-on experiences, children could engage in active learning. Amanda provided her perspective on why she liked using a place-based approach:

I think because these children are so young, they learn by experience and by doing. Instead of us just talking, it’ll be too overwhelming, it’s good for them to go out and to actually be in the place. And to actually see where things—and explore where things come from or whatever you’re investigating. I think it’s very important … to take the kids out and making the connections with everyone in the community, and in their neighborhood, and exploring what’s out there … taking the kids down to the stream where it’s right in the valley where we live. So actually take the class to go down there and to get that experience at that place and investigate what animals live in the stream, instead of the teacher just talking to them about it, “okay this is what lives in that stream” and things like that. Going out there and giving them that hands-on experience. (Interview, 3/13/14)

Charlotte added that “place-based education is more relevant for them because it’s hands-on, it’s immediate. Every child has to bond with people and with the place” (Interview, 1/31/14). Having that direct experience helps to make learning meaningful (Amelia, Interview, 2/3/14). It also helps them “retain the knowledge when it’s hands-on” (Sean, Interview, 2/6/14). Sean provided an example: “We can go out and talk to [the children] about tides, and water flow, and rain that’s going into the ocean but they don’t really grasp it as well as when we go outside and see it actually happening” (Interview, 2/6/14).
Place-based education also made learning exciting and fun. Amelia stated, placed-based education “is fun. It’s an experience. It makes them curious and they want to try more new things. I like to get them excited” (Interview, 2/3/14). Sean concurred, “It gets them excited about learning too. They’re more apt to want to participate if they’re excited in something that they’re really interested in what they’re learning” (Interview, 2/6/14). Making learning fun and exciting helped children to care about their learning process. Their motivation to learn increased and the educators believed that they would carry that motivation to their later years. The educators felt that children learned to care about their place and that they would be likely to put efforts in making the place better.

In addition, the teachers believed that place-based education could set a good foundation for learning. Kaitlyn mentioned, Place-based education lays a foundation to find learning exciting and fun. I want the kids to enjoy coming to school. … And I wish it carried on through the upper grades, this enthusiasm …. I think laying the foundation at this level is a good start in teaching them to love their learning, to love school. Not be afraid of coming to school. (Interview, 2/6/14)

The place-based approach helped create a basis for positive emotional connections to learning and to school. Kaitlyn hoped that if children had good experiences in their early education, that those positive thoughts and feelings would last even when they get older.

Similarly, Charlotte spoke to the importance of place-based education in the early years: It’s even more important in early childhood because that’s when you are building the foundation, their knowledge base. So I think that in order for them to connect what’s
going on around them then starting from where they are is a tangible way to explore and learn new things. (Interview, 1/31/14)

Just as Kaitlyn talked about, Charlotte mentioned how an approach like place-based education is especially important in early childhood when those early feelings and knowledge were forming. The place-based approach gave Charlotte a way to provide children with tangible experiences from which they could learn new information.

Furthermore, Jake shared how place-based education provided children with a common language:

Place-based education is a grounding position. So we look at, look at the environment. We do go out and see where the school is positioned. The resources that are available and then we also use that as a comparison for other cultures and other places. … So because we have people from different places at such a high level you have to make it so that things are accessible but then you have a common language. And I think place-based education gives us a platform for that common language but you have to build that. (Interview, 2/4/14)

The children came to preschool with different experiences. They came from different cultures. They may have moved from different areas. In Hawai‘i, they often came to school knowing and speaking different languages. Jake perceived place-based education as a means to provide children a common ground, a common language from which they could build their experiences and knowledge at school together. When they visited certain places and encountered the same experiences together, Jake referred to those experiences to situate the class’ learning. He referred back to their class visit to the lo‘i, an event they experienced together, to talk about
irrigation. Despite the differences that the children came to school with, the visit was something
that they all could relate to; it was a starting point from which Jake could talk about other topics.

On a more general level, Anna believed that place-based education helped children learn
about how they related to their place, and what feelings were provoked from those understandings:

Children learn where they stand in their place and come to terms with how they feel in it.
They understand themselves to the point where they feel free to take risks and express
themselves. I think that once children have that opportunity to just explore in the
environment that they live in, the place they live, understand the place, then they are
more grounded in themselves and more free to take risks and learn. … and grow to his or
her potential. (Interview, 2/3/14).

To Anna, place-based education helped children know what their place was about and where
they fell within that place. They learned whether their place was somewhere that they could run
around, explore, and love. She believed that they learned about their connectedness to the place,
and understood more about themselves to the point where they felt comfortable taking risks to
delve into the unknown and learn more about the things in which they were interested.

**On teachers.** Several of the educators shared how their thoughts and understandings of
place-based education and pedagogical approaches for best practices changed over time. When
they first started intentionally planning and implementing place-based lessons, teachers recalled
being narrow about their understandings and approaches. As teachers continued with place-
based lessons, many of them spoke about how their interpretations of what place-based meant
expanded. They went from framing their lessons within children’s immediate physical

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surroundings to those that extended outward. Some also noticed that they became more flexible with the topics that they taught using the place-based approach.

Mia talked about the progression of her thoughts concerning place-based education: “When I first started, it really was what was in [the children’s] near vicinity. One of my projects was about the garden in our school” (Interview, 2/6/14). Mia, like other teachers, started with lessons like gardening that took place in the schoolyard. She mainly focused on the physical school environment. Her ideas then moved away from thinking that place-based education should strictly focus on what was in close proximity to children at the school to thinking that place-based lessons could extend to the outer community and environment.

Charlotte also talked about how her ideas of place-based education evolved: I think at the beginning I felt like place-based was more just nature-based, but I think that it is different. I think it encompasses different things. It’s not just nature-based, being in the natural environment, using the natural environment, it’s part of it. It’s part of being place-based. But I think there’s a wider definition of place-based. (Interview, 1/31/14)

By nature-based, Charlotte pictured lessons based around trees, streams, and hills in places like Waikiki and the Honolulu ahupua’a. Overtime, however, she perceived place-based education as also including the environments that was manufactured by people—community places like the library and fire station. Her understanding of place-based approach also evolved to include the teaching of abstract concepts. She believed that lessons could still be place-based even if they were exploring abstract concepts, as described in the section about Charlotte’s class discussing civil rights at the Rainbow Shuttle stop. She said that these lessons were place-based so long as she contextualized those concepts in the children’s place.
Other educators agreed that place-based education did not have to just be about nature, as they initially thought. Place-based education included culture and cultural traditions (Jake, Interview, 2/4/14). In a place that is diverse, as Hawai‘i, certain cultural practices and traditions like those that come with Chinese New Year, for example, were common experiences for all children regardless of whether their families celebrated the event (Mia, Interview, 2/6/14). Cultural practices influenced the events, interactions, and foods found within a place. At school, children had shared experiences when parents came to teach children about traditional games and attire (Observation, 2/20/14), and administrators invited dancers to perform a Chinese lion show (Observation, 2/10/14). Educators ended up viewing place-based education as not being restricted to the physical place itself, but involved the experiences that people had in a place—the interactions that happened among people within places (Evelyn, Interview, 1/30/14; Mia, Interview, 2/6/14). The educators’ interpretations and implementation of place-based education were about how children’s places could be used to make learning meaningful, and the ways in which that was done continually evolved, became flexible, and would vary.
CHAPTER 5

DISCUSSION

Overview of the Study

The design of this exploratory qualitative study was guided by elements of Vygotsky’s sociocultural theory and the community of learners model; it was framed with the notion that learning and development are affected by interactions between individuals and environments within social and cultural contexts. The purpose of the study was to gather educators’ perceptions of 3- to 5-year-old children’s sense of place, and to capture how educators viewed, planned, and implemented place-based education in Hawai‘i. More specifically, the research questions aimed to uncover how preschool teachers defined and identified young children’s sense of place, and how they addressed young children’s sense of place in place-based lessons.

The 13 educators who participated in the study taught either in preschool classrooms at UHMCC, located in urban areas of O‘ahu, or at Maui Preschool, a preschool located in a rural area of Maui. The participants shared their perceptions and experiences in response to open-ended questions during semi-structured individual interviews. Supplemental data sources included observations, videos, and classroom artifacts. As a result of a constant comparison analysis, the following major themes emerged: influences of sense of place development at school; existence; comparison to later years; multidimensionality of sense of place; indicators of young children’s sense of place; effects of sense of place; goals of place-based education; shaping young children’s sense of place in place-based education; place-based education takes place at school, and in the local community and environment; place-based content; and effects of place-based education. Several subthemes emerged under some of the main themes as well. Rigor and credibility of data collection and findings were established by visiting classes before
data collection, piloting the interview questions, conducting member checks, using data triangulation, gathering rich and thick descriptions, having a second coder, engaging in peer debriefing, creating reflective commentaries, basing the findings on multiple educators’ perspectives, and keeping an audit trail.

Findings suggest that defining sense of place is complex and amorphous. Throughout this chapter, I discuss teachers’ perceptions and the way they described the multidimensionality of young children’s sense of place. Those dimensions include physical, emotional, individualized, and social aspects and are closely interrelated. The educators shared examples of how they uncovered children’s understandings of place or connections to place through children’s verbalizations, behaviors, and representations. The educators took what they knew about children to create learning events, interpreted children’s learning, and used that information to further inform their instruction. The discussions conveyed teachers’ beliefs about children’s learning and what is important in deepening their learning. Through their discussion of their lessons, the educators demonstrated how their beliefs paralleled their practices. The educators described their goals for place-based lessons, the nature of their activities, how they viewed the effects of their use of place-based education and how they shaped children’s learnings and connections.

In interpreting these findings, the teachers’ discussions of sense of place and place-based education aligned with elements of Vygotksy’s sociocultural theory, the community of learners model, Bronfenbrenner’s ecological model of human development theory, and the CREDE Standards. The findings about young children’s sense of place and place-based education in this this study may provide insights into how 3- to 5-year-old preschool children in Hawai‘i connect to places and how that could be meaningful for instruction and learning.
Multidimensionality of Young Children’s Sense of Place

Given that understandings of place are multidimensional (Gruenewald, 2003a, 2003b; Lim & Calabrese Barton, 2006; Hutchinson, 2004; Low & Lawrence-Zúñiga, 2003; Theobald & Siskar, 2008), it is not surprising that connections to places are as well. As the literature suggests, a clear definition of sense of place is difficult to obtain because individuals connect to places in different ways, and those connections are affected by various features, thus making a generic definition inadequate (Resor, 2010). Instead, educators in this current study spoke about sense of place in terms of children’s interactions within physical, emotional, and social environments, and how cultural aspects and the role of others influenced its development.

Although discussed separately in the results, the different features of sense of place were interrelated and overlapping, which is expected since development occurs and is influenced by multiple contexts (Bronfenbrenner, 1994; Vygotsky, 1978). Educators understood children’s sense of place as based on the actual physical place, as they used words like “environment,” “school,” and “home” in linking children’s connections and awareness to them. Those connections, which can also be understood as their relationships, associations, or links to places, involved feelings and other emotional components that those places evoked. Feelings and thoughts for places could be positive, negative, or neutral, and with varying intensity levels, and those feelings were influenced by the interactions that occurred in places with others. When some teachers talked about the existence of sense of place, some attributed the perceived absence of sense of place at school to children’s inability to make attachments in general, or to children just becoming accustomed to school and how they were not yet comfortable. Emphasizing their own roles, teachers acknowledged that these lack of feelings or attachments could just be developing and that they helped children to create positive, strong connections. As Mia said,
young children “need more help connecting” and teachers can build children’s sense of place to school through their interactions with children.

Moreover, teachers’ highlighted their understandings of the importance of comfort, security, consistency, and children’s backgrounds in establishing positive physical and emotional environments for children’s learning. This awareness aligns with principles of child development and learning that inform developmentally appropriate practice (NAEYC, 2009). Namely, that children develop best when they have secure, consistent relationships with responsive adults, and that learning should build on knowledge already acquired. The degree to which children felt comfortable and secure, both emotionally and physically, affected their attachment to places and the people within those places. The level of consistency that children received from their environments—knowing what to expect from school, individuals, and daily routines—influenced their efforts in making connections. In addition, the backgrounds from which children came also affected their sense of place. Their backgrounds affected their behaviors at school, and the lenses through which children interpreted their places. As such, teachers needed to “observe” and “get to know” children. Knowing about children’s backgrounds, helped educators build on their knowledge and experiences, making learning relevant and interesting for different children.

