Place: A Springboard for Learning and Teaching About Culture and Literacy

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Emerging national and local research demonstrates that place-based education occurring in a wide variety of settings has many positive effects. This article highlights the advantages of place-based learning that is relevant to rural, Native Hawaiian communities and that surfaced during the conceptualization and implementation of a culture- and place-based afterschool literacy program established on the leeward coast of O'ahu. Data from pre- and post-surveys indicate that the program contributes significantly to students' motivation to read. Authors also examine how a focus on place can mediate the complexities of culture and community interactions, serve as a springboard for literacy, and strengthen teacher–student relationships.

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Place-based approaches to education have been in existence for decades and have recently experienced a renewal. Place-based learning is an umbrella term for a variety of educational practices and purposes, including experiential learning, contextual learning, problem-solving learning, constructivism, outdoor education, indigenous education, environmental and ecological education, bioregional education, democratic education, multicultural education, and service learning (Gruenewald, 2003; Smith 2002). From a theoretical perspective, place-based approaches to education support the work of Paulo Freire and John Dewey (Gruenewald, 2003; Kemp, 2006; Smith, 2002). Utilizing the local community and environment provides students with opportunities to engage in learning experiences that allow them to become creators of knowledge rather than merely consumers of information.

A hallmark of place-based learning is that the curriculum adapts to the unique characteristics of particular communities, thus overcoming the incongruence between school and children's lives (Smith, 2002). One of the characteristics of a place-based curriculum is that it uses the natural and cultural history of the community as the foundation for the curriculum, thereby bringing into focus for the students the strengths of their communities. It grounds learning in local phenomena and students' lived experiences, providing the environment as the integrating context across disciplines. Place-based education emphasizes hands-on, experiential learning experiences that more closely reflect the heritage learning style of the target student population (Meyer, 1998).

Emerging national and local research demonstrates that place-based education occurring in a wide variety of settings has many positive effects. In particular, students participating in place-based educational programs in the continental United States have increased their achievement test scores, demonstrated higher-level thinking skills, and expressed more enthusiasm for learning (American Institutes of Research, 2005). Likewise, students participating in place-based learning activities in Hawai'i have higher attendance rates, are less likely to drop out of school, and show greater interest in postsecondary education (Yamauchi, 2003). Kawakami and Aton (2001) showed that best practices among successful teachers of Native Hawaiian students include experience-based, authentic activities. What the students learn is concrete—it is apparent in their communities and of direct significance to their lives, families, and communities. As a result, the learning begins with the firm grounding in what is significant to them and has utility (Handy & Pukui, 1972). This concrete concept is linked to

the oral history of Hawaiian knowing. Theobald and Nachtigal (1995) argued that place-based education helps students see the intradependence of their lives and their communities and environments. A focus on "place" provides the mechanism for incorporating cultural similarities and uniqueness.

A recent study, the Program for Afterschool Literacy Support (PALS), funded by the U.S. Department of Education's Native Hawaiian Education Program, addresses the advantages of place-based learning, particularly for schools in rural Native Hawaiian communities. PALS is informed by earlier studies that draw on indigenous perspectives of place and identity (Kameʻeleihiwa, 1992/2003; Kanaʻiaupuni & Malone, 2006; Meyer, 1998). Scholars such as Memmott and Long (2002) have argued that because indigenous knowledge systems view people and place as overlapping and interacting, people carry the energy of places as part of their being. These perspectives emerged early on in the PALS study, which set out to measure the effects of a place-based afterschool literacy intervention on students' motivation for reading and school engagement in predominantly Native Hawaiian schools.

This article describes the PALS study and its findings as implemented in two elementary schools on the Waiʻanae Coast of Oʻahu over a 2-year period. It also presents factors that significantly influenced the study and from which the need and advantage of a "place" focus was strengthened. The first factor relates to the way in which a focus on place accommodates the complexities of culture and community interactions. Although the participating schools were situated within 5 miles of each other, the culture of each school community—that is, the nature of the human interactions within each community—varied, including opinions about what should be included in a culture-based curriculum. The variations resulted from differences in the ancestral history of the members of the school staff and administrators, the relationships between the school and its surrounding community, and the historical and familial relationships among community members and among school staff and administrators. The cumulative effect of these differences created pockets of tension and varying notions regarding the manifestations of culture (Gutierrez, 2002). Thus, the danger of viewing culture as a monolithic entity (Goodenough, 1994) was apparent. School demographics and academic indicators of the target schools are included in Table 1.

TABLE 1 Demographic and academic performance indicators in target schools

School	Native Hawaiian	Schools in Restructuring[a]	Average Daily Absences	Free/ Reduced Lunch Program	5th-Grade HSA Reading[b]
Hawai'i Department of Education average	28%	28%	9	39%	57%
Kamaile Academy	60%	R	19	85%	23%
Mākaha Elementary	67%	GS-P	19	75%	42%

Source: Hawai'i Department of Education (2008).
[a] One of the target schools made adequate yearly progress in 2007–2008 and the other is in good standing: R = restructuring; GS-P = good standing, pending.
[b] Proportion of fifth graders proficient on the Hawai'i State Assessment (HSA) in reading.

