## The Kahua Induction Program: Systemically Supporting New Teachers Through Culturally Relevant, Place-Based, and Community Mentor Strategies

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The Hawai'i Department of Education (HDOE) has dealt with the issue of significant teacher attrition for decades. In response, the HDOE, Kamehameha Schools, and several other community organizations collaboratively developed a pilot program named the Kahua Induction Program. Designed to provide "new" teachers in the Ka'ū, Kea'au, and Pāhoa complex area with a strong foundation for their first year in the teaching profession, Kahua (foundation) provided 36 new teachers with mentor, academic, social-emotional, and place-focused support. This article presents the pilot year's evaluation findings and examines the critical need for teacher induction that provides placebased, culturally relevant strategies to improve the chance of new teacher acclimation to their schools and communities.

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Hūlili: Multidisciplinary Research on Hawaiian Well-Being Vol.6 (2010) Copyright © 2010 by Kamehameha Schools.  $\mathbf{F}$  or nearly two centuries of formal, Western education in Hawai'i, the islands' public schools have imported and continue to import teachers from afar. Historically, Hawai'i's schools hired individuals who were schooled in Western pedagogy and content knowledge. With them came a brand of inculcation that staunchly pressed for English language and Western ideology while discounting Hawai'i's host culture, history, practice, and knowledge (Kahumoku, 2005). Even today, in some areas, large numbers of teachers from the continental United States make their way to Hawai'i without much knowledge or understanding of the local place and people.

This article presents the evaluation results of a pilot teacher induction program called the Kahua Induction Program. Kahua (foundation) provides new teachers with a year-long support process—an orientation to people, places, and school; seminars to improve instruction, curriculum, classroom management, and assessment; community mentorship; and a culminating event that showcases participant growth. At the heart of this program is its mission: To cultivate an awareness of and sensitivity to Hawai'i's cultural approach to learning in the hope that it will bridge one's own educational framework with that of the host culture and its values of 'ohana (family), community, and place (*Kahua Program Year 1 Report*, 2008).

The 1-year pilot of Kahua was created in the spring of 2007 and began in the Ka'ū, Kea'au, and Pāhoa (KKP) complex area on the island of Hawai'i. The program supplemented an existing academic induction process that provided new teachers with academic mentorship, content knowledge, and pedagogy guidance. This combined, collaborative effort is unique in that currently, no other complex area-wide Hawai'i Department of Education (HDOE) induction program provides new teachers with academic and community support as well as emphasizing the value of culture and place.

This article is divided into the following sections: a literature review, discussion of methodology, and summary of findings. Several key evaluation questions frame the study: What effect did the Kahua pilot have on retention rates? How did teachers grow in terms of knowledge, attitudes, and skills as a result of Kahua? And, to what extent did participants acquire strategies to build positive relationships with families and communities? It is our hope that this foundational publication will expand to other articles that link the Kahua Induction Program to teacher preparedness, examine the impact of culture-based education on students, and explore the value of community members as mentors of new teachers.

### LITERATURE REVIEW

Staffing schools with qualified new teachers has been, across the United States, a perennial problem (National Commission on Teaching and America's Future, 1997). Ingersoll (2001) observed, "The dominant policy response to school staffing problems has been to attempt to increase the supply of available teachers through a wide range of recruitment initiatives" (p. 500) like signing bonuses and lucrative benefits packages. Another tactic used to reduce teacher labor shortages is to increase the number of teacher training and education programs. Teach for America, for example, attracts talented undergraduates from a variety of disciplines outside of education and prepares them through an abbreviated teacher training program and a 2-year, on-the-job teaching assignment (Kopp, 2001). Some schools have even tinkered with alternative teacher licensing opportunities and strategies aimed at recruiting early retirees from other professions to increase the supply of available new teachers (Borman & Dowling, 2008). Yet, government agencies continually misdiagnose "the problem as 'recruitment' when it's really 'retention.' Simply put, we train teachers poorly and then treat them badly, so they leave in droves" (Merrow, 1999, p. 64). As Reed (2007) discussed, attempts to draw people into the profession have done little to stem the tide of teacher recidivism.