The educators communicated their beliefs about how children would not be able to learn without these foundations, and that is why they encouraged parents to display family pictures in the classroom and asked children to bring in their special toys. They wanted to instill a “home-away-from-home” atmosphere for the children within their classrooms. Valuing the inclusion of parents and learning together matches ideologies of the community of learners model (Rogoff et al., 1996), as teachers welcomed families into the classroom to share their stories, traditions, and
practices in hopes of bridging those connections between home and school and helping children learn from one another. The educators were conscious about providing consistent emotional support to children by listening to children, including children’s interests, and tailoring their interactions to address children’s needs.

Additionally, the educators noted that a part of children’s sense of place had to do with the interactions that they had with others, or their social connections within places. As one teacher shared, other people are a part of children’s sense of place, again illuminating the inseparability of social contexts from learning and development (Bronfenbrenner, 1994; Vygotsky, 1978). Children’s experiences include the emotional bonds that emerge from social interactions. Although connections to nature are a part of a sense of place, a sense of place is not equivalent to a sense of nature (Derr, 2002). While the Ala Wai canal contains water from streams and is bordered by several trees, these are small features of nature in a place that is predominantly human-constructed. Children’s experiences at the canal were shaped more by the social interactions with others such as the conversations they shared with teachers and peers, picking up trash together, or in creating collaborative artwork, than by elements of nature. Nature in these cases at the canal, though still influential, was the background for children’s experiences. While nature is a critical component to some children’s sense of place, other factors such as family, social relations, and personal meaning are more important than physical features for children who are exposed to nature less than those who are around nature a lot (Derr, 2002; Proshansky, Fabian, & Kaminoff, 1983).

The relationships and interactions that children have with each other and adults add to their understanding of what a place means to them. The educators talked about how children’s connections often occurred during shared experiences at school with others, but while multiple
children experienced the same event, they each had their individualized interpretations of that shared experience. Educators’ beliefs about the individualization of sense of place reinforce Resor’s (2010) perspective that sense of place does not have a universal meaning as it involves subjective sets of meanings and emotional attachments to places by individuals.

Educators identified young children’s sense of place through their verbalizations, behaviors, and representations. Relying on multiple ways to identify how children relate to their learning environment is important for instruction (Phillips & Shonkoff, 2000). By pinpointing conversations and children’s verbalizations as major means through which teachers assessed what children knew and how they felt, teachers demonstrated their view on the importance of language for informing their interactions with children (Phillips & Shonkoff, 2000; Tharp, 2006; Vygotsky, 1978; Yamauchi et al., 2012). What children said gave teachers insights into how children connected to places. For instance, children’s verbalizations helped teachers determine whether children were happy in or were proud of their place which shaped how teachers furthered conversations or worked with children. As another way to gather children’s sense of place, especially for children who were not as verbal, teachers recognized that they could look to children’s behaviors and their representations. The way children gravitated towards places or how they jumped with excitement when arriving at a particular place—were indicators for teachers of what children felt for places. From the paintings, drawings, sculptures, murals, and photographs that children made, teachers believed that they could grasp what children found meaningful.

Furthermore, most of the educators felt that children’s sense of place influenced the places with which children were connected, which reflects views of Gruenewald and Smith (2008) and Sobel (2004). According to the educators, the environment affected children’s sense
of place, and likewise, the children’s sense of place affected the environment. Children learned what a place meant to them which in turn influenced how they acted on or within those places. For example, children became connected to the canal near their school which affected their continued care for it. They picked up trash whenever they went on their class walks, and some continued to do so when they visited the canal outside of school time. Even after moving on to kindergarten, one child reached out to his preschool teacher to share some news about the canal, demonstrating a strong connection to that particular teacher and the canal. His connection to his teacher and the canal were linked to his process of acquiring new knowledge, attitudes, and skills to understand how to work with others and apply his feelings, supporting the assertion that a sense of place also influences children’s socioemotional development (Brillante & Mankiw, 2015). When children were connected to their places, and really cared for them, they were invested in and excited about learning, which deepened it and made it meaningful.

Teachers described evidence that suggested children’s connections to places, and this was helpful in examining how teachers’ beliefs on sense of place influenced their place-based instruction. By drawing upon children’s verbalizations, behaviors, and representations, teachers created place-based lessons that developed children’s understandings and connections to their physical, emotional, cultural, and social environments. When educators strive to make sense of their children’s learnings, understandings, and misunderstandings, they can more effectively address children’s needs.

**Addressing Understandings of Sense of Place in Place-Based Education**

Educators’ awareness and understandings of the multidimensionality of sense of place shaped how they planned and implemented place-based lessons to further children’s learning, and so their beliefs and practices seemed to match. Through their descriptions of their place-
based lessons, teachers revealed beliefs about learning that included an emphasis hands-on experiences, active versus passive learning, and including other people and personal experiences in the learning process. Consistent with their beliefs about sense of place being linked to the physical environment, the teachers’ lessons were hands-on and promoted active learning. The individualization of sense of place was addressed through the inclusion of aspects that made lessons personal and relevant. With regards to the emotional and social dimensions, place-based activities included others, and were also active, relevant, and personal.

Educators shared how they planned and implemented place-based lessons with several goals in mind: (a) to strengthen children’s connections to each other and their place; (b) for children to learn how to collaborate with and learn from others; and (c) to have children develop care and love for their place, including the things and people who are part of that place. With these goals, teachers wanted children to be motivated about, and dedicated to learning, a lifelong attitude. The teachers’ goals are consistent with the purposes of place-based education that are discussed by Gruenewald and Smith (2008), Sobel (2004), and Smith (2002). The ways in which teachers promoted connections, collaboration, and care can be seen in the Ala Wai canal example.

Kaitlyn and Sean provided hands-on experiences for the children to explore the area surrounding the canal by their school. Children’s connections to each other and the place grew as they continued to visit the canal and gained different experiences with each visit. Their experiences consisted of picking up trash, taking pictures, having conversations, and creating artwork. Kaitlyn and Sean aimed to not only strengthen the social and emotional connections between children, but also between children and their place, including what was in their place (i.e., trash) to concepts (i.e., sustainability and art). They brainstormed with children about what
they could do with the trash that they found, and encouraged children to collaborate when creating their sustainability artwork. Children and teachers worked together to collect trash from the canal, and then manipulated the trash to create sculptures that they could display in their classrooms—an example of how the teachers created the conditions for a joint productive activity (Tharp, 2006; Yamauchi et al., 2012). Teachers, children, and families collaborated to collect unwanted materials or “trash” from their homes to add to their sustainability projects. Their lessons about sustainability carried over to other experiences, such as their visits to the zoo. Their continued conversations and interactions led children to care for places as they maintained their recycling efforts at school, home, and in the community.

This particular case challenges the claim that place-based curriculum based in the local community is mainly for those in middle childhood, ages 7 to 11 (Sobel, 2004; Sopori, 2004). Sobel (2004) and Sopori (2004) discussed how curriculum on waste management practices and recycling are age-appropriate for 7- to 11-year-olds because of their ability to think abstractly. For younger children ages 4- to 7-years old, Sopori (2004) suggested that lessons based at the school were a better fit, and shared an example of planting and monitoring gardens at school as an appropriate lesson. In this study, however, place-based lessons did not only take place at the school for the preschoolers, they also took place in the local community and environment.

While several of the teachers in this current study did situate their lessons at school, particularly with their school gardens, the Ala Wai case showed that preschool children do have the ability to learn about more complex topics such as recycling. As long as experiences facilitate the development of more complicated topics in simple and practical contexts, young children can demonstrate abilities for abstract concepts (Carey, 2009; Gopnik, 2012; Gopnik & Meltzoff, 1997; Siegler, 2006; Spelke, Breinlinger, Macomber, Jacobson, 1992; Wellman &
Gelman, 1992). Kaitlyn and Sean started with taking children on walks to the canal, before their lessons evolved to picking up trash, creating art, and recycling.

Another example of exploring abstract concepts came from Charlotte’s lesson with children about civil rights and discrimination. Charlotte elaborated on one child’s connection to inequality with the Rainbow Shuttle, and she simplified the explanation of discrimination for the class by basing it in a concrete, hands-on, and relevant experience at the shuttle stop. The educators in this study established simple and concrete contexts for more complex ideas by building on what was immediate, such as creating lessons on children learning about themselves first, before tailoring instruction to include the school, community, and environment. Basing instruction in what is immediate and then extending outward follows Sobel’s (2008) recommendations for implementing place-based lessons, and complements the general progression of children’s thinking abilities from concrete to complex (Berk, 2005; Phillips & Shonkoff, 2000). Learning will likely be meaningful when young children can first learn about concepts that are concrete and that can serve as a base from which they learn progressively complex or abstract concepts.

In addition, this study demonstrated how educators strived to make place-based lessons personal and relevant for children. They adapted lessons to their particular place (Smith, 2002), whether it was to the urban areas of O‘ahu or rural parts of Maui. They created opportunities for children to explore the school gardens, local stores, beaches, the ocean, streams, parks, canals, ahupua’a, and the lo‘i. Through their accounts, teachers shared how their place-based lessons complement the local culture as they relied heavily on involving the places, people, and language specific to Hawai‘i. Teachers also exhibited their understanding that children’s cultural backgrounds influence aspects of their development (Phillips & Shonkoff, 2000), and as a result,
they included what they learned about their children’s backgrounds and used that information in their place-based lessons. This is an example of teaching in context where there is a connection between the curriculum and new information to the experiences of children (Tharp, 2006; Yamauchi et al., 2012), which likely helped to lessen the gap between home and school. By using a place-based approach, teachers applied children’s learning to their places—their homes, schools, communities, and environments. They provided opportunities for parents and other community members to participate in instructional activities at school, and in doing so, further contextualized activities for the children. Incorporating their backgrounds and allowing children and their families to share their cultural traditions and practices validates their cultural experiences and conveys that they are worthy of inquiry (Smith, 2002).

The findings show that educators’ place-based lessons provided opportunities for cultural, ecological, and individual experiences which all contributed to a sense of place for young children. Although Derr (2002) worked with 10- to 11-year-olds, her ideas about sense of place development are similar to this study’s findings. Derr (2002) stated that sense of place occurs on multiple scales: child-scale, family-scale, and community-scale. At the child-scale, children’s sense of place is influenced by running around, climbing trees, and playing with friends in places. The family-scale experience of places provides cultural and historical contexts for experiences. Children come to school shaped by experiences with their families’ cultures, values, beliefs, and traditions. The community-scale sense of place is related to broader cultural values and the formation of place relations. With assistance from adults in and out of school, children learn what lies in their surrounding community environments and develop understandings for community-level expectations. All of these scales influence what children
learn, the benefits that they gain, and ultimately, the type and extent of connections they acquire for places (Derr, 2002).

The scales in which sense of place develop (Derr, 2002) parallel the ecological model of human development theory (Bronfenbrenner, 1994). Using the ecological framework, Jack (2010) explained that the main influences that affect children’s attachment to places occur at the individual and family, community and neighborhood, and societal and cultural levels, all of which are also influenced by time. At the individual- and family-level, children’s access to places differ dependent on their families’ social class, and exploration is limited to proximal places in childhood because children are not typically able or allowed to explore wider environmental contexts on their own. With regards to community- and neighborhood-level influences, connection to places are affected by both parents’ and children’s perceptions of safety and risk. If they deem a place safe, children will be more likely to explore the areas than if they perceive them to be unsafe. Concerning society- and cultural-level influences, the meanings, rules, and artifacts that exist within particular cultures affect children’s attachment to places. While this perspective is useful, Bronfenbrenner (1994) recognized the need for an educational perspective. He wrote: “Most of the relevant studies of proximal processes have focused on the family, with all too few dealing with other key developmental settings, such as classrooms and schools” (Bronfenbrenner, 1994, p. 40) and an educational context, like this current study provides, can add to this literature.

Educators’ discussions of how they planned and implemented place-based lessons made clear that teachers have a major and active role in children’s lives that can cross into varying systems including those at children’s individual-, family- and community-levels. As they learned more about the children in their classes, educators adjusted their interactions with
children. They integrated children’s needs and interests with the physical and social conditions in which instruction took place. Educators showed that they, like parents, have the power to introduce children to places. They took children to explore places that they otherwise might not have been able to go to on their own. Some parents might not have even been aware of or able to take children to some locations such as the lo‘i. In a similar light, educators connected children with community workers—at the farmer’s market and local grocery store, for instance—which might have become a community-level influence. Through their instruction and interactions with children, educators helped children learn more about themselves in ways that were different than what they might have learned outside of school. They nurtured relationships among and between various ecological levels, enhancing children’s exposure to diverse places and people and thus, increased the potential for children to create new connections.