A second factor relates to the implementation of literacy activities in an afterschool setting. Sanctions from the No Child Left Behind Act (NCLB) weighed heavily on the schools and required that they spend more in-school time engaged in traditional exercises in reading and writing. As we conceptualized the study, it became clear that students were not going to voluntarily spend more time after school engaged in traditional reading and writing exercises, no matter how culturally relevant we could make the content. In addition, the teachers we talked with were not interested in spending out-of-school time on what they felt was already overemphasized during in-school time, particularly at the expense of other valuable aspects of learning such as science, art, music, physical education, and so forth. We had to find a more engaging strategy to encourage student reading and engage students in the learning process.

A third factor that we had to account for was the difference in demographics between teachers and students at the participating schools, and how to address the potential cultural disconnect. Hawai'i public schools, particularly those in rural Native Hawaiian communities, experience a variety of challenges that affect student academic achievement and teacher satisfaction. One of these challenges is the difference in demographics between students and teachers. Approximately 6 in 10 students at the target schools are Native Hawaiian, including those participating in PALS, compared with only 1 in 10 teachers (Hawai'i Department of Education, 2008). Only a small percentage of teachers and PALS tutors in the target

schools were familiar with the ancient history and culture of the communities, and a significant proportion were also new to Hawai'i and unfamiliar with its multicultural history.

Throughout these overarching issues, it was the haumana (student) who demonstrated to teachers, administrators, and project staff the significance of place to each of them. The students' connectedness to place manifested itself early on in the study. The different features of place-based learning fell into place and offered solutions to the cultural differences and tensions across and within school communities, and between teachers and students. Place also was the focus and means of engaging students in literacy activities. The 'āina (land) called to the students.

We begin with a description of the PALS study methodology, followed by a discussion of how culture is situated in place-based education. Next, we highlight how literacy—as it is broadly defined—can be enhanced using a place-based approach. We provide evidence that place-based learning can result in strengthening the teacher–student relationship. Lastly, we provide analyses of data collected during the 2nd year of the study that further support our hypothesis that a focus on place can lead to increasing student academic achievement, particularly in terms of increasing their motivation for reading and their engagement in school.

Method

Participants

There were approximately 80 student participants from the fourth, fifth, and sixth grades at the two participating schools. Participation was voluntary, and teachers nominated students who they felt would benefit from the program. Next, all interested students were provided relevant program information and consent forms. PALS did not turn away any students, and students did not have to identify as Hawaiian or part-Hawaiian to participate. However, between 60% and 70% of student participants at the two schools identified as such. Tutor participants included 10 certified classroom teachers and 1 head custodian. Tutor-to-student ratio was kept low, at no more than 1 tutor to 8 students. Each school program also employed one site coordinator. Only 3 of the PALS tutors were local, of whom 2 identified as Hawaiian. PALS tutors by their place of origin (e.g., local vs. nonlocal, Hawaiian vs. non-Hawaiian, etc.) are described in Table 2.

TABLE 2 PALS tutors by place of origin

Place of Origin	Kamaile	Mākaha
Local Hawaiian		
From Waiʻanae	1	1
Not from Waiʻanae	1	1
Local non-Hawaiian	0	1
From the continental United States		
10 or more years in Hawaiʻi	0	0
Less than 10 years in Hawaiʻi	5	5

Note: PALS = Program for Afterschool Literacy Support.

Instruments

PALS was a mixed-method study, relying on both qualitative and quantitative data for evidence of impact. There were a total of nine data collection methods. The observations and interviews provided qualitative data, whereas the four surveys provided quantitative data. The PALS Student Motivation for Reading Survey consisted of 38 items that addressed eight constructs related to reading. These constructs included *self-efficacy* (e.g., students' perception of their reading ability), *challenge* (e.g., students' preference for hard/challenging reading materials), *importance* (e.g., students' feelings of the importance of reading to life), *curiosity* (e.g., students' reading for satisfying personal curiosity), *involvement* (e.g., students' perception related to involving oneself as part of the story being read), *recognition* (e.g., students' reading for satisfaction), *social* (e.g., students' reading as a means for socialization), and *culture* (e.g., students' reading as a way to learn more about Hawaiian culture).

The PALS Student School Engagement Survey consisted of 29 items that addressed four constructs: *cognitive engagement* (e.g., "How important do you think the things you are learning in school are going to be to you later in life?"), *behavioral engagement* (e.g., "If I don't understand what I read, I go back and read it over again"), *emotional engagement* (e.g., "I feel happy in school"), and *voluntary literacy activities* (e.g., "How much time do you usually spend each day *reading just for fun* when you are *not* in school or in the afterschool program?").

The PALS Tutor Survey consisted of 18 items on the presurvey and 30 items on the postsurvey related to tutors' perceptions of place-based education and strategies that they used in PALS and in their regular classrooms. The PALS Parent/Caregiver Satisfaction Survey consisted of 8 items related to program satisfaction and perceptions of academic impact. Table 3 describes the data collection methods used in the study.