In addition to recruitment challenges, little has been done to improve teacher retention. By 2010, the United States will hire some 2.4 million teachers and place some 700,000 of them in high-poverty, urban and rural districts (Blair, 2002; Riley, 1998). Guarino, Santibañez, and Daley (2006) found that by offering greater intrinsic rewards, higher salaries, and better working conditions, teachers were more likely to stay in their positions than leave for another school. Even then, Grissmer and Kirby (1997) argued that teacher turnover follows a U-shaped distribution with the highest attrition rates occurring in the first few years of teaching and the later years in the profession.

A significant number of teachers are approaching retirement—fully one quarter of all teachers nationwide are currently 50 years or older (Hirsch, Koopich, & Knapp, 1998). Harris and Adams (2007) acknowledged that because of high participation in retirement programs and pensions, more teachers leave the profession earlier than do their counterparts in nursing, accounting, and social work. Couple this with the 45% who leave the profession in the first 5 years of teaching (Ingersoll & Smith, 2003) and what becomes evident is that very little has been done to significantly reduce teacher attrition.

The U.S. Department of Labor estimates that the cost of teacher attrition per employer is 30% of the departing employee's salary (Alliance for Excellent Education, 2004). Based on the 1999–2000 averages, with a teacher salary of \$41,820, the outlay to a school system of replacing a teacher was \$12,526. With an estimated 173,439 nonretirees leaving the profession during 1999–2000, the total cost of replacing teachers who left early was nearly \$2.2 billion. In Hawai'i where an estimated 1,550 new teachers are hired annually (HDOE, 2005), the HDOE estimates that the price tag for replacing teachers is a staggering \$19,415,300.

Given the high price of replacing teachers, Brownell, Hirsch, and Seo (2004) identified approximately 30 states that have created and maintained induction programs to support new teachers. An induction program focuses primarily on orienting teachers to the profession, school system, and school site as well as providing site-based mentoring for the first 1 to 2 years of a new teacher's career (Guarino et al., 2006). However, Brownell et al. remarked that very few of these induction programs have been evaluated for quality, rigor, relevance, and responsiveness to teacher needs.

Flannery Quinn and Ethridge (2006) cited that less than 1% of teachers get comprehensive induction according to the Alliance for Excellent Education. Borman and Dowling (2008) identified that while "school-based mentoring and induction programs—particularly those related to collegial support—may help lower rates of turnover among beginning teachers" (p. 371), most new teachers are placed into classrooms with little academic guidance, and even fewer receive direction in navigating through the quagmire of school policies and procedures, classroom management techniques, and dealing with parents, all of which combined can create instability for 1st- and 2nd-year teachers.

Finally, although many researchers (Deloria & Wildcat, 2001; Kaiwi & Kahumoku, 2006; Kaomea, 2005; Wilson & Kawai'ae'a, 2007; Kawakami, 2004; McCarty, 2008; Yamauchi & Tharp, 1995) highlight the need for culturally relevant educational strategies, missing from literature on teacher attrition, induction, and retention is the integration of culturally relevant, place-based training with traditional academic-focused induction. According to Kana'iaupuni (2007, p. 1), "Culture-based education is the grounding of instruction and student learning in these ways [being, knowing, and doing], including the values, norms, knowledge, beliefs, practices, experiences, and language that are the foundation of a(n indigenous) culture." Although critics of culture-based education may argue against the need

for culture and place relevancy, few dispute the fact that "classroom learning is enhanced when the structure is changed so that they are more compatible with the home cultures of these children" (Yamauchi & Tharp, 1995, p. 352). When pedagogy is "consistent with a language-based educational model that focuses on [group and individual] meaning making and the interdependence of social, oral and written skills [of an ethnic community]," the indigenous child is more likely to flourish (Yamauchi & Tharp, 1995, p. 353). Kana'iaupuni and Kawai'ae'a (2008) highlighted that numerous studies "document the educational advantages of relating to the learners' prior experiences, home language, and culture, and the need for culturally relevant pedagogy" (p. 71). In sum, the need for all teachers, especially those new to the profession, to understand and use place-based, culturally and linguistically relevant educational strategies when teaching indigenous children, is clear.