The social interactions that children have with parents, peers, educators, and community members are critical for learning and development (Rogoff et al., 1996; Vygotsky, 1978). Interactions and relationships with others, and “the effects of relationships on relationships, are the building blocks of healthy development” (Phillips & Shonkoff, 2000, p. 4). Relationships in the early years predict outcomes on academic achievement, prosocial behaviors, cognitive abilities, and social adaptation (Birch & Ladd, 1996, 1997; Connell & Wellborn, 1991; Davis, 2003; Howes, Hamilton, & Matheson, 1994; Howes, Hamilton, & Philipsen, 1998). According to sociocultural perspectives, social interactions are the origins of higher thinking processes (Tharp & Gallimore, 1988; Vygotsky, 1978).

As an example, in introducing children to the Japanese garden, Charlotte engaged children in conversations and asked them questions that encouraged them to think about the differences between the Japanese garden and their school garden. By asking questions and
extending children’s thoughts in conversations, she modeled ways to think about comparisons which might have helped children appropriate similar strategies for future thought. Social interactions during place-based activities also promoted other opportunities for modeling, through which children learned by observing others (Tharp, 2006; Yamauchi et al., 2012). In gaining procedural knowledge, children watched teachers model how to plant seeds in peat pellets. They also learned from teachers’ behaviors and language use, like when a child, Jason, imitated the gestures and language of his teacher to explain the location and purposes of the maka at the lo‘i.

The ways that educators navigated social interactions during place-based lessons also fit well with the Language and Literacy Development CREDE Standard (Tharp, 2006; Yamauchi et al., 2012). Teachers encouraged language and literacy development by listening to children talk about their homes and what they found interesting. They asked clarifying questions, used a variety words to describe a concept, encouraged the use of different languages, and respected children’s preferences for speaking and interaction styles. Several of the educators used Hawaiian words and names—for example, maka, mālama and kuleana—to describe objects, communicate desired behaviors, expand on what they were doing, or explain the purposes of their activities. Moreover, decisions about physical and social conditions of activities allowed for Instructional Conversation, another CREDE Standard that involves engaging children through dialogue (Tharp, 2006; Yamauchi et al., 2012). Educators and children engaged in small group conversations on a regular and frequent basis. The educators asked children about their views, judgments, and rationales and listened carefully to what children said to assess their levels of understandings.
Place-based education relies on what is relevant and interesting to children just like the Child Directed Activity CREDE Standard (Sobel, 2004; Tharp, 2006; Yamauchi et al., 2012). The educators took the interests of children and expanded on them during their activities, while remaining flexible in their instruction. For instance, one pair of teachers developed a unit on community workers after children expressed so much interest in fire fighters. Other educators explored different ways of celebrating Chinese New Year, after a child elicited excitement among peers with his own interest in lion dancing. Teachers took the children’s interests and involved them with the design and development of teaching and learning tasks. Many of the educators agreed that children should have an active role in their learning, and that children were more likely to participate if they had a part in generating or directing activities.

Children having an active role does not imply that teachers’ should be passive. Even though preschool children are becoming more assertive in taking the initiative towards gaining autonomy (Erikson, 1963), teachers should still be highly involved in children’s learning process. The teachers’ roles include their interactions with children which are affected by their connectedness and beliefs. Teachers’ own sense of place will influence what they expose their children to and in turn affect children’s sense of place. If teachers value nature, they will likely translate this feeling to their children through the way they work and communicate with children. A part of the place-based approach to instruction seemed to parallel the philosophy behind the community of learners model, which emphasizes that learning is not a function of one-sided action, directed solely neither by adults nor children, but of action that promotes working together (Rogoff et al., 1996). Learning is a function of balanced interactions between teachers and children, and that balance can be obtained through adjustments made through scaffolding children’s learning.
Scaffolding children’s learning involves providing just enough assistance within children’s zone of development to enable children to perform at a skill level just beyond what they can do on their own, then gradually reducing the support as children begin to master the skill, and setting the stage for the next challenge (NAEYC, 2009; Vygotsky, 1978). In exploring places, educators scaffolded children’s learning by asking questions, modeling conversations or skills, and adding cues. Educators also included or adapted materials, such as tools and artifacts to facilitate learning. When and how educators provided support influenced the meanings that children associated with places.

Tharp (2006) stressed that “in our culturally and diverse nation, schools must provide the common experience, activity, language, and conversation that learners require, both for individual development and the development of a common, shared and mutually endorsed community” (p. 19). One of the educators, Jake, said, “place-based education gives us a platform for that common language” (Interview, 2/4/14). Place-based education can provide children and educators with a common experience wherein meaningful learning occurs and a sense of belonging develops. Despite coming to school with different backgrounds, speaking different languages, and entering with varying experiences, place-based lessons can be that common experience and produce a common language at school that is significant to the children of that place. With that common language, opportunities for children to develop individually and together as a community in positive ways are likely.

**Potential Contributions**

There is little research on preschool children’s sense of place and place-based education in early childhood. This study is unique in that it examined the two concepts in both an early childhood and educational context through the perspectives of educators located in Hawai‘i.
Teachers are in the classroom every day with children, and so they are in a prime position to “know children—their interests and experiences, what they excel in and what they struggle with, what they are eager and ready to learn” (NAEYC, 2009, p. 5). Understanding teachers’ perceptions of children and their learning is worthwhile because it provides insights as to how their beliefs about children’s connections (i.e., sense of place) match with their instructional practices (i.e., place-based approach). This study gives these particular teachers a voice by sharing their thoughts about how children connect to their world and how that informs the way they interact with children. With their thoughts that sense of place is multidimensional, especially social and emotional elements, educators created lessons that were inclusive, active, hands-on, personal, and relevant. Their perceptions about young children’s developing sense of place aligns with some of the literature on older children which suggest that sense of place is multidimensional. Like this study, other investigations involving older children, usually around the age of 10, showed that there are cultural, social, and nature-based connections to places (Derr, 2002; Sobel, 1998). Younger and older children’s sense of place are affected by different individuals at varying levels (Derr, 2002), but young children’s senses of place appear to be more heavily influenced by families and teachers. Teachers and families are critical for providing young children with opportunities for exploration—such as taking them to visit different places—whereas, older children may not need that kind of support from adults because they can access some places on their own.

Concerning place-based education, this study contributes information about what lessons can look like in preschools. Even though there are not many publications on place-based education in early childhood settings, this study suggests that place-based education is occurring at the preschool level. The teachers described how they integrated the unique features of
Hawai‘i such as the lo‘i, streams, and ahupua‘a into their lessons. In addition, this study showed a variety of content and topics that can be covered through place-based instruction, besides those that are environmental- and nature-based. Moreover, the teachers were flexible in their use of place-based instruction, adapting it to their specific children and context, and explored ways to have children think about more abstract concepts.

The educators’ accounts show that it is important to learn about young children’s sense of place and place-based education in early childhood in order to make learning meaningful for children. Inferences from this study support teacher education and professional development efforts that will encourage teachers to think about how they and their children connect to places, and how they can use that information to create positive, joint learning experiences for everyone—educators, children, family, and community members. Teachers need to collaborate with others and involve children directly through their learning process.

**Implications**

I present several implications that are based on the findings of this study. In order to cultivate children’s developing sense of place, educators should create inclusive places, foster a school community, explore the neighborhood, and create place-based investigations.

**Create inclusive places.** At school, educators should include children in making decisions about some physical attributes of the playground, classrooms, and other shared places. On the playground, for example, educators can ask children what they would like to see on their playground, or have children build or add something to the playground together. Like those at UHMCC, teachers and children can build replicas of something they are familiar with in their environment, such as the stream. Educators can plant trees with children in their playground from which they can observe the trees’ lifecycles, and that can simultaneously serve as
representations of children’s influence while attending that preschool. Within the classroom, educators can involve children in the process of arranging or creating the classroom place. Educators can allow children to include pictures of their families in their classrooms and post children’s artwork on the walls. Additionally, educators can create opportunities for reflection and recall by collaboratively creating and then displaying projects such as murals, photobooks, or sculptures.

By doing such, educators communicate to children that they have a voice that matters. The school and classroom places then become a part of children. Children get the message that this is their school and their classroom; they belong there. This promotes an emotional attachment to the place and strengthens a sense of belonging. Having their representations and materials in the classroom may remind children of prior experiences in which they explored and interacted with others and the environment, and encourage the development of a connection to the place and the individuals within it. These inclusions, especially those that bridge the home and school community, portray that children and their families are accepted and valued.

**Foster a school community.** Educators should plan visits to different classrooms so that children can have shared experiences with other children. Engaging children in collaborative school activities, like planting a garden, reminds children that they are in a place that is shared with others, and that others can share common attachments to the place with them. When educators make opportunities for families to come together and spend time with other children and their families at school, or for families to come to school to share their values, traditions, and practices, these interactions can help children get to know their peers and develop a sense of place with the school. These opportunities let children know that their cultures are valued and respected. Teachers can also document school events by taking pictures or writing newsletters to
share with children and families, which helps develop the psychological attachment that builds the foundation of sense of place (Brillante & Mankiw, 2015).

**Explore the neighborhood.** Educators should provide opportunities for children to explore their school, community, and environment. For example, they can provide time for children to climb trees, play at the park, touch the streams, smell different plants, and run around the playground. Educators should plan trips to places in children’s neighborhoods such as local grocery stores and fire stations where children can meet community workers and have conversations with them. Further, teachers can invite individuals from the community into the classroom so that children can share their place and build relationships. To help children remember their experiences, teachers should explore creative ways to capture memories. For instance, they can give children cameras to take pictures or have children bring journals and crayons to draw and document their observations.

**Create place-based investigations.** Educators can nurture children’s developing sense of place by creating place-based investigations of their surrounding places. They can start with what children know, consider their backgrounds, and ask children what they want to explore. Watching and listening to children can help teachers determine what gets children excited and what they wonder about. Additionally, teachers should have conversations with children individually and collectively to figure out their interests. By brainstorming as a group, facilitating discussions on what children would like to explore, and including children’s opinions and interests, teachers can foster children’s invested interest in subsequent activities. During explorations, teachers should think about how children can learn about a place from different perspectives. For example, children might be familiar with the local grocery store, but arranging a “behind-the-scenes” visit where children get to meet workers and directly see what happens on
the other end of the store could help them create personal connections. Moreover, teachers should reflect on what other local resources are available to children. If children are interested in picking up “trash” or unwanted materials in their environment to transform them into art, educators might invite artists to visit, teach, and assist children with their art representations.

**Limitations**

There are some limitations to this study. Although the educators shared similar perspectives about the topics, the sample size was small. Due to the small sample size, the results of this research may not generalize to the population at large. The findings were specific to the sample, time, and settings from which this research transpired. Specifically, the data were collected from 13 educators from two schools during the 2013-2014 school year. All of the teachers participated with the Mohala project and were familiar with the CREDE Standards. Therefore, this research study did not gather a representative sample of all early childhood settings, but it did provide useful insights to what these particular educators believed.

In addition, the exploratory and qualitative nature of the study only provided insights as to what the participants thought of young children’s sense of place and place-based education in early childhood. As the researcher, I relied on the subjective accounts of the participants to investigate and interpret the topics of interest which can be perceived as a limitation (Merriam, 2009). I served as the instrument for data collection and analysis, which may have led to biased interpretations of the results. To minimize bias from data collection, I gathered data from different sources. A second researcher coded a portion of the data which may have reduced threats of data analysis bias. As with most qualitative studies, sole objectivity cannot be claimed, and no causal relationships can be made from this study. However, the intention of this research was to be descriptive, not to make claims about cause and effect.
Some participants may not have been comfortable with me or may have been nervous about being interviewed. I visited all classes and had interactions with each teacher before any data collection, but I still had closer relationships with some teachers than others, especially with those at UHMCC. Compared to educators at Maui Preschool, I had more interactions and history with the UHMCC educators.

Another limitation is that some educators may have shared more than others during their interviews and provided more accurate accounts of their beliefs. The participants may have also made socially desirable remarks as to not discredit the CREDE project of which they were a part. Even though I expressed that their participation was voluntary and their genuine comments were desired, some participants may have still withheld their true opinions. I gave educators other opportunities to clarify and elaborate on their thoughts, through member checks, and in different ways, in person and in writing. But then, some may still have chosen not to expand on what they already shared.

**Future Research**

Continued research on sense of place and place-based education is needed, especially in the area of early childhood education. For future research, larger samples of participants from early childhood settings could provide greater insights about young children’s sense of place. It would also be interesting to see how other educators from different contexts—who teach at varying types of preschools and work with different populations—perceive young children’s sense of place and how they have planned and implemented place-based education. That is, it would be worthwhile to see how other educators in Hawai‘i across the islands at different preschools perceive these concepts, and to examine whether there are commonalities. And on a larger scale, gathering the perceptions of educators from other states who provide different
cultural, linguistic, and economic perspectives could add to this area of research. Viewpoints of individuals from areas where major political struggles, social change, or economic development have recently occurred, which may have transformed the ways those individuals connect to places, could also be worthwhile.