TABLE 3 Type of data collected by method and frequency

Instrument	No. of Items	Frequency
Quantitative		
Student Motivation for Reading Survey	38	Pre/post
Student School Engagement Survey	29	Pre/post
Student Hawai'i State Assessment	—	Post
Tutor Survey	18/30	Pre/post
Parent/Caregiver Satisfaction Survey	8	Post
Qualitative		
Site observations		Weekly
Student interviews		Post
Tutor interviews		Post
Parent/caregiver interviews		Post

Design and Procedure

The project used a quasi-experimental research design that compared PALS participants' motivation for reading, school engagement, and standardized test results with their non-PALS peers in the same schools. The program at both schools operated 3 days each week for an average of 67 program days. Each program began with a 30-minute homework block, followed by 90 minutes of program time. In addition, tutors were paid for 30 minutes of prep time for each program day. Tutor activity interests were incorporated into the program as a way of motivating both tutors and students during afterschool hours. Literacy activities were then woven

throughout the activities. Examples of the activities (i.e., tutor interests) included performing arts, health and nutrition, media and technology, and outdoors. Field trips were taken throughout the school year and were led by school or community kūpuna (elders). PALS adopted the philosophy of 17th-century philosopher John A. Comenius, as cited by Woodhouse (2001) that "knowledge of the nearest things should be acquired first, then that of those farther and farther off" (p. 1). On each of the field trips, community kūpuna welcomed the students with moʻolelo (stories) of the place and its historical richness. Examples of field trips included visiting Kaʻala Learning Center, Kekoʻo Springs, Mauna Lahilahi, Kaʻena Point, Pōkaʻī Bay, Kāneʻākī Heiau, Puʻukāhea and stargazing at the observatory at Leeward Community College.

After exploring their immediate school community, students then participated in field trips further away. At the end of the school year, all students and tutors were invited to an overnight field trip to the Bishop Museum, where Hōkūleʻa crew members who had just returned from the Palmyra voyage addressed the students, answered questions, and showed slides of the voyage. Parents were welcome to attend the field trips. In addition, students and tutors at Mākaha Elementary had regular access to Hoa ʻĀina O Mākaha, a community farm on the property adjacent to the school.

Although the majority of tutors were familiar with the principles of a culture-based approach to learning, only two had encountered literature related to place-based approaches to learning, and neither had participated in place-based curriculum delivery. During the first year of the study, one kupuna from the community and one kupuna with the Native Hawaiian Education Council addressed the tutors about working with Native Hawaiian students. In addition, tutors attended six professional development sessions that included a review of the study, principles of place-based learning, resources within the community, and curriculum planning.

Results and Discussion

Culture- and Place-Based Learning

Within a Native Hawaiian context, place-based education is often synonymous with culture-based education because a sense of place is central to Hawaiian culture, identity, and learning. In essence, Hawaiian culture evolved in close relationship with island geography (Kameʻeleihiwa, 1992/2003), and the strong connection to the ʻāina that many Native Hawaiians have is a result of centuries of living, cultivating, learning, stewarding, and dying on the same land (Kanaʻiaupuni, Malone, & Ishibashi, 2005). However, Native Hawaiian communities, while sharing core practices, are still cultured in historical, storied, nonlinear, and dynamic ways. Engestrom (1993) and Gutierrez (2002) argued that while there are regularities in the ways cultural groups participate in everyday practices, within any cultural group there are tensions related to conflicting goals and practices. Just as one performs different roles within one's family unit, individuals perform different roles within a common society. Thus, the performance of a particular role forms part of the cultural makeup of the group who perform the activity. There is no one culture of activity for the group as a whole that all members share.

Goodenough (1994) argued that culture is necessarily diverse among people within a society because it is rooted in human activities, and it is within the human activities that culture emerges. One of the principals at the participating schools, a linear descendant of the "place," affirmed that there are variations within any cultural group, including Native Hawaiians residing in his community. Culture is continually reconstructed and reworked, in both intended and unintended ways. As Cole and Engestrom (1993) argued, culture "is experienced in local, face-to-face interactions that are locally constrained and heterogeneous with respect to both 'culture as a whole' and the parts of the entire toolkit experienced by any given individual" (p. 15). Thus, our study was supported by the work of many scholars showing how problems arise from essentializing people on the basis of group membership (Gay, 2000; Nieto, 1999).

We knew early on that we had to incorporate the variations across communities and honor the fluid and dynamic nature of culture within each school community. We started with walking field trips around each school community, and the sparks within the students were ignited. As a result of the community field trips,

learning became more meaningful and relevant for students, and their sense of community and their awareness of the issues faced by the communities were enhanced (Scott, 2002). One fifth-grade student commented that learning about her community was important because

> other people, they think that Wai'anae is just a place where every night they have a fight and drink all night but then they don't really know that Wai'anae is the most royal part of O'ahu...but if they really get to go inside, and you see all those plants...Wai'anae is a beautiful place but people are trying to hide that.

Another fifth grader said that the community field trips were important to him because "you could help the community get better, clean the community up...and protect it by learning more about it."

Place has been a critical foundation of human cognition and identity (Relph, 1976). Within the educational institution and curriculum in Hawai'i, little is written about Wai'anae. What is commonly known about Wai'anae is related to its socio-economic challenges. One parent commented that he appreciated learning about the places he often played in as a kid, because he did not have the opportunity to learn the history of the places and to learn about their significance when he was in school. Exploring Wai'anae provided opportunities to learn about the rich ancestral history and significance of Wai'anae moku (district) in Hawai'i's history.