# Kahua Induction Program Description and Evaluation Focus

The Kahua Induction Program partners with higher education institutions, public and private schools, and nonprofit educational agencies to improve the education of all students, particularly those of Native Hawaiian ancestry, through the induction of new teachers. In the spring of 2007, a core planning team was created to engineer and execute the Kahua prototype. The pilot launched that summer and completed its first year in May 2008.

Kahua supports new educators by providing them with (a) an orientation to the islands and specifically to the school/community where they teach; (b) cultural/ place-based sensitivity training to enhance curriculum development, instruction, and assessment; and (c) a community mentor to help navigate living in Hawai'i (see the Appendix for the components of the Kahua program). Designed to work in conjunction with an existing academic induction process in an HDOE complex area,<sup>1</sup> three of Kahua's five intended goals became the focus of this study and the basis of our evaluation questions (see Table 1).

Kahua program goals	Evaluation questions
<b>Goal 1</b> : To increase retention rates of new HDOE teachers.	<b>Evaluation Question 1</b> : What effect did the Kahua program have on the complex area's retention rates of new teachers?
<b>Goal 2</b> : To increase new HDOE teachers' under- standing and implementation of appropriate, effective cultural/place-based/indigenous/ current "best practices" to educate all students, particularly those of Native Hawaiian ancestry.	<b>Evaluation Question 2</b> : Did participants show any changes in their knowledge, attitudes, and skills in the area of culture-based education as a result of participation in the Kahua program?
<b>Goal 3</b> : To help new HDOE teachers acquire strategies for building positive relationships with parents, guardians, and other family and community members.	<b>Evaluation Question 3</b> : To what extent did participants acquire strategies to build positive relationships with families and communities?
<b>Goal 4</b> : To build and sustain collaborations between educators who represent higher education, public and charter education, and Kamehameha Schools.	Not addressed here
<b>Goal 5</b> : To design and implement a well-tested orientation/mentorship program that improves both teacher preparedness and student outcomes (e.g., self-esteem).	Not addressed here

TABLE 1 Kahua's program goals and evaluation questions

As previously discussed, Kahua is a collaboratively created community and cultural induction process that complements an existing academic mentoring program. Although we believe that all components of a standard teacher's induction program are valuable, due to time and resources, the scope of this evaluation only examines the Kahua program.

#### Method

To understand the impact of the Kahua pilot on new teachers, we designed a mixedmethod study in spring 2007. The power of this approach lies in the ability to evaluate a program using both quantitative and qualitative methods (Wiersma & Jurs, 2009), which avoids method bias, appeals to various audiences, and allows researchers to encompass multiple perspectives concerning a phenomenon. Particularly in terms of evaluation research, a mixed-method approach addresses the plethora of questions generated by multiple stakeholders engaged in school reform and improvement. Aligned with the program goals and objectives, this evaluation design enabled program planners to systematically and efficiently implement this pilot.

#### Participants

The Kahua Induction Program is voluntary; new teachers elect to participate in the program. To attract participants, the program offered a stipend of \$500 for attendance and completion of all Kahua components, including participation in program evaluation. Of a total of 60 eligible<sup>2</sup> teachers, 36<sup>3</sup> (24 women and 12 men) elected to join Kahua. Although a slight majority of the participants were from the continental United States (52.8%), a high percentage received their teaching degree within the state of Hawai'i (58.3%). Comparable proportions of participants lived in Hawai'i for 5 years or less (47.2%) or for more than 10 years (44.4%). A vast majority of the participants were raised outside of their teaching area (88.9%) but many now reside there (55.6%). Slightly more than half of the participants said they plan to remain teaching in the same complex for more than 5 years (52.8%).