Furthermore, future research could gather data from other sources and with different methods. For example, prolonged studies in classrooms, gathering data from children directly, in-depth case studies, follow-up investigations after children moved on from preschool, and interviewing parents and other individuals who know children well could be other means through which young children’s sense of place can be explored. Another research could also explore sense of place and place-based education from different perspectives: a number of questions arise for me. How does sense of place compare generationally? How are young children’s sense of place similar and different to their parents’ and grandparents’ sense of place when they were children? Examining the purposes of special places for children—places that children go to for solitary reflection, places that are linked to social interactions with friends or families—could add to the literature. In investigating the purposes of places, I would like to see how much children visit or use places, what types of activities are associated with places, and what meanings the places give children.

Lastly, I think it would be interesting to study how technology influences young children’s sense of place and teachers’ understandings of such, and how that would influence pedagogical approaches. Technology in many places is becoming a dominant part of individuals’ lives affecting how individuals communicate, live, and perceive themselves (Shirky, 2009). Children now are born into a world and grow up in places where technology makes access to information and connecting with others substantially different than what was possible
even just five years ago. Technological devices and social media are playing a major part in how individuals choose to express themselves and how they communicate. Will the concept of “place” be understood beyond the physical dimension? If so, to what extent and what role does that play in how individuals gain a sense of place? How, then do educators address this in their instruction and interactions with children?

Conclusion

Hawai‘i is unique in its cultural richness and early childhood is a period during which experiences can make lasting impressions. There is little research on teachers’ perceptions of preschool children’s sense of place, and how place-based education in Hawai‘i has been implemented in early childhood education. This study’s results are a start in understanding them. Having awareness about children’s sense of place and its influences may assist educators in being intentional about teaching practices that can positively shape children’s development.

Places, especially ones within a heterogeneous group, should be carefully considered in order to implement approaches that are relevant for individuals who reside in those places. Educators should take time to build connections with individuals who regularly interact with children in their homes and communities. Knowing where children spend time outside of school can help teachers recognize children’s connectedness to places on physical, social, emotional, and personal levels. Being attentive to what children say and do may provide clues to what they find interesting and valuable. When children feel a strong connectedness to a place, and when teachers use that place as a platform for instruction, children may likely draw deep, meaningful associations to the learning process that will influence their outlook on learning in later years.
Appendix A

Teacher Consent Form

The CREDE Early Childhood Project

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The purpose of this project is to highlight, develop, and evaluate use of the Center for Research on Education, Diversity, and Excellence (CREDE) Standards for Effective Pedagogy, principles of effective instruction for culturally and linguistically diverse students. The project involves professional development for teachers and teacher educators, evaluation of the effects of those efforts in classroom instruction and students’ learning, and the development and evaluation of science curriculum and place-based instruction in their classrooms.

You will be asked to participate in professional development activities organized around workshops and meetings. The professional development also includes peer and/or professional coaching in your classroom. The objectives of the professional development are to promote understanding and use of the CREDE Standards for Effective Pedagogy. Your participation will involve attending the workshops and meetings and participating in discussions about your use and understanding of the CREDE Standards. These sessions may be audio taped or videotaped. Project researchers will observe, videotape, and photograph you while you are teaching. Other teacher participants and visitors to your classroom may observe your live and videotaped instruction. You will be asked to observe and analyze your own and other teachers’ live and videotaped practice.

At the beginning and end of each school year, you will be asked to complete a survey about your background and attitudes toward science and a belief survey about your general practice. Each coaching session, during which you are implementing the science curriculum, you will be asked to estimate how much time you spent on science instruction.

Your educational practices will be assessed by a teacher observation protocol. The protocol will be used to rate videotaped instruction and throughout the 2013-2014 school year. You will be videotaped approximately three times each year. You will be informed of the videotaping on the morning that it is scheduled. Unless you specify otherwise, your identity, with regard to these assessments, will be kept confidential, as allowable by law. The assessments will only be used for research purposes.

Videotaped and audio taped recordings, observations, and photographs of you and your students will be used to create a videotape of educational practices at the school, to develop a website about the project, and for journal articles, conference presentations, and other publications written about the research. The videotape will be widely distributed nationally and the website
will be on the Internet for teachers and researchers who are interested in learning about CREDE. All tapes and digital images will be stored in Dr. Yamauchi’s office.

Your participation is voluntary. You may choose to stop participating at any time without prejudice or penalty. You can contact Dr. Yamauchi by email or phone by December 31, 2013 if you do not want us to use your video recording on the DVD or website.

You may benefit from participating in this project by receiving professional development. Although there are no other direct benefits to your participation, the information gathered in this project may improve services at your school and help other teachers and researchers understand how to better instruct culturally and linguistically diverse young learners.

Research Participation:

I have read and understand the information above. My questions about project procedures and other matters have been answered to my satisfaction. I know that I can withdraw my participation at any time without consequence.

I agree to participate in this project. I understand that by agreeing to participate, I have not given up any legal rights and that the researchers and the institutions they represent are still responsible for upholding all laws that apply.

______________________________     ___________________________        ___________
Signature of Participant      Print name      Date

Video and Photo Release:

I agree to allow photographs, video recordings, and audio recordings made of me for the above project to be reproduced on a DVD and website. I understand that the DVD will be distributed nationally and that the website will be on the Internet for those who are interested in learning more about CREDE, the CREDE Standards, and the science curriculum.

______________________________     ___________________________        ___________
Signature of Participant      Print name      Date

* If consent is not given, the videos will be destroyed upon completion of the analyses.

(If you do not receive satisfactory answers to your questions or have comments or complaints about your treatment in this study, contact: Human Studies Program, University of Hawaii, 1960 East-West Road, Biomedical Building B-104, Honolulu, Hawaii 96822. Phone: (808) 956-5007. Email: uhirb@hawaii.edu)

cc: participant message teacher consent form 12/18/13
Appendix B

Interview Questions

Defining sense of place:
Let’s start our conversation with a basic but important question for place-based education. What is ‘sense of place?’

1. How do you define sense of place?
   a. Can you think of an example?
   b. Some researchers have made references to attachment and meaning when discussing sense of place. How do these words relate to your notion of sense of place?
   c. Others say that sense of place relates to identity. What do you think?

2. In what ways is sense of place important? You don’t have to limit your answer to just importance for teaching.
   a. For learning?
   b. For development?
   c. In childhood?
   d. How does sense of place affect other aspects of learning or development?
   e. Why or why not is sense of place important? (e.g., for personal wellbeing, because it can help learning)
   f. Recast and confirm teachers’ comments

3. Do you have any questions or confusion about the concept of sense of place?

Identifying preschool children’s sense of place:
Let’s talk about sense of place in childhood and preschool.

4. How is a preschool child’s sense of place similar to or different from that of an older child, adolescent, adult, or elder?
   a. Similarities
   b. Differences
   c. Equally important across the lifespan?

5. How can an adult know whether a preschool child has a sense of place?
   a. What signs do children show?

6. As a teacher, either now, or when you were in Mohala, did you do anything to identify or try to understand your preschool children’s sense of place?
   a. What indicators did you look for to try to gauge each child’s sense of place?
   b. Formal vs. informal assessment

7. What classroom dynamics (i.e., teacher to student ratio, activities (e.g., play, circle time), environment (e.g., indoor/outdoor), etc.) impact sense of place?
   a. Through which of these dynamics is sense of place observable?
b. Which make it more difficult to observe sense of place?

**Incorporating sense of place in curriculum and classroom:**
8. How have you incorporated children’s sense of place in your place-based lessons or units?
9. What materials, if any, do you make available in your classroom that represents children’s sense of place?

**Place-based related:**
Next I’d like to talk about place-based education.

10. What are the three most important goals of place-based education?
11. What is the role of sense of place in place-based education?
12. How have you implemented place-based lessons or units? What topics or concepts did you focus on? What activities did you use to teach those topics or concepts?

**Other:**
I have a couple more questions for you regarding sense of place and place-based education in general.

13. What are some negative things or issues you see with sense of place?
14. What other comments do you want to make regarding sense of place? Place-based education?
Appendix C

Data Collection Form

Research Questions:
1. How do preschool teachers of 3-to 5-year-old children who have used place-based education define children’s sense of place?
2. How do these teachers apply that definition to identify preschool children’s sense of place?
3. How do these teachers incorporate preschool children’s sense of place in place-based lessons or units?

Location:
Date:
Time:
Setting:
My state:
Weather, hot/cold:
Physical surroundings, visual and audio cues (props: wall hangings, posters, charts, books):
Number of children/adults:
Notes (What happened? Describe observations):
Participants:
Characteristics such as dress, gestures, and nonverbal behavior:
Conjectures about social relationships among participants/interactions:
Actions taking place, whether human/mechanical:
Flags (Important notes):
Appendix D

Completed Data Collection Form

Observation Notes

Research Questions:

1. How do preschool teachers of 3-to 5-year-old children who have used place-based education define children’s sense of place?

2. How do these teachers apply that definition to identify preschool children’s sense of place?

3. How do these teachers incorporate preschool children’s sense of place in place-based lessons or units?

Location: Lo‘i at the Hawaiian Studies building at University of Hawai‘i at Mānoa

Date: Wednesday, 2/19/14

Time: 9:00AM-10:15AM

What: Lo‘i. Charlotte and Jake informed me that they would be visiting the lo‘i and invited me.

Setting:

I arrived at the lo‘i separately from the children and teachers since I live next to it (less than a 5 minute walk). The children and teachers came from UHMCC and we met up at approximately 9:00AM. I was feeling pretty refreshed. In general, the weather was fairly warm. It was sunny with clear skies. At the lo‘i, there were plants and trees that created a lot of shade and with the taro patches (lo‘i), there was a lot of moisture and mosquitos. There was construction at the site. They are building a new structure that looks like it will be small classrooms, exhibition rooms, or offices. Although there was not a lot of noise coming from the construction, the regular driveway you would normally take to enter the lo‘i was blocked off and I had to walk around through the main building entrance to get into the lo‘i patch. I arrived a few minutes earlier than Jake and Charlotte’s class. There was another class visiting the patch (they were all wearing blue t-shirts and were sitting under the traditional Hawaiian hut/tent receiving information from an individual that works with Hawaiian studies. I noticed Jake and Charlotte’s class arriving as I heard the younger children chattering. They came in from the driveway (the one that was “blocked” off by construction signs that said not to enter) since the gate was open. Once they all got there we gathered under a tented area which hosted picnic tables. The children were instructed to sit at the tables and Auntie Jane, who works for Hawaiian Studies, approached the tent and gave the children instruction on the lo‘i.
Number of children/adults: There were 4 adults (including Charlotte and Jake) and approximately 13 children.

Notes (What happened? Describe observations.):

Participants: Polu class. Head teachers: Jake and Charlotte. Two interns/aides. Me. All participants were casually dressed. Some children had an extra change of clothing in case they got the clothes they were wearing muddy from the lo‘i. The teachers did not prevent children from moving away from the larger group if they chose to do so. There would be one adult watching those children while the others stayed with the larger group. One particular child (Andrew) continually wandered away physically and did not pay attention when he was sitting with the larger group. He would ignore any adult’s request for him to come back.

Actions taking place, whether human/mechanical: When Auntie Jane approached the tent she addressed the children and introduced herself. She started off by singing a morning song that contained a few Hawaiian words in it asking the children to sing along. After the song, she asked Jake what it is that they were interested in getting out of the visit. Jake explained that the preschool has taro plants growing and that they wanted to create a model of the lo‘i like the one at Hawaiian Studies at the preschool playground. Jane then began to explain to the children where the lo‘i comes from. She taught children different Hawaiian words with associated hand gestures. For example she made a motion with her hands and arms that started from mid-torso and extended outward and said “papa.” Telling the children “papa” meant earth. The then extended her arms, above her head and motioned downwards while saying, “wakea” and explaining that “wakea” meant sky. She told the children that “papa” and “wakea” came together to create “babies” which she explained was the islands of Hawai‘i. She then had the children count to 8. The children counted to 8 and Jane paired each number with one main Hawaiian island: Kahoolawe, Hawaii, Niihau, Kauai, Maui, Molokai, Lanai, and Oahu. She went further to explain how “wakea comes together with ho‘ohokukalani, meaning stars, to make taro or Halo haka lo kapali.” She also said that they came together to make Ha loa kanaka which are all of the people of Hawaii. She told the children that they need to take care of one another, the earth, sky, land, everything. She said mālama ‘aina—take care of the land. She also informed the children that there was going to be an art festival surrounding the topic of the taro and that the children should take part by submitting their art of taro for the contest.