Teachers noticed the enthusiasm in their students and commented on the effect that learning about the rich history of their particular community had on the students. A Native Hawaiian teacher of 35 years commented, "It makes an impact. They have to first feel proud of this particular place because of the burden that is put on them as children." By first focusing on the place of each school community, students became immersed in the strengths and assets of their communities, in addition to the issues each community faced. Such an approach provides opportunities for students to gain valuable insights about their community, with the potential for bringing about social change (Kana'iaupuni, 2005). As the Native Hawaiian teacher of 35 years observed, "They're [the students] starting to realize they have the power to make...they're the ones that's gonna change their community."

Place as a Springboard for Literacy

Taking our lead from the students' response to the field trips, we knew that we needed to contextualize literacy and learning at a much deeper level (Gutierrez & Rogoff, 2003). There were many aspects of the community field trips that engaged the students. One of the engaging aspects for students was learning about the people who walked the same land as they did and learning about the history of ridges and streams that they themselves crossed. The ʻāina became an important intergenerational transmitter (i.e., communication) of identity (Kanaʻiaupuni, 2004). Because place-based learning relies on the interconnectedness of communication, physical place, sociality of individuals, and culture (Kemp, 2006), it is therefore a more holistic approach to learning. Given this, we were motivated to take a more holistic approach to literacy, as a collection of cultural and communicative practices shared among members of particular groups (National Council for Teachers of English, 2008). As society and technology change, so does literacy.

Literacy is a social practice, and the manner in which it is defined, including the strategies deemed effective for acquiring literacy skills, is reflective of ideological belief systems. Although the kinds of literacy practices used within communities may vary, they tend to reflect the range of social practices of their culture (Cairney, 1998). Educational institutions also use literacy as a social practice. However, literacy associated with schooling tends to reflect a single rather narrow belief system that has not changed much throughout the decades. Meanwhile, the diversity of children who enter those institutions has changed significantly, and their realities that they bring to the institutions are increasingly incongruent with the prevailing belief systems. Additionally, technology and complex global environments necessitate a broader, more encompassing definition of literacy as a social practice, and of the strategies deemed effective for acquiring the associated skills. PALS incorporates a broader definition of literacy, one in which traditional reading and writing is but a part of a larger toolkit of communication and practice.

The students' joy in learning about the specifics of their community made us realize that the community had to be the context for literacy activities if we were to maximize student interest and engagement. Thus, we expanded the notion of literacy from the traditional definition of reading and writing to a notion of "multiple literacies"—bodies of knowledge, skills, and social practices with which people understand, interpret, and use the symbol systems of their culture (Kellner, 2004). A place-based approach to learning and a holistic approach to

literacy fit well and are aligned with the definition of 21st-century literacies as adopted by the National Council for Teachers of English (2008). Its 21st-century literacies include not only proficiency in tools of technology but also relationship building, collaborative problem solving, creating and critiquing multimedia texts, and attending to the ethical responsibilities of complex environments.

The students embraced the many literacy opportunities that emerged from exploring their community and its many resources. They gravitated toward the hands-on, literacy-rich activities, such as writing and performing plays based on their particular community history, and working with technology to document what they know about their community. With a focus on place, the storied histories of the students' community were incorporated into the students' learning about their communities. Neuman and Rao (2004) noted,

> the value of literacy is realized not merely through the ability to read and write, but through an individual's ability to employ those skills in order to navigate, shape, and be an agent for his or her own life, as well as the ability to change one's knowledge, self, and situation. (p. 8)

We knew the program had to include more than the histories of the communities. In an attempt to further broaden opportunities for literacy, to strengthen the student–tutor relationship, and to further engage tutors, we incorporated tutor interests as a feature of PALS. A few of the tutors were interested in the performing arts, so students and tutors collaborated in writing plays about mo'olelo of the community or issues facing the community. Some tutors were interested in technology, so students and tutors used multiple forms of technology to document their places in the community. Other tutors were interested in cultural practices, so students and tutors danced, chanted, and made kapa (tapa, i.e., cloth made from bark). Yet other tutors were interested in gardening and nutrition, so students and tutors planted banana trees and experimented with recipes using produce from a community garden. Tutors and students together explored ways to weave literacy throughout all the activities. By providing opportunities for developing multiple literacies, we were better able to encourage a holistic view of student interest and abilities.

A teacher of 12 years who served as a PALS site coordinator commented,

> I really believe in the program. Just seeing the kids' excitement and the growth that they've made as far as how much they've learned about their place here and their community and how excited they are about coming to school and even just being part of PALS...just...it's pretty...it's just exceptional. I've never experienced anything like that.

Another teacher who was born and raised on O'ahu, not from the community but living in the community for 14 years, commented,

> I think I really get it and just seeing there's so much more to reading, writing, and math. And just getting the kids connected....And for me not being from out here, I don't have the connection too. So now when I see them, I think now I really get that connection.