Participants entered their first year of teaching in the KKP complex area on the island of Hawai'i where approximately 26% of the population is Hawaiian or part-Hawaiian. The Center on the Family (2003) reported that while many people in this region of Hawai'i Island face economic, social, and educational hardships, adolescents report strong and close neighborhood ties, and in two of these subregions, the count of teachers with advanced degrees is among the highest percentages in the public school system.

#### Instruments and Data Collection

Retrospective surveys, individual event surveys, and a set of DVD-recorded events assisted in program evaluation and adjustment throughout the year. Participants evaluated each event through a Likert-scaled and short-answer questionnaire (for the orientation, questionnaires were distributed and collected at the close of each day). Along with a review of taped footage of the event,<sup>4</sup> the core planning team met to evaluate the event and to plan for future events in light of the data collected. This program evaluation and adjustment process, though not detailed in this article, remains a critical component to maintaining program quality and integrity.

A comprehensive retrospective survey<sup>5</sup> was used to measure any increase or decrease in participants' knowledge and/or agreement with teaching belief and philosophy statements. This survey required participants to indicate their current degree of agreement with statements as compared with their degree of agreement (to identical statements) that represented their perceptions at the beginning of the year.

This retrospective survey was a modification of a survey used in the Hawaiian Cultural Influences in Education (HCIE) study, which gathered information from educators, students, and families about their beliefs, attitudes, and use of culture-based educational (CBE) strategies in their teaching practices (Kana'iaupuni & Kawai'ae'a, 2008; Ledward, Takayama, & Elia, 2009). The HCIE teacher survey was designed to capture data regarding five components of CBE: content, context, family, language, and assessment (Kana'iaupuni, 2007). Each question was assigned a weighted value between 0 and 3 to correspond to their intensity of CBE use. A question assigned a weight of 0 indicates a lack of CBE, whereas a question given a higher weight of 3 indicates stronger use.

We modified the HCIE teacher survey for the purposes of measuring the impact of Kahua on teachers. Most notably, the instrument was modified to record perspectives retrospectively, and the response options were expanded to a 10-point scale to increase sensitivity to change. Furthermore, an additional construct, knowledge, was added to the existing CBE components to better reflect the Kahua design.

This modified survey design also incorporated a short-answer, qualitative section to provide program planners with insight about participants: what they learned and its usefulness to classrooms, perceptions about positive and negative aspects of the program, and the types of support they needed. In many instances, participants provided rich qualitative data in the form of moʻolelo (stories). Participants completed an online or printed version of this survey at the end of the 2007–2008 school year.

#### Analysis

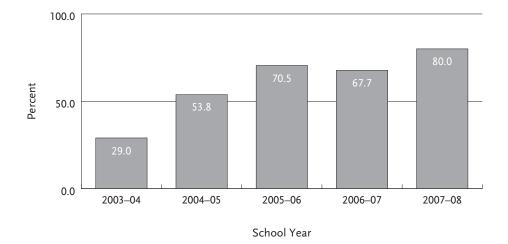
We analyzed teachers' retrospective responses for any statistically significant differences with their end-of-year responses. For the responses, we created a construct score by separating questions by construct and then multiplying the respondents' Likert scale answer by the assigned question weight. These weighted scores were then summed for each construct and then divided by the possible score in the domain. Finally, we multiplied this score by 100 to create a score between 1 and 100 for each participant in each construct. We used a paired *t* test to test for any significant differences between the participants' retrospective scores and their end-of-year scores.

Event surveys contained 5- and 10-point Likert scale questions that were averaged for individual questions. Participants' responses to open-ended questions were summarized by theme. Results were immediately reviewed by the core planning team and informed program adjustments.

We used the constant comparative method to analyze the qualitative data (Merriam, 1998). An initial set of data was grouped into tentative categories, and as new data were included into the analysis, new categories were compared with previous ones until general themes emerged. These themes were then compared with the quantitative results to establish validity of perspectives.