9:35AM: After Jane told the children the story of how the taro was created, she asked them to find and collect leaves and to put them in a bucket she placed out on the dirt. The children were given about 10 minutes to collect leaves.

9:45AM: When the children filled the bucket with leaves, Jane explained to the children that they would be throwing the leaves into the lo‘i to “feed” it and that they would also be walking around in the mud to help push the leaves into the mud. The children got to choose whether or not they wanted to get into the mud. The children who wanted to walk around in the mud got to do so and did it with Jane, Charlotte, and one other adult (intern?). The other children went with Jake to another area of the lo‘i and sat down on a small hillside. Jake reminded the children that their intention is to eventually build a lo‘i of their own at the preschool and pointed out the structure of two lo‘i patches. He asked the children to look at where they pipes located within each patch. He directed their attention to how the pipe is secured, explaining that the grass and dirt holds it in place. He referred to the pipe as “maka.” Jake told the children how there were
two maka in every patch. One that brings water into the patch and one that drains the water. He recapped by saying that there are two maka, and how they now know how to keep it in place, and that they can use leaves to “smash it into the ground.” Jake asked what purpose the leaves served.

[The following was recorded on my phone’s voice recorder]

Jake: “How are we going to do that on our playground? What happens to the leaves when you stick them into the ground?”

C: eating them.

J: “who is eating them?”

C: “Kalo!”

J: “How does the kalo eat the leaf? It doesn’t have a mouth.”

C: Child says something about how the kalo comes up and eats it with it’s mouth.

J: “I have never seen a kala with a mouth. It is not an animal. Here’s my question: what happens to the leaf? ... what happens to the leaf when you stick it into the ground?”

C1: (inaudible)

C2: “I think the people is pushing into the leaf.”

J: “And what happens when the leaf gets pushed into the mud?”

C2: “They eat.”

J: “Who eats?”

C2: “The lo‘i.”

J: “The lo‘i eats it? And turns it into?”

C2: “Mud!”

J: “Mud? … The leaf is going to decompose. … Joshua, there is a pile near your campus that you like to climb on a lot by the green box. What is that pile?”

C2: “The compost pile.”

J: “The compost pile. What happens to the leaves in that pile?”

C2: “It disappears.”

J: “They don’t disappear. What do they do?”

C3: They decompose.”

J: “They decompose and they turn into?”
C?: “Compost.”

J: “But what is compost then?”

C?: “Compost is when it is dirt.”

J: “Ahh! So the leaves decompose into dirt. That’s what it’s doing here. The leaves are decomposing into dirt. The water on top of it turns it into mud. Right? You got it? So in our lo‘i on the playground, … what… We’re going to have to get water in there. And? And?”

C?: (something about dirt)

J: “Oh cause we already have dirt? But we gotta feed that dirt. So how are we going to feed that dirt?

C?, “Water!”

J: “And?”

C?: (inaudible)

J: “And?”

C?: “Leaves!”

J: “Leaves! That’s right. So we’re gonna put the leaves in. We’re gonna grind them into the ground so that they can create compost and then we’re gonna put water on top of it and then we have the delicious mud—the healthy mud—so that we can plant our kalo. Ok?

C?: “yay!”

J: “Got it? So we got two things that we have to do. What do you think we have to do? What two things do we have to do (directing to different child)? Do you remember?”

C?: Compost.

J: “We have to compost the inside and we have to make the maka. Are you ready? Let’s go see over there so that we can see how it works.” (Jake and children leave the little hillside and walk towards some of the other lo‘i patches that are closer to Charlotte and the rest of the class).

As the children were walking from one lo‘i patch to another, Jake said “So that’s one maka. [pointing to one maka in the corner.] Where’s the other maka?” [children point to the diagonal corner]. Jake repeated this questioning in two other patches. Some children are able to point out where the second maka was located.

Jake stopped walking and asked the children who were following to look at his clipboard. He flipped his clipboard so that the back of it was showing. He had a piece of paper that was taped to the back of it and compared the rectangular shape of the paper to the shape of the lo‘i patch. He stated, “if this is one maka [pointing to one corner of the paper], where is the other maka?” Some of the children pointed to the corner diagonally from the one Jake pointed to, while others pointed to different areas of the board. Jake then pointed to different corners to see if the
children understood where the second maka was located. As Jake was doing that, two children who were furthest away from him were observing the loʻi patch closest to them. One of the children said to the other, “there is a maka here. Look Jason.” Jake asked the children to make their way towards the other children who were in the mud of the other patch by Charlotte.

10:10AM: The adults and children gathered under the same tent that they met under at the beginning of the loʻi trip. Jake held up his clipboard and once again explained where the makas lie in the loʻi patch. Auntie Jane spoke to the children about entering their artwork for the art festival and told Jake that she would send him a flier regarding the event. The children and adults made their way out of the field and headed back towards UHMCC (which is down the street).
Jake walks the children by one of the taro patches.
The children assist by “feeding” the lo‘i and stepping the leaves into the mud.
This is a picture of a maka in the corner of one of the patches. Jake referred to this maka to help children understand where the water in the patch was coming from.

**Flags (Important notes):** None
Appendix E

Example of Code Document

QSR N6 Full version, revision 6.0.
Licensee: Unregistered.

REPORT ON NODE (1 1 4) '~/children's backgrounds'
Restriction to document: NONE

******************************************************************************
(1 1 4)                 /Sense of Place/derives from/children's backgrounds
*** Description:
uniqueness; individual personalities
++++++++++++++++++++++++++++++++++++++++
+++ ON-LINE DOCUMENT: Aubrey Interview
+++ Retrieval for this document: 11 units out of 740, = 1.5%
++ Text units 36-41:
gained is, it’s amazing how every child is so different, so very unique 36
and yet they’re so very special. And so when they discover that, they 37
figure out who they are basically and they bring that to the table and 38
the school system, or in their everyday you know – I mean I’ve seen them 39
grow so much from coming in very insecure and not understanding and then 40
building that relationship and connections with teachers. And okay this 41
++ Text units 50-54:
curtain. As far as what’s opened my eyes is how everything is connected 50
and plays a part in them. And yet having their own personality come out 51
in that. And so like I think that’s where my sense of place, my 52
understanding as far as that would be concerned for the child as far as 53
we all come into play as one thing. 54
++++++++++++++++++++++++++++++++++++++++
+++ ON-LINE DOCUMENT: Charlotte Interview
+++ Retrieval for this document: 22 units out of 649, = 3.4%
++ Text units 196-213:
C: I think it does and I think the role of the teacher is to learn about 196
the children and where they’re from and know where they’re coming from as 197
far as their sense of place and also to develop a shared experience that 198
gives them a shared sense of space, I guess. Or sense of place rather. 199
K: Can you go a little bit further into how children’s sense of place 200
comes from their family background? Like what that means to you? 201
C: Well I think that they grow up in a culture, in the culture of their 202
family and so their sense of place especially when they’re as young as 203
preschool. When they come into preschool the sense of place that they 204
have is being with their family and so it’s the practices and culture, 205
cultural beliefs that their family has. And so when they come into a 206
larger community that sense of being comes with them and so I think 207
that’s where their sense of place comes from is the home. And that’s why it’s important to include that when you’re thinking about moving forward with the group of children.

K: Right so the home encompasses their culture, their values. Okay. This is related to my next comment and question too is that it relates to their identity development. Do you believe that as well?

C: Yeah.

K: Because they come from being raised by their parents in a certain way and they come to you in the classroom with those kinds of predispositions. ..
Appendix F

Initial Code Book

Sense of Place

<table>
<thead>
<tr>
<th>Code</th>
<th>Definition</th>
<th>Exemplar</th>
</tr>
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<tbody>
<tr>
<td>1. 1. Derives from:</td>
<td>the aspects that lead to, or develop Sense of Place (SOP)</td>
<td>&quot;I think sense of place is a sense of feeling comfortable and loved, and a sense of peace, and a sense of joy. And I think with those basic needs met with a sense of place is really all you need to build upon…” [INT8, p. 3]</td>
</tr>
<tr>
<td>1. 1. 1. Comfort</td>
<td>minimal anxiety; at ease for both children and parents</td>
<td>&quot;Well when I hear sense of place that's what comes to my understanding is that having the children feel comfortable, almost at their home away from home. That brings in security and security is important.&quot; [INT13, p. 1] &quot;I think the sense of place in physicalness is to bring what they know or what they feel comfortable home to school. So family pictures, possibly something special that they made to bring from home to make them feel comfortable, asking families to share what they do, what they know, what they're interests are and bring that interest to the classroom.&quot; [INT6, p. 5]</td>
</tr>
<tr>
<td>1. 1. 2. Security</td>
<td>to feel safe</td>
<td>&quot;For them to understand, for them to feel comfortable, for them to feel safe because a lot of it's new you know what I mean.&quot; [INT13, p. 1]</td>
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</table>
### 1.1.3. Consistency

*stability*

"...hearing about about their family troubles and them bringing them into school and how that plays a part and them knowing that they have consistency here at the school. But their sense of place, I come here to the school and everyday it’s the same routine." [INT13, p. 1]

Sense of place can be disrupted when there is change. For example, when a child and his family move. School is consistent so children’s sense of place can be stronger there. [INT6, p. 7]

### 1.1.4. Children’s Backgrounds

*uniqueness, individual personalities*

Every child is different, unique, and special. [INT13, p. 1]

Many factors play a role in a child's sense of place and their personality comes out from it. [INT13, p. 1]

A child's sense of place comes from their home life which includes their culture and family. [INT1, p. 4]