Place and the Tutor–Student Relationship

Most tutors in PALS were unfamiliar with the concept of place-based education prior to their participation. Place-based learning invites teachers to engage with their students in renewed ways; it invites teachers to become colearners, side-by-side with their students. Rather than holders of the knowledge, teachers are encouraged to facilitate the learning, engage themselves in the learning with the students, and connect with the community side-by-side with the students. This change in focus necessitates changes in the nature of the relationships between teacher and students, and as a result the relationships between them deepen. Conversations become more personal and caring. Lieberman and Hoody (1998) found that place-based learning results in a better working relationship between teachers and their students and colleagues and helps them become a "learning-teaching team focused on the same objectives" (p. 10).

The invitation to explore place was welcomed by both new teachers to school communities and veteran teachers who are connected to both the culture and place. However, for the newer teachers, who were not from the community and/or unfamiliar with Hawai'i, the exploration of school communities connected them to their students more quickly and deeply. Over 50% of the participating teachers were born and raised on the continental United States, and some had lived in their school communities from only a few months to several years. One of the participating schools experienced an unusually high teacher turnover one year and welcomed over 20 new teachers during the 2nd year of the study. One of the new teachers joined the study, and midway through her 1st year, she commented,

> I have learned more about the community in which I am teaching than anywhere else. This knowledge of our setting will allow me as a teacher to deepen my understanding of my students and how to reach them, and will also hopefully have our students more deeply understand themselves.

Another teacher who had lived in the school community for only 2 years commented,

> I think the program is great for a teacher like me, who slowly is trying to learn the culture. The program gives me more opportunities to meet knowledgeable people, go to interesting places, and read informative literature I may not have otherwise.

When asked to identify one of the most important things someone should know about PALS, a sixth-grade student commented, "That you can come to PALS anytime you want. And that you can always tell your teachers what's happening in your life and you don't have to hide it." This student's comment represents many similar comments made by other students. The nature of the relationships with teachers matters deeply. Another student added that the teachers "help us through...like when we talk to them they...they don't just like, okay, you oughta let it go, they talk to us about it and help us solve it." A parent of a student also shared how the program influenced her son, namely getting admitted into a competitive intermediate school:

> It was a very humbling experience for me because I was more like an academic, you know, you need to do this, you need to do this and I thought PALS is like a tutoring thing. Like he needs better this, he needs better this, I need to make sure when he gets to seventh grade he goes to a good school. So I am looking for a tutor, tutor, tutor, tutor, tutor. And then he comes home and he's like planting trees. He planted trees today and I'm like, really? And at one point I was like, is this even worth it? I don't understand how planting trees or running around the field is going to help him academically. So it was a very humbling as a parent to say like, you know what, it made me start to think like, okay, maybe it's not all about academics. I need to feed other areas of his, I don't know his psyche, his being or whatever it's... whatever you call it...but I think that helped him socially and I think by working on those relationships it just kind of elevated everything else. And I think that that was like a missing...that was a factor that I was looking previously that, it wasn't clicking for me that something like that was important. But really I think that if he hadn't been part of the PALS organization for two years, honestly I don't think he'd be where he is or where he's going to go today.

Students' Engagement With School

We hypothesized that the PALS participants would give higher ratings on the postsurvey on engagement than the non-PALS students at the same school and in the same grades. However, although the group means of the PALS participants were higher than those of their non-PALS peers on many of the constructs, no statistically significant differences between the two groups were found on any of the comparisons. Yet when a subsequent hypothesis was tested—that the attendance rate of the PALS participants may have a positive relationship with the school engagement ratings—statistically significant differences between the two groups were found. PALS participants were disaggregated into two groups: participants with low attendance rate and participants with high attendance rate. The findings are in support of the adjusted hypothesis—that while no comparison was significant in the presurvey data, analysis of the postsurvey data shows that those

who participated in PALS activities more often were more than likely to have higher cognitive engagement, behavior engagement, and voluntary literacy activities than those who participated in PALS activities less often.

Students with 81% or higher attendance rates formed the high attendance group (17 students), and students with attendance rate of 80% or lower formed the low attendance group (13 students). Only surveys that yielded both a completed presurvey and postsurvey from the same student were analyzed. Independent *t* tests assuming unequal variances were performed on the presurvey and postsurvey construct scores of the students.

TABLE 4 Student engagement by attendance in PALS

	Presurvey				Postsurvey			
Construct	*M*	*SD*	*t(28)*	*p*	*M*	*SD*	*t(28)*	*p*
Cognitive engagement			0.21	*ns*			3.04	<.005
Low attendance group[a]	3.63	0.21			3.48	0.21		
High attendance group[b]	3.65	0.19			3.68	0.12		
Behavior engagement			1.47	*ns*			4.06	<.001
Low attendance group[a]	3.30	0.53			3.03	0.43		
High attendance group[b]	3.55	0.36			3.64	0.38		
Emotional engagement			0.90	*ns*			1.23	*ns*
Low attendance group[a]	3.29	0.40			3.00	0.50		
High attendance group[b]	3.15	0.43			3.20	0.32		
Voluntary literacy activity			1.04	*ns*			3.52	<.001
Low attendance group[a]	2.77	1.07			1.96	0.72		
High attendance group[b]	2.41	0.71			2.94	0.77		

Note: PALS = Program for Afterschool Literacy Support.
[a] $n = 13$ for each group.
[b] $n = 17$ for each group.

In Table 4, the data show the mean construct scores, standard deviations, and *t* test results for comparisons between the low attendance group and the high attendance group with presurvey and postsurvey data on the school engagement constructs. While no statistical significance was found in any comparisons of the presurvey results between the two groups, statistically significant differences ($p < .005$) were found in the postsurvey results on three of the four constructs between the two groups (cognitive engagement, behavior engagement, and voluntary literacy activity). The only comparison that was not significant in the postsurvey data was the comparison on emotional engagement.

Students' Motivation for Reading

Compared with school engagement, more positive evidence was found in the data that support the conclusion that PALS motivated students to read. First, while no statistically significant differences were found between the PALS participants and non-PALS students on any of the comparisons (except one) in the presurvey data on motivation, significant differences were found in the postsurvey data on four of the eight motivation constructs: self-efficacy, challenge, curiosity, and culture. This finding indicates that while there was no difference between the PALS participants and their non-PALS peers on the motivation constructs in the beginning of the school year, participating in PALS program for at least 1 year significantly improved PALS participants' motivation for reading, in comparison with their non-PALS peers. Data presented in Tables 5 and 6 show the findings of presurvey results and postsurvey results, respectively.

TABLE 5 Presurvey results for student motivation for reading

	PALS *(n = 40)*		Other *(n = 40)*			
Construct	*M*	*SD*	*M*	*SD*	*t(28)*	*p*
Competence and effective beliefs						
Self-efficacy	3.33	0.59	3.16	0.54	1.34	*ns*
Challenge	3.22	0.74	3.15	0.77	0.42	*ns*
Importance	3.63	0.45	3.40	0.68	1.76	<.05
Goals for reading						
Curiosity	3.20	0.70	3.13	0.60	0.45	*ns*
Involvement	3.25	0.62	3.21	0.50	0.33	*ns*
Recognition	3.31	0.66	3.15	0.54	1.18	*ns*
Social purpose for reading						
Social	2.80	0.82	2.77	0.76	0.16	*ns*
Culture	3.19	0.94	3.40	0.66	—	*ns*
					1.15	

Note: PALS = Program for Afterschool Literacy Support.

TABLE 6 Postsurvey results for student motivation for reading

	PALS *(n = 40)*		Other *(n = 40)*			
Construct	*M*	*SD*	*M*	*SD*	*t(28)*	*p*
Competence and effective beliefs						
Self-efficacy	3.20	0.66	2.70	0.81	2.85	<.005
Challenge	2.92	0.77	2.54	0.81	2.18	<.05
Importance	3.20	0.72	3.06	0.92	0.78	*ns*
Goals for reading						
Curiosity	3.09	0.70	2.79	0.80	1.74	<.05
Involvement	2.94	0.66	2.75	0.75	1.23	*ns*
Recognition	2.91	0.68	2.76	0.96	0.80	*ns*
Social purpose for reading						
Social	2.43	0.70	2.34	0.81	0.53	*ns*
Culture	2.95	0.84	2.67	1.10	1.28	<0.1

Note: PALS = Program for Afterschool Literacy Support.

Second, when the data on motivation were disaggregated by attendance rates of the PALS participants, stronger evidence was found in support of the hypothesis that PALS had a positive effect on the students in terms of motivation for reading. While no statistically significant differences were found in any of the motivation constructs between the low attendance group and high attendance group in the beginning of the school year, significant differences were found in all except one construct between the two groups at the end of school year. The finding strongly indicates that participating in PALS greatly motivated the students for reading, as defined by a more traditional understanding of literacy that is valued by schools (see Table 7).

TABLE 7 Student motivation for reading by attendance in PALS

	Presurvey				Postsurvey			
Construct	*M*	*SD*	*t(28)*	*p*	*M*	*SD*	*t(28)*	*p*
Self-Efficacy			0.95	*ns*			3.13	<.005
Low attendance group[a]	3.29	0.67			2.82	0.73		
High attendance group[b]	3.40	0.46			3.55	0.45		
Challenge			0.90	*ns*			2.30	<.05
Low attendance group[a]	3.08	0.66			2.56	0.90		
High attendance group[b]	3.33	0.81			3.28	0.76		
Importance			0.31	*ns*			3.37	<.005
Low attendance group[a]	3.65	0.34			2.83	0.59		
High attendance group[b]	3.60	0.58			3.62	0.62		
Curiosity			1.09	*ns*			1.95	<.05
Low attendance group[a]	3.05	0.70			2.79	0.86		
High attendance group[b]	3.34	0.69			3.37	0.68		
Involvement			0.52	*ns*			1.44	*ns*
Low attendance group[a]	3.29	0.66			2.88	0.73		
High attendance group[b]	3.17	0.61			3.21	0.42		
Recognition			1.81	*ns*			3.89	<.005
Low attendance group[a]	3.04	0.72			2.49	0.56		
High attendance group[b]	3.47	0.49			3.33	0.58		
Social			0.85	*ns*			3.10	<.005
Low attendance group[a]	2.69	0.89			2.07	0.70		
High attendance group[b]	2.96	0.75			2.89	0.68		
Culture			0.43	*ns*			2.08	<.05
Low attendance group[a]	3.23	0.84			2.70	0.84		
High attendance group[b]	3.09	0.92			3.33	0.73		

Note: PALS = Program for Afterschool Literacy Support.
[a] $n = 13$ for each group.
[b] $n = 17$ for each group.