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<tr>
<th>Code</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td>1.2</td>
<td>Outcomes/Influences</td>
<td>what sense of place does for children; what or how sense of place influences</td>
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<td></td>
<td></td>
<td>Sense of place affects their social, linguistic, and cultural development and understanding. [INT13, p. 6]</td>
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<td></td>
<td></td>
<td>Sense of place influences different domains such as language and literacy, creativity, social, and cognitive. [INT10, p. 4]</td>
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<td>Sense of place is children’s understanding of where they’re at, which is tied to setting the foundation for their developing identity. [INT12, p. 5]</td>
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<td>Sense of place is like a sense of belonging. [INT2, p. 7]</td>
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<td>Sense of place influences a sense of ownership. [INT3, p. 7]</td>
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<tr>
<td>Code</td>
<td>Definition</td>
<td>Exemplar</td>
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<tr>
<td>1. 2. 1. Social</td>
<td>Sense of place affects social development, or the development of relationships and connections to others and places, and vice versa</td>
<td>Sense of place shapes how you connect to your current place and also affects how you understand future places (e.g., when you move and have to learn about a new place). [INT5, p. 3] Sense of place is the bond to physical places and the people associated with those places as well. [INT7, p. 3] Connections to places and people are fundamental to motivation and driving interests. [INT4, p. 6]</td>
</tr>
<tr>
<td>1. 2. 2. Deeper</td>
<td>affinity for place: sense of security; sense of community (shared); emotional development; spiritual development</td>
<td>“It allows for a deeper kind of learning to occur when a child has a strong sense of place. They feel more connected to what they’re learning about. …it definitely gives them a sense of security and it can give them a sense of community with other people having that same shared experience, having that same special place.” [INT1, p. 5] Sense of place is the connection to home and all the people that you know, making it very emotional as well. [INT4, p. 7]</td>
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<tr>
<td>Code</td>
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</table>
| 1. 3. Definition | what is sense of place?                                                     | Sense of place involves different places, but they’re all connected. [INT13, p. 2]  
Sense of place includes overt aspects like the physical environment to those that are less so like cultural values that drive behaviors. [INT1, p. 6]  
Sense of place can be both a “physical place place” and a “place that you carry around with you.” [INT14, p. 6]  
Sense of place includes the environment which also includes the people. [INT8, p. 1]  
Sense of place starts from what they know, and what they experience directly. [INT9, p. 5] |
| 1. 3. 1. Multidimensional | there are varying aspects and layers to Sense of Place: emotional, cultural (Hawaiian values), physical, community sense, shared, individual, interest, relationships | Sense of place is emotional, physical, and cultural. [INT13, p. 2]  
Sense of place for children is the school, the community, and then extends out from that. [INT1, p. 6]  
Sense of place is emotional, involving trust and comfort, especially with the relationships between child and adult. [INT6, p. 6]  
Sense of place is strengthened through interests, and builds stronger connections [INT12, p. 7]  
Sense of place is affected by accessibility. Having the opportunity to go back and explore a place multiple times and in different ways can strengthen the connection to that place. [INT1, p. 4]  
Sense of place is individualized. The same place can evoke different meanings for different people. Sense of belonging is essential to sense of place. [INT2, p. 5]  
Sense of place is affected by the lens—culture, values—through which children see and understand the world. [INT9, p. 10] |
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<tbody>
<tr>
<td>1.3.1.1. Emotional</td>
<td>Affinity for place: sense of security; sense of community (shared); emotional development; spiritual development</td>
<td>Sense of place is emotional including a sense of belonging [INT2, p. 5; INT3, p. 10], ownership [INT8, p. 3; INT3, p. 4], and connectedness [INT6, p. 5; INT2, p. 5, INT8, p. 3].</td>
</tr>
<tr>
<td>1.3.1.2. Cultural/background</td>
<td>Home culture, ethnic culture, values, upbringing</td>
<td>Children’s upbringing affects their choices, understandings, connections to places and people. [INT13, p. 2; INT11, p. 6; INT9, p. 10].</td>
</tr>
<tr>
<td>1.3.1.3. Physical</td>
<td>Tangible, physical places, physical environment</td>
<td>Sense of place is children's schools and communities. [INT10, p. 3; INT11, p. 3].</td>
</tr>
<tr>
<td>1.3.1.4. Community Sense</td>
<td>Having an understanding of your relation to the community</td>
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<tr>
<td>1.3.1.5. Shared</td>
<td>Comes from shared and common experiences with others</td>
<td>Children's sense of place in school can be one that is created with other children and adults. [INT1, p. 4; INT3, p. 5].</td>
</tr>
<tr>
<td>1.3.1.6. Individual</td>
<td>Unique</td>
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<tr>
<td>1.3.1.7. Interests</td>
<td>What one is drawn to, intrinsically,</td>
<td>Children were interested in whales and the ocean and identified with them. [INT12, p. 8].</td>
</tr>
<tr>
<td>1. 3. 1. 8. Social/relationships</td>
<td>extrinsically, communally</td>
<td>Sense of place is affected by people who are in, or affiliated with those places. [INT6, p. 6; INT2, p. 5]</td>
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<td></td>
<td>affected by people and connections to people in places</td>
<td>Children’s sense of place is influenced by the representations they create, especially when those representations are displayed in the classroom. [INT1, p. 10] Different places may provide different opportunities. School may provide opportunities to do or learn about things that may not be available at home, and thus create a sense of belonging and ownership. [INT2, p. 5]</td>
</tr>
<tr>
<td>1. 3. 1. 9. Sense of belonging/ownership</td>
<td>sense of community</td>
<td>School can create a sense of ownership and sense of pride for children. When they have a part in that place and contributing to that place, they can feel proud of it. [INT8, p. 3] In school, children can feel a sense of ownership after they have developed strong, positive connections with that place and feel comfortable with “jumping right into things.” They feel confident. [INT3, p. 4]</td>
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### Code

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<tbody>
<tr>
<td>1. 3. 1. 10. Bidirectional</td>
<td>understanding of place is affected by the children being in it themselves, and children influence the place as well</td>
<td>&quot;… it would be how the child see them in relation to the world and so you know, different cultures, different environments, it's how they affect it and how it affects them.&quot; [INT7, p. 2]</td>
</tr>
<tr>
<td>1. 3. 2. Background/individualized</td>
<td>uniqueness, individual personalities</td>
<td>Everyone’s perspective is different and so they’re sense of place will be different. [INT13, p. 3] Sense of place is influenced by where you’re from, your background, which means it will be different for everyone. [INT1, p. 3; INT5, p. 2; INT11, p. 9; INT9, p. 11]</td>
</tr>
<tr>
<td>1. 3. 3. Does every child have a sense of place?</td>
<td>if sense of place exists, does every child have one?</td>
<td>Yes, usually with the home and/or school. [INT13, p. 6; INT6, p. 6; INT1, p. 6] No, those who cannot make connections will not have a sense of place. [INT5, p. 5] No, some are not connected with their environment or they do not know what to do. [INT11, p. 8] Yes, but it is continually developing. [INT2, p. 10] Yes, but harder because technology and modern lifestyle has made people shift away from experience physical places and nature. [INT14, p. 3] Yes, but it may be more or less defined depending on the child. Some may be more attached to a person, others to an actual place. [INT7, p. 6] Yes, but not a strong one in early childhood. [INT4, p. 4]</td>
</tr>
<tr>
<td>1. 3. 4. Different than that of an older child or adult?</td>
<td>does sense of place differ across ages?</td>
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<td>Sense of place develops with age. You have a more established sense of place in later childhood to adulthood than in early childhood, although it can always be developing. [INT13, p. 7]</td>
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<td>Young children’s sense of place is affected by their thinking in the “here and now,” whereas adults’ are affected by broad experiences. [INT10, p. 5]</td>
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<tr>
<td>Sense of place in early childhood is more stable than that in older children or adults, because there is more consistency and predictability in early childhood. [INT6, p. 8]</td>
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<td>Sense of place is more so affected by peers in the teenage years. [INT6, p. 9]</td>
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<tr>
<td>Sense of place is more so affected by the home component in early childhood than in the later years. [INT1, p. 6]</td>
<td>Sense of place is more so affected by the home component in early childhood than in the later years. [INT1, p. 6]</td>
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<tr>
<td>Sense of place is more narrow and concrete in early childhood than in the later years. [INT1, p. 8]</td>
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<td>Older children and adults already have an established identity, and patterns of behaviors and dealing with others. It is harder to change in older children and adults. With younger children, it is flexible. [INT5, p. 4]</td>
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<tr>
<td>Sense of place exists in younger children but they may not be able to make the connection or explain it yet. They may not be able to verbalize their feelings. So they may connect to a place physically but not be able to express their emotional connection to it. They are more concrete. [INT11, p. 3]</td>
<td>Sense of place exists in younger children but they may not be able to make the connection or explain it yet. They may not be able to verbalize their feelings. So they may connect to a place physically but not be able to express their emotional connection to it. They are more concrete. [INT11, p. 3]</td>
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<tr>
<td>Sense of place starts off with the immediate surroundings and expands outwards over the years. Young children are receptive—more open, and more able—to taking in information when they are younger</td>
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</table>
Younger children are “hands on, immediate, like what’s happening now and egocentric.” Their sense of place is heavily influenced by home and school, whereas older children are influenced by less immediate aspects, like global trends or issues. Sense of place is not developed enough yet in early childhood. Sense of place “lives in the people.”

Young children’s sense of place is concrete and not affected by as many experiences than those who are older may have.

<table>
<thead>
<tr>
<th>1. 3. 5. How do you identify a child's sense of place?</th>
<th>Indicators of sense of place</th>
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<tbody>
<tr>
<td>Teachers know whether children have a sense of place by talking to them, observing them, interacting with them, and getting to know the parents. Teachers know whether children have a sense of place through the children’s verbalizations and facial expressions. Teachers know whether children have a sense of place by watching them and seeing how they prioritize things.</td>
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<tr>
<td>Code</td>
<td>Definition</td>
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<tr>
<td>1. 3. 5. 1.</td>
<td>Verbal verbalization; what children say</td>
</tr>
<tr>
<td>1. 3. 5. 2.</td>
<td>Nonverbal through behaviors, facial expressions, representations</td>
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<tr>
<td>Code</td>
<td>Definition</td>
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</table>
| 1. 3. 6. Examples of incorporating or considering sense of place | examples of what things can impact sense of place | The children compared what they were learning about civil rights with the university shuttle service. They wanted to test one child’s claim that children were not allowed on the rainbow shuttle. The teachers and children walked over to the university and children would ask the drivers if they could get on the shuttle. [INT1, p. 8]  
The teachers used Dr. Seuss’ Sneetches story to discuss racism with the children, since traces of racism were occurring in the classroom and it was around Dr. Martin Luther King Jr. Day. [INT5, p. 6]  
The teachers taught island formation by comparing volcanoes (not familiar to some) to mountains (familiar to most children in the classroom), and adding concepts one-by-one that was built on existing knowledge. [INT11, p. 4]  
Lessons incorporate indoor and outdoor environments, connections to family, literature, language, art, and music which will have references in place. [INT14, p. 4]  
The teachers encouraged children to brainstorm solutions on how to help a kitten that was stuck in the tree of their playground. The children decided that they should call the fire department and witnessed fire fighters save the kitten. The teachers and children extended this experiences by continuing to talk about fire fighters, and including their experience in different activities such as dramatic play. [INT9, p. 7] |
### Code | Definition | Exemplar
--- | --- | ---
1. 4. Dynamics that contribute to what influences sense of place? dynamics that contribute to sense of place. | Teachers can see children’s sense of place by working with them in small group and large group times. They can especially get a sense of it during informal time such as during lunch, as the children are comfortable and free to talk about what is on their mind. The children seem to be “themselves completely” during this time. [INT13, p. 9] People highly influence children’s sense of place such as volunteers, interns, teachers, family members, and student assistants. Their sense of place is molded by their interactions with different people. [INT6, p. 11] The opportunities, materials, and activities that are made available to children contribute to their sense of place. In the classroom, teachers give children the space to explore. The teachers help children draw connections between their sense of place and what their experiences in the classroom [INT12, p. 6; INT11, p. 8] Every part of the classroom contributes to children’s sense of place—from group time to outdoor play. Some units of study are more intentional than others on developing children’s sense of place—such as the unit on the ahupua’a. [INT1, p. 9] Different activities, centers, and set-ups will contribute to different students depending on their personalities and preferences. For example, shy children will be comfortable and receptive to connecting to a place in small group settings. [INT2, p. 10] Children’s sense of place will be more heavily impacted when teachers are learning with the children, than when teachers direct lessons. [INT14, p. 2] Every experience children have impacts their sense of place. What teachers allow children to do in a space affects children’s sense of place. Bringing the children to revisit places, and having them reflect on their experiences by asking questions, also contributes to their sense of place. [INT7, p. 8] Small group and one-on-one opportunities give children a space to express their feelings, thoughts, and ideas. [INT4, p. 9] Allowing them to visit places, and create experiences—by doing activities like drawing—within those places adds to their sense of place. [INT8, p. 6] Basic needs—food, sleep, etc.—need to be met before they can be ready for lessons. [INT3, p. 12]
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<tr>
<th>Code</th>
<th>Definition</th>
<th>Exemplar</th>
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</thead>
<tbody>
<tr>
<td>1. 4. 1. Materials/products that represent sense of place</td>
<td>Split into materials that represent sense of place, and materials made available (below)</td>
<td>See below.</td>
</tr>
<tr>
<td>1. 4. 1. 1. Materials that represent sense of place</td>
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<tr>
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1. 4. 1. 2. Materials made available

Materials in the classroom that are intended to be open-ended such as scarfs can be used by children for multiple purposes. Around Chinese New Year time, children used the scarfs for a lion dance. [INT6, p. 10; INT8, p. 11]

Things that are interesting to them, and that they can relate to—usually something from home. Children are given their own space or area (e.g., cubbies, art files, etc.). They can put what they want in those spaces, and they are given the freedom to display their work if they wished. [INT2, p. 11]

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<tr>
<td>1. 4. 2. Teachers/parents</td>
<td>teachers and parents affect children's sense of place</td>
<td>Parents and teachers play a role in children’s sense of place. Their involvement affect the experiences that the children have. [INT11, p. 7]</td>
</tr>
<tr>
<td>1. 4. 3. Transitions</td>
<td>e.g., dropping children off at school</td>
<td>Transitions allow for teachers to connect with parents and share information about the child. During this time, the child can also start to develop trust for the teacher which sets the foundation for comfort and allows for learning. [INT4, p. 9]</td>
</tr>
</tbody>
</table>
| 1. 4. 4. Group size   | small and large groups                     | Small groups allow teachers to interact closely with the children, to have intimate conversations with them. [INT14, p. 2; INT8, p. 8]  
Large group, or whole class, is good to establish a shared group identity. Small group is beneficial in that you can really get to know the children and their interests, but it really is essential to have a balance of small and big group. [INT3, p. 11] |
Teachers are intentional about having the children spend the school day both indoors and outdoors. [INT14, p. 2]

Class will be divided into different areas that allow for children to display their work, remind children of rules and responsibilities, encourage different types of interactions. [OBS5, p. 2]

The teachers emphasize having open-ended materials in their centers—things that are not made for only one purpose—so that children can use their imagination and creativity in finding and expressing themselves. [INT8, p. 10-11]