Table 8 contains the Hawai'i State Assessment (HSA) reading test results for the PALS participants at the target schools. The HSA scaled scores are used by the Hawai'i Department of Education to determine the proficiency levels of students in reading and math. Currently, the scaled score for a student to be considered proficient in reading or math is set at 300. In the 2008–2009 school year (SY), 17 of the PALS students scored 300 or above in the annual HSA reading test, while in SY 2007–2008, 18 of the students scored 300 or above in the test. Data in Table 8 show the mean and standard deviation of reading scaled scores of the students in SY 2007–2008 in comparison with the data of the same students in SY 2008–2009 and the results of a dependent *t* test performed on the matched data. Although the mean scaled score of the students increased from the category of "approaching proficiency" in SY 2007–2008 to the category of "proficient" in SY 2008–2009, the slight change of 3 points was not significant.

TABLE 8 HSA scaled scores for PALS students

Standardized Test	*N*	*M*	*SD*	*t(27)*	*p*
HSA reading scaled scores (2007–2008)	28	298	39.4	0.81	*ns*
HSA reading scaled scores (2008–2009)	28	301	35.9		

Note: HSA = Hawai'i State Assessment; PALS = Program for Afterschool Literacy Support.

Tutor Outcomes

PALS is not only a literacy enrichment program for students but is also a source of professional development for participating tutors. The program provided training, support, and flexibility for the tutors to design and implement program activities according to their interests and strengths and created a nurturing learning environment for the teachers to become experts in place-based education. The pre- and posttutor survey data (see Table 9) clearly show that the tutors' understanding of place-based education, their perception of PALS, and their skills for implementing the program improved in as little as a year of participating in PALS. While less than half of their ratings were above 3.5 for the presurvey items, all but one of their postsurvey ratings were 3.5 or higher, indicating somewhat strong agreements with the concepts expressed in the survey items at the end of the school year. Examples

of the survey items that received the highest ratings (3.7 or higher) were as follows: "Field trips to community sites are a necessary, not supplemental component of PALS," "In general, community partnerships and the resources that community organizations provide are essential for PBE/CBE [place-based education/culture-based education]," "I am knowledgeable about PBE/CBE," "I understand the important needs and problems of my school community," and "I am comfortable and experienced in collaboratively designing/producing activities with my students." Furthermore, the tutors' reflections show that after participating in PALS, they strongly felt PALS had "positively influenced their students' emotional well-being and increased their students' problem-solving abilities and/or advanced their thinking to more complex levels."

TABLE 9 Pre- and postcomparisons of tutor survey results

	Pre		Post	
Survey Item	*M*	*SD*	*M*	*SD*
1. I am knowledgeable about PBE/CBE.	3.3	0.6	3.7	0.6
2. PBE/CBE can strongly increase student's engagement in learning.	3.6	0.5	3.6	0.7
3. In general, community partnerships and the resources that community organizations provide are essential for PBE/CBE.	3.3	1.1	3.8	0.4
4. I understand the assets and resources in my school community.	3.5	0.7	3.4	0.5
5. I know the history, cultural sites and special places, traditions, and protocol of my school community.	3.2	0.7	3.5	0.5
6. I understand the important needs and problems of my school community.	3.8	0.4	3.7	0.5
7. I am comfortable and experienced in collaboratively designing/producing activities with my students.	3.4	1.1	3.7	0.5
8. Learning is more meaningful for students when disciplines and standards are integrated.	3.6	0.5	3.6	0.7
9. Connections between school and students' lives cannot be effectively made through classroom discussion alone.	2.5	1.5	3.5	0.8
10. Field trips to community sites are a necessary, not supplemental component of PALS.	3.2	1.3	3.8	0.4
11. Ongoing support and professional development are necessary to successfully implement PALS at my site.	3.5	1.1	3.5	0.7

Note: Based on a 4-point Likert scale, with 4 being the highest. PBE/CBE = place-based education/culture-based education. PALS = Program for Afterschool Literacy Support.

Tutors also shared that they had received appropriate training to implement PALS and were provided with adequate resources to teach each lesson. When asked if they were more or less inclined to promote place-based learning in their classroom in other units/subjects since their participation in PALS, tutors gave an average rating of about 9 (maximum is 10), demonstrating their willingness and readiness to extend PALS practices beyond the program.

The posttutor survey also asked the tutors to reflect on three additional questions by indicating the extent to which they are ready to implement PALS, the extent to which they would promote place-based education in their classrooms, and their ranking of the impact of place-based education on their students. Tutors from both schools were equally highly inclined to promote place-based education in their classrooms, and tutors from both schools gave the highest rank to the item, "When students 'see' the relevance of the activity or subject to their own experience, they are more confident as learners."