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<tr>
<td>1. 4. 5. Centers</td>
<td>what centers or different areas of the school provide</td>
<td>Teachers are intentional about having the children spend the school day both indoors and outdoors. [INT14, p. 2] Class will be divided into different areas that allow for children to display their work, remind children of rules and responsibilities, encourage different types of interactions. [OBS5, p. 2] The teachers emphasize having open-ended materials in their centers—things that are not made for only one purpose—so that children can use their imagination and creativity in finding and expressing themselves. [INT8, p. 10-11]</td>
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</table>

| 1. 5. Incorporation into Place-Based Education | How is sense of place incorporated into place-based education or lessons? | Children felt really connected to fire fighters and that was a constant conversation topic, so teachers changed the centers and included materials that would support children in remembering the experience, and learning, expanding, and extending on that lesson. [INT10, p. 6] In the beginning of the school year, teachers will draw more in from the home life and apply that to children’s school experience, and ultimately create a larger class- and then school-wide “family.” From there, the teachers extend outwards and start building shared experiences that will create a sense of place together as a group. [INT1, p. 10] Having conversations with children. [INT11, p. 8] Have conversations, brainstorm, share ideas, and contribute thoughts to others. [INT2, p. 11] Go to the library to explore topics are interested in, in a different way. [INT7, p. 9] Discussions and sharing. [INT4, p. 10] Establishing relationships. Creating an o’hana. [INT3, p. 5] Completing projects that ties the class together. Songs that they sing together to create a classroom identity. [INT3, p. 11] |
# Place-based Education

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<th>Definition</th>
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<tbody>
<tr>
<td>2. 1. Definition</td>
<td><strong>how would you define place-based education?</strong></td>
<td>Place-based education needs to include Hawaiian culture and values—like Malama and Kuleana. It also needs to include other cultures that the children are a part of. [INT13, p. 4] Place-based education includes the environment and children’s interests. Many teachers started off with thinking that place-based education was physical, nature/environmental solely, and as they thought about it more and grew more familiar with it, they extended their ideas of it beyond that. [INT6, p. 3] In the beginning, it seems more nature- and environment-based, but it is so much more than that—it encompasses different things (e.g. rainbow shuttle bus adventure). [INT1, p. 8] Place-based education is environmental- and cultural-based. Culture includes the home and school culture. [INT5, p. 1] Place-based education involves children’s interests. It includes the environment and hands-on experiences from immediate locations to those that extend out. [INT11, p. 1] Place-based education is children’s interests, the environment, and making meaningful connections—contextualizing. [INT2, p. 5] Place-based education is emotional, relationship-based, culture-based, and specific to particular places. [INT7, p. 10] Place-based first focuses on the child so that they can have a better understanding of themselves. Then it extends to the school, to the home, and incorporates the community. [INT9, p. 2]</td>
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<tr>
<td>2. 1. 1. Hawaiian values</td>
<td>cultural values from Hawai`i. Two main values were Kuleana and Malama (see below).</td>
<td>The teachers at this school focus on instilling values—namely Malama and Kuleana—that children will carry with them and continue to apply long after they are done with preschool. [INT13, p. 6] Hawaiian culture is tied to the physical environment, and the legends and stories, the language, food, and plants. We have to main responsibilities in Hawai<code>i: to respect the culture that was here before and to co-create a new experience. [INT14, p. 2] Studying the ahupua</code>a, lo`i, and heiaus are some topics of place-based education. [INT4, p. 1]</td>
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<tr>
<td>2. 1. 1. 1. Malama</td>
<td>to care for, to maintain, to protect; be diligent in all aspects of our duties and responsibilities as it translates into the charge we have for the environment we coexist in and for ourselves and the people around us—reminding us daily to operate from a place of care and ethics.</td>
<td>Young children tend to be focused on immediacy and teaching children Malama aims to instill gentleness, ownership, and care. The class created a Malama tree, which was a visualization of when children practiced and applied Malama at school. [INT13, p. 5] The teachers taught the children Malama by focusing on bettering the environment and their community. They learned to reuse materials for class and student projects. [OBS2, p. 2-3] Within the classroom, teachers used props to remind children of their values (e.g., Malama tree, Kuleana chart). [OBS11, p. 4]</td>
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Kuleana, privilege, responsibility, obligation. Seeing our area of responsibility (ourselves, others, environment) as a privilege and opportunity to cause growth in those with whom we interact as well as ourselves. Recognizing the commitment this privilege deserves.

The teachers taught the children the meaning of Kuleana and incorporated their responsibilities at home to those at school. [INT13, p. 4]
The teachers also aimed to teach children about the value of kuleana, or privilege, responsibility, and obligation. One way that they demonstrated this is by creating a kuleana chart which reminded the children of their responsibilities within the class community. [OBS11, p. 4-5]
Within the classroom, teachers used props to remind children of their values (e.g., Malama tree, Kuleana chart). [OBS11, p. 4]
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| 2. 1. 2.      | Community                                           |Teachers extended the children’s experience with a cat who got stuck in the tree located their playground. They learned about community workers. They visited the fire fighters. They changed their dramatic play center to allow for play around community workers. … They also discussed local and nonlocal food and took children to the local market. They talked about community workers, and physically went out into the community, allowing the children to explore and gain hands-on experiences. Goals: connecting with the community, having children get direct experiences, and bringing the children back and extending those lessons and conversations. [INT10, p. 2-3]  
Place-based education involves being familiar with or learning about the community which includes family and cultural aspects. [INT6, p. 2]  
“Place-based is when you connect what children are learning with where you are and the community around you.” Also, community or building community occurs in the classroom. [INT1, p. 1]  
Surrounding places and community for UHMCC is Waikiki, Ahupua’a in Mānoa, and the university campus. The community hosts plants, birds, and animals. [INT14, p. 1]  
The teachers took the children to the university campus. They were extending their lessons on sculptures and artwork embedded in their community. The children walked around campus talking about, and taking pictures of the sculptures. [OBS1, p. 2]  
The teacher took a group of children on a walk around their school campus. They talked about what they observed in the environment and the children got a chance to run around, draw, and write about different areas. [OBS2, p. 5-6]  
The classroom had evidence of the children’s individual and communal artwork made from items that they found in the surrounding community and from home. The items and materials are typically deemed as “trash” (e.g., plastic, water bottles, cardboard). [OBS2, p. 1-2]  
The class participated in a community event designed for all children from preschools in the district. There were games, activities, etc. Teachers,
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| children, family members, and other volunteers were involved. [OBS3, p. 1-3]  
The school asked a community theatre group to perform a play for the children. The children and their families were invited to come watch. The actors had ties to the university as they were former students. There was an interconnectedness of the community, school, children, families, and teachers/administrators. [OBS10, p. 2]  
Eliciting help and participation from parents is an example of building community and bridging the gap between home and school. The teacher planned a cooking series and parents came volunteered to come into the classroom to share some of what they like to make at home. [OBS5, p.2]  
Bringing children out into the community is another way of how one teacher interpreted place-based education. One teacher brought the children to a nearby Whole Foods grocery store. The store workers gave the children a tour and shared information about the store. Parents were invited to participate in this experience. [OBS6, p. 1-2]  
Some teachers incorporated community in their lessons by taking the children to the neighboring lo‘i. The children received information about the lo‘i, its history, and purpose. The children helped in the lo‘i by collecting leaves and grinding them into the ground. One of the teachers took a group around and facilitated a discussion on how the lo‘i’s structure so that they could build their own at their school campus. [OBS7, p. 1-4]  
The school invited a guest storyteller to tell the children Hawaiian stories with puppets. One student’s parents came to the school to share about how they celebrate Chinese New Year, through their traditional dress and games. [OBS8]  
Children were taken on walks to the university to visit the libraries and to search for and identify plants that they were learning about in class. [OBS9]  
Community is the land and everything that comes with it—nature, community centers, restaurants, people, etc. [INT9, p. 1]        |
| 2. 1. 3. Other cultural aspects | events, values, beliefs, language, etc. that influence place-based education | Even though they all live in Hawai‘i, they all have different experiences of what that is, and so it is important to bring in the cultural backgrounds of all the children. [INT1, p. 11] Chinese New Year is something that many of the children and teachers celebrate. The school provided an event, a traditional lion dance, which facilitated conversations between staff, children, and families. Even if there were some who did not celebrate it they learned about Chinese New Year; the school created a shared experience for the children. [INT6, p. 1; OBS1] Culture is not just about your race or ethnicity; it is also about the experiences that you have in a place, which includes your interactions with people. [INT14, p. 2-3] The dissemination and sharing of Hawaiian stories is embedded with the local culture. [OBS4; OBS8] Experiences at the ‘lo‘i provide children with information regarding, and make them a part of the local culture. [OBS7] In addition to direct and shared experiences, the teachers also provided children with a space to share their personal experiences and culture. [INT4, p. 2] |
| 2. 1. 4. Background | homelife; experience (affected by vicinity) | Place-based education involves past experiences, new experiences together, and interest. What the children are interested in and it affects later experiences. It may also affect the opportunities that parents and teachers expose children to, as parents and teachers may pick up on what their children would like to do or learn more about. [INT6, p. 1] Teachers start off the year getting to know the children by having them talk and show who they are, where they are from, what makes them special. They also asked parents to get involved by sharing a bit of their home life through cooking recipes. [INT1, p. 3] |
| 2. 1. 5. Comes from interest | sparked by the interests of children and teachers | Lessons usually start with a child or children’s interests. An example of this was lion dancing. The teacher used that as a starting point to expand on the topic and help all children in the class learn about lion dancing. [INT6, p. 2] Place-based education comes from the children: their interests, ideas, thoughts. It also comes from their surroundings, environment, and things that happen with their families. The teacher tries to bring all of that in and make connections between all those factors and school. Example: whales. [INT12, p. 7] An example of how children’s interest turned into a place-based lesson: the children were in the sandbox at the playground and started talking about the beach. The teacher noticed and selected books about the beach and seashore, and read the books to the children to facilitate a conversation. [INT11, p. 3] Another example: children were concerned about the trash in the Ala Wai. The teachers used that interest as a platform for learning during the school year. Some children, even after moving on from preschool, continue to care about keeping the environment clean. They become attached to the pace and feel that it is their responsibility to take care of it. [INT8, p. 1] |
### 2.1.6. Physical Environment

There seemed to be an evolution of teachers’ understandings of place-based education which tended to start with immediate physical surroundings and expanded outward and became more complex and rich. [INT6; INT12] School playground is an outdoor classroom. [INT2, p. 1]

School, grocery store down the street, fire station in the neighborhood, Waikiki ahupua’a. The plants, animals, birds in these places. [INT14, p. 1]

Example: walking trip around the university campus to find plants that they were learning about. [OBS9]

Example: children worked together to create a volcano model. [OBS11]

The teacher focused more on the physical environment, and also had children talk about their cultures and share what their place was like in other countries. [INT7, p. 1]

Examples: Mānoa stream, Ala Wai. Older children: solar systems and stars because there as an eclipse coming. [INT4, p. 1]

Immediate surroundings where children could directly access it, both inside and outside the classroom. Outside: Ala Wai canal. Inside: drew a map of the Ala Wai. [INT8, p. 1]

Example: gardening. Creating a garden at the school. [INT9, p. 1]

| 2.1.7. Age differences in early childhood | how place-based education may be different for the younger children than those who are older. | Children’s ages may affect teachers’ support during their learning. For example, their teaching strategies (e.g., group sizes) may differ because of children’s attention spans, ability to mimic, verbalization capabilities, etc. The younger the children are the more the teachers have to be in-tuned to each individual child and cater to that child—more individualized instruction or attention or support.
Younger ones may be more likely to mimic each other than the older children. That is why it is important for teachers to work with the younger ones one-on-one so that they can obtain their actual perspectives instead of those that are copied from others. Younger children’s attention span is shorter than the older ones. Pairing up younger ones with older and those that are more experienced made for a different learning and teaching experience where they could learn from each other. [INT6, p. 4-5] |
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### 2. 1. 8. Goals of Place-Based Education

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<tr>
<th>Code</th>
<th>Definition</th>
<th>Exemplar</th>
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<tbody>
<tr>
<td>Place-Based</td>
<td>what educators wanted to get out of place-based education</td>
<td>Expand on thoughts. Make connections. [INT12; INT1; INT3] Establish and build foundational knowledge and skills. Extend to later years. [INT12; INT3] Share ideas to others, including families. [INT12] Improve children’s self-esteem and contribute to developing self-concept. Instilling thoughts of “I can do it.” Recognize the children as individuals and where they are coming from. Letting children know that their knowledge and perspective is important. [INT5] Help increase children’s awareness of their surroundings. [INT11] To include children’s interests in instruction. Make instruction personally relevant. [INT12; INT5; INT9] To have teachers learning alongside the children. Collaborative learning. [INT11; INT9] Provide children with hands-on experiences. [INT4; INT3; INT9]</td>
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### 2. 2. Benefits of Place-Based Education

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<tr>
<td>Place-Based</td>
<td>additional comments made about place-based education, usually were in favor of it.</td>
<td>Building relationships. It contributes to collaboration and social development. [INT10; INT6; INT5] It includes a part of children in instruction. [INT1] Children can take on responsibility for their environment and their community. Through place-based instruction, children can feel pride and power over their influence over their instruction and surroundings. They can make a positive impact and carry this attitude throughout their lives. [INT5] It can really empower children and teach them that learning can be fun and exciting. It can make children feel important. [INT8]</td>
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### 2. 3. Importance/for early childhood

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<tr>
<td>Place-Based</td>
<td>place-based education or elements of it is important to have in early childhood.</td>
<td>It provides children with hands-on/direct experiences. [INT10; INT1; INT2; INT14; INT7] It contributes to and encourages children’s active learning. [INT10; INT2] It contributes to children’s commitment to their community. It instills a sense of responsibility. It helps children with their critical thinking skills. [INT2] It provides opportunities for real-world application. It allows them to take risks and explore their potential. [INT4] It sets a foundation for later learning. It affects their excitement and motivation for later learning. [INT5; INT2; INT7; INT8; INT3; INT9]</td>
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### 2. 4. Negative/difficulties associated with Place-Based Education

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<tr>
<th>Topic Choices</th>
<th>Teachers Used for Place-Based Lessons/Education</th>
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<tbody>
<tr>
<td>Liability that comes with taking the children outside of the classroom and off-campus. Funding is also a challenge since it’s going to cost money for field trips, for which parents usually are asked to pay.</td>
<td><strong>Gardening</strong> [INT6; INT12; INT1; INT2; INT14; INT3] <strong>Observing nature, getting into the environment (e.g., ahupua<code>a, Japanese garden, lo</code>i, Mānoa stream, Ala Wai stream, surrounding schools like <code>Iolani)** [INT1; INT7; INT4] **Cooking** [INT6; INT1; INT2; INT8; INT3] **Walks (e.g., to the university campus, to the nearby community (also community building within the classroom))** [INT6; INT1; INT7] **Community workers (e.g., at restaurants)** [INT1; INT7] **Learning about animals in their area, including those in the school (e.g., chickens, guinea pigs) and other creatures (e.g., spiders)** [INT1; INT14; OBS12] **Trips (e.g., to farmer’s market, grocery store; vet office, Whole Foods, farms (Ma</code>o))</strong> [INT6; INT3] <strong>Social focus and values-based (e.g., malama and kuleana) and culture (e.g., Chinese New Year)</strong> [INT6; INT5; INT14] <strong>Ocean, migration, shoreline, habitats, waves, tides</strong> [INT12; INT11; INT7] <strong>Volcanoes</strong> [INT11]</td>
</tr>
<tr>
<td>A challenge was initially trying to define place-based education.</td>
<td><strong>A challenge was looking beyond the labels that may have been placed beforehand.</strong> [INT5] <strong>If you apply a strict definition to place-based education, it may turn into something that people try to standardize and test children on.</strong> [INT14] <strong>Some parents may be resistant to having their children taken out to the community because they are concerned for their safety.</strong> [INT8]</td>
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*INT10* A challenge was trying to define place-based education. *INT5* A challenge was looking beyond the labels that may have been placed beforehand. *INT14* If you apply a strict definition to place-based education, it may turn into something that people try to standardize and test children on. *INT8* Some parents may be resistant to having their children taken out to the community because they are concerned for their safety.
Appendix G

Initial Code Tree

1. Sense of place
  - 1. 1. Derives from
    - 1. 1. 1. Comfort
    - 1. 1. 2. Security
    - 1. 1. 3. Consistency
    - 1. 1. 4. Children’s backgrounds
  - 1. 2. Outcomes/influences—SOP influences what?
    - 1. 2. 1. Social
    - 1. 2. 2. Deeper understanding/connectedness to a place
  - 1. 3. Definition
    - 1. 3. 1. Multidimensional
      - 1. 3. 1. 1. Emotional
      - 1. 3. 1. 2. Cultural/background
      - 1. 3. 1. 3. Physical
      - 1. 3. 1. 4. Community sense
      - 1. 3. 1. 5. Shared
      - 1. 3. 1. 6. Individual
      - 1. 3. 1. 7. Interests
      - 1. 3. 1. 8. Social/relationships
      - 1. 3. 1. 9. Sense of belonging/ownership
      - 1. 3. 1. 10. Bidirectional
    - 1. 3. 2. Background/individualized
    - 1. 3. 3. Does every child have a SOP?
    - 1. 3. 4. Different than that of an older child or adult?
    - 1. 3. 5. How do you identify a child’s sense of place?
      - 1. 3. 5. 1. Verbal
      - 1. 3. 5. 2. Nonverbal
    - 1. 3. 6. Examples of incorporating/considering SOP
  - 1. 4. Dynamics that contribute to
    - 1. 4. 1. Materials/products that represent SOP
      - 1. 4. 1. 1. Materials that represent SOP
      - 1. 4. 1. 2. Materials made available
    - 1. 4. 2. Teachers/parents
    - 1. 4. 3. Transitions (parents dropping kids off)
    - 1. 4. 4. Group size
    - 1. 4. 5. Centers
  - 1. 5. Incorporation into PBE

2. Place-Based Education
  - 2. 1. Definition
    - 2. 1. 1. Hawaiian values
      - 2. 1. 1. 1. Malama
      - 2. 1. 1. 2. Kuleana
- 2.1.2. Community
- 2.1.3. Other cultural aspects
- 2.1.4. Background
- 2.1.5. Comes from interest
- 2.1.6. Physical environment
- 2.1.7. Ages differences in EC
- 2.1.8. Goals of PBE

☐ 2.2. Benefits of PBE (usually other comments about PBE)
☐ 2.3. Importance/for early childhood
☐ 2.4. Negative/difficulties associated with PBE
☐ 2.5. Topics
Appendix H

Second Code Tree

1. Sense of place
   □ 1. 1 Definition
     ○ 1. 1. 1. Derives from
       ▪ 1. 1. 1. 1. Comfort and Security
       ▪ 1. 1. 1. 2. Consistency and Transitions
       ▪ 1. 1. 1. 3. Children’s backgrounds
     ○ 1. 1. 2. Multidimensional
       ▪ 1. 1. 2. 1. Emotional
       ▪ 1. 1. 2. 2. Cultural/background
       ▪ 1. 1. 2. 3. Physical
       ▪ 1. 1. 2. 4. Shared
       ▪ 1. 1. 2. 5. Interests
       ▪ 1. 1. 2. 6. Social/relationships
       ▪ 1. 1. 2. 7. Sense of belonging/ownership
       ▪ 1. 1. 2. 8. Bidirectional
     ○ 1. 1. 3. Does every child have a SOP?
     ○ 1. 1. 4. Different than that of an older child or adult?
     ○ 1. 1. 5. How do you identify a child’s sense of place?
     ○ 1. 1. 6. Evidence of sense of place
     ○ 1. 1. 7. Dynamics that contribute to
       ▪ 1. 1. 7. 1. Materials made available
       ▪ 1. 1. 7. 2. People
         • 1. 1. 7. 2. 1. Group size (social)
         • 1. 1. 7. 2. 2. Centers (physical)
     ○ 1. 1. 8. Examples of incorporating/considering SOP
     ○ 1. 1. 9. Outcomes/influences—SOP influences what?
       ▪ 1. 1. 9. 1. Social
       ▪ 1. 1. 9. 2. Deeper understanding/connectedness to a place
   □ 1. 2. Incorporation into PBE

2. Place-Based Education
   □ 2. 1 Definition
     ○ 2. 1. 1. Hawaiian values
       ▪ 2. 1. 1. 1. Malama
       ▪ 2. 1. 1. 2. Kuleana
     ○ 2. 1. 2. Community
     ○ 2. 1. 3. Other cultural aspects
     ○ 2. 1. 4. Background
     ○ 2. 1. 5. Comes from interest
     ○ 2. 1. 6. Physical environment
     ○ 2. 1. 7. Ages differences in EC
     ○ 2. 1. 8. Goals of PBE
   □ 2. 2 Benefits of PBE (usually other comments about PBE)
2.3 Importance for early childhood
2.4 Negative difficulties associated with PBE
2.5 Topics
Appendix I

Third Code Tree

1. Sense of place
   □ 1. 1 Definition
     ○ 1. 1. 1. Derives from
       ▪ 1. 1. 1. 1. Comfort and Security
       ▪ 1. 1. 1. 2. Consistency and Transitions
       ▪ 1. 1. 1. 3. Children’s backgrounds
     ○ 1. 1. 2. Multidimensional
       ▪ 1. 1. 2. 1. Emotional
       ▪ 1. 1. 2. 2. Cultural/background
       ▪ 1. 1. 2. 3. Physical
       ▪ 1. 1. 2. 4. Shared
       ▪ 1. 1. 2. 5. Interests
       ▪ 1. 1. 2. 6. Social/relationships
       ▪ 1. 1. 2. 7. Sense of belonging/ownership
       ▪ 1. 1. 2. 8. Bidirectional
     ○ 1. 1. 3. Does every child have a SOP?
     ○ 1. 1. 4. Different than that of an older child or adult?
     ○ 1. 1. 5. Indicators of sense of place
     ○ 1. 1. 6. The role of people
       ▪ 1. 1. 6. 1. Group size (social)
       ▪ 1. 1. 6. 2. Centers (physical)
     ○ 1. 1. 7. Examples of incorporating/considering SOP
     ○ 1. 1. 8. Outcomes/influences—SOP influences what?
       ▪ 1. 1. 8. 1. Social
       ▪ 1. 1. 8. 2. Deeper understanding/connectedness to a place
   □ 1. 2. Incorporation into PBE

2. Place-Based Education
   □ 2. 1 Definition
     ○ 2. 1. 1. Hawaiian values
       ▪ 2. 1. 1. 1. Malama
       ▪ 2. 1. 1. 2. Kuleana
     ○ 2. 1. 2. Community
     ○ 2. 1. 3. Other cultural aspects
     ○ 2. 1. 4. Background
     ○ 2. 1. 5. Comes from interest
     ○ 2. 1. 6. Physical environment
     ○ 2. 1. 7. Ages differences in EC
     ○ 2. 1. 8. Goals of PBE
   □ 2. 2 Benefits of PBE (usually other comments about PBE)
   □ 2. 3 Importance/for early childhood
   □ 2. 4 Negative/difficulties associated with PBE
   □ 2. 5 Topics

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Appendix J

**Final Code Tree**

1. Sense of place
   - 1.1. Influences of Sense of Place Development at School
     - 1.1.1. Comfort and Security
     - 1.1.2. Consistency
     - 1.1.3. Children’s backgrounds
   - 1.2. Existence
   - 1.3. Comparison to Later Years
   - 1.4. Multidimensionality of Sense of Place
     - 1.4.1. Physical
     - 1.4.2. Emotional
     - 1.4.3. Individualized
     - 1.4.4. Social
   - 1.5. Indicators of Young Children’s Sense of Place
     - 1.5.1. Verbalizations
     - 1.5.2. Behaviors
     - 1.5.3. Representations
   - 1.6. Effects of Sense of Place
     - 1.6.1. Influences on Place
     - 1.6.2. Socioemotional Development
     - 1.6.3. Deepens Learning

2. Place-Based Education
   - 2.1. Goals of Place-based Education
     - 2.1.1. Connections, Collaboration, and Care
   - 2.2. Shaping Young Children’s Sense of Place in Place-based Education
     - 2.2.1. Social Conditions
     - 2.2.2. Physical Conditions
   - 2.3. Place-based Education takes place at School, and in the Local Community and Environment
     - 2.3.1. School Campus
     - 2.3.2. Local Community
     - 2.3.3. Local Environment
   - 2.4. Place-based Content
     - 2.4.1. Learning about the Self
     - 2.4.2. Content including Children’s Backgrounds
     - 2.4.3. Plants in the Environment
     - 2.4.4. Abstract Concepts
     - 2.4.5. Local Places, Culture, and Legends
     - 2.4.6. Hawaiian Values
       - 2.4.6.1. Mālama
       - 2.4.6.2. Kuleana
   - Effects of Place-Based Education
     - On Children
     - On Teachers
REFERENCES


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