TABLE 10 Other questions in the posttutor survey

Survey Items
1. As a result of your own background and training and/or because of the training you received via PALS, do you feel you have the requisite knowledge and skills needed to successfully implement PALS lessons with your students?
2. After your involvement with PALS as a tutor, are you more or less inclined to promote place-based learning in your classroom in other units/subjects?
3. In your opinion, what is the greatest impact that place-based curriculum has on the students with whom you work? Please rank in order of importance, with "1" being the most important.

Note: Based on a 10-point scale, with 10 being the highest. PALS = Program for Afterschool Literacy Support.

Caregiver Satisfaction With PALS

A PALS Parent/Caregiver Survey was given to the parents/caregivers of the PALS students at the end of the school year to collect their feedback on the effectiveness of, and satisfaction with, the program. The return rate of Parent/Caregiver Survey was 100%. The data presented in Table 11 show that the parents/caregivers of the PALS participants were extremely positive and supportive of the program. The majority of the parents/caregivers agreed or strongly agreed that the PALS program helped their children become better readers, better writers, and, in general, better students in school. Ninety percent of the parents/caregivers indicated that they believed that their children looked forward to the PALS program, were generally doing better in school, and would enroll their children in the PALS program again in the following year. Eighty percent of parents believed or strongly believed that the program improved their child's reading and writing. And lastly, 97% of the parents agreed or strongly agreed that the PALS tutors cared about the students.

TABLE 11 Feedback from parents/caregivers of PALS participants

Survey Items	Positive Responses		Total Responses
	n	%	
My child looks forward to coming to the PALS program.	36	90	40
The PALS program has helped my child become a better reader.	31	78	40
The PALS program has helped my child become a better writer.	33	83	40
The PALS program has helped my child to do better in school.	36	90	40
The PALS tutors care about the students.	38	97	39
If I could do it over again, I would enroll my child in the PALS program.	36	90	40

Note: PALS = Program for Afterschool Literacy Support.

Limitations

Repeated measures were used to collect data from the same students at the beginning and end of the school year. However, limited by school schedules, the PALS end-of-year surveys were given to the students on days that were too close to the HSA testing period. Adversely affected by the fatigue usually found in students at the end of the testing period, student ratings on the end-of-year surveys were generally lower than their ratings on the presurveys at the opening of the school year. Because of this, caution should be exercised when using the data for comparisons. Another limitation of this study is the small sample size (less than 30) used for some of the comparisons. End-of-the-year fatigue and attendance affected the completion of the end-of-year surveys. The data presented in this article are from the 2nd year of PALS and do not separate out the students who have attended PALS for 2 consecutive years. Those data had not been analyzed at the time this article was written.

Conclusion

Inviting Native Hawaiian students and their non-Native Hawaiian peers to explore the communities in which they live provided rich opportunities that served as a springboard for learning. In essence, participation in PALS enabled students to reexamine and reshape beliefs and assumptions about who they are and where they come from. These reshaped beliefs and assumptions in turn influenced students' interpretation of their cultural history—past, present, and future—and understanding of community. Combs (1962) argued that one's behavior is the product of the way in which one perceives one's world. Because perceptions are learned, the exploration of community can lead to opportunities to reexamine perceptions, leading to changed behaviors and relationships with the world (Purkey & Novak, 1996). Scott (2002) noted, "A sense of place is a sense of history, of human and non-human interactions, and the vital connection between where we live and who we are" (p. 5).

Culture is not static (Gutierrez & Rogoff, 2003). Variations exist in individuals' and groups' histories of engagement with cultural practices. Focusing on place responds to the particulars and the strengths of each community, its students, and its teachers. Place provides the richest possible context for learning across content areas and its relevance to its students. As Luddick (2001) noted, "Places give the adolescent a frame of reference in time and place. They enable them to make sense of their experiences. They also help the adolescents to recognize themselves as part of the continuum of events that have shaped society" (p. 159). A renewed interest in place-based education is producing research substantiating its positive impact on student academics, motivation to learn, school engagement, sense of purpose, and personal power.

Previous work by scholars and practitioners dedicated to the well-being of Hawaiian children provided a foundation for PALS and moved us forward in amazing ways. PALS students knew that the adults in the program cared not only about their academic success but also about their well-being individually. After 2 years of collaboration with students, teachers, administrators, and community kūpuna, we know that an effective curriculum must include the following: (a) the exploration of community, with follow-up that involves hands-on learning opportunities; (b) support for multiple literacies (from Internet research, videography, performance, cooking, kapa making, working in the loʻi [irrigated terraces], writing plays, poetry writing, and more); and (c) the inclusion of kūpuna within the community. In addition, curriculum has the potential to create opportunities for increasing a child's thriving behavior (e.g., parent involvement, caring adults, high expectations, service to the community, interpersonal skills, personal power, positive view of personal future, etc.). On the basis of our initial findings, we believe that this approach will result in an increase in children's thriving behavior, including improved school attendance, an increased motivation to learn, stronger school engagement, and a heightened sense of purpose and personal power. Children are more ready to see themselves as shapers of their communities, beginning with their immediate community (local) and enlarging their vision to other communities (global). As Kemp (2006) noted, "Engaging the environment as a means of capturing the curriculum is a theory whose time has come" (p. 127).

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