### Results

Evaluation data indicate that the Kahua pilot had a positive impact on teacher retention rates in the KKP complex area. Past retention rates of teachers ranged from 29.0% in 2003–2004 to 70.5% in 2005–2006 (see Figure 1). The overall retention rate<sup>6</sup> of all new teachers, including both Kahua and non-Kahua participants, during the 2007–2008 Kahua pilot year was 80.0%, with the complex area retaining 48 out of  $60^7$  new teachers. Of this group of 60 new teachers, those who participated in Kahua (n = 35) had a retention rate of 91.4%. The teachers not retained either resigned or were not hired back at a school the following year. In comparison, there was a 64.0% retention rate of the 25 teachers who did not participate in Kahua. In the following year (2008–2009), 6 teachers of this group had resigned from their posts and 3 teachers relocated to schools outside of the complex area (see Table 2).



#### FIGURE 1 Percentage of teacher retention from 2003 to 2008 (KKP Complex Area)

TABLE 2         Retention rates of	FKahua and non-Kahua participants f	or school year (SY) 2007–2008

	Kahua participants		Non-Kahua participants		Total	
	n	%	n	%	Ν	%
Participants returning to the complex for SY 2008–2009	32	91.4	16	64.0	48	80.0
Total participants	35		25		60	

Recent follow-up with the complex area about this pilot group suggests that of the 35 Kahua participants from school year 2007–2008, 22 teachers completed the 2008–2009 school year and returned to teach at their same school for the 2009–2010 school year, corresponding to a retention rate of 62.9% for 2 years. Teachers not returning to the same school in 2009–2010 cited medical reasons, work leave, faculty downsizing, and work contracts ending. Data are still being gathered about the retention rates of non-Kahua faculty.

Through the Kahua pilot, participants increased their knowledge, attitude, and skills toward culture-based education. Although there were 35 participants in the Kahua program, several responses were not included in this analysis. Nine participants did not complete the retrospective survey. Surveys with more than 25% missing responses per construct were eliminated. Total counts by constructs were as follows: context (n = 21), content (n = 21), knowledge (n = 23), family (n = 22), language (n = 22), and assessment (n = 22).

A paired t test was used to identify any significant difference in participants' retrospective and end-of-year responses in the following constructs. Participants showed a significant increase in their knowledge, attitudes, and skills in all constructs (see Table 3).

		Retrospective responses		Post responses		
Construct	М	SD	М	SD	t value	df
Context	65.74	22.46	84.30	13.35	-5.73	21
Content	62.50	21.19	82.72	13.2	-6.35	21
Knowledge	53.53	29.07	79.31	15.76	-7.00	23
Family	65.42	28.43	80.00	22.36	-4.61	22
Language	55.17	23.33	70.99	16.53	-5.11	22
Assessment	70.21	17.1	82.32	14.32	-5.53	22

**TABLE 3** Paired *t* test results by construct

Note: All results are significant at the .001 level.

Results showed a significant difference between participants' retrospective responses and their end-of-year responses in both the context, t(21) = -5.73, p < .001, and content, t(21) = -6.35, p < .001, constructs. Results indicated significant increases in teachers' level of understanding of CBE, and a large number of participants agreed that CBE is a way to engage students by making learning more meaningful and relevant to them. Finally, self-reported levels of use of CBE in the classroom also increased. As one participant shared:

[Without Kahua] I would not have taught some of the lessons that I did and I surely would not have had my students engage in projects based on the culture and history. I don't think that I would have integrated so much culture into my lessons and used the language as often.

Lastly, teachers in the Kahua pilot acquired strategies for integrating families and communities into their curricula. The quantitative results indicated that participants' knowledge about the state of Hawai'i, their teaching community, and the students in their classrooms grew significantly, t(23) = -7.00, p < .001. Results showed that an increased number of resources were accessed by participants. These resources included people in the community, printed materials, and online cultural information. This finding was also the most prominent theme in the qualitative data. Participants highly valued and praised the relationships that were built through Kahua as it offered them much-needed support and resources throughout their first year of teaching. One teacher shared:

[If I had not participated] I would not have made so many connections with other people, new teachers, program coordinators, and community mentors. I also would not have had access to a lot of the information that I have now. I believe the program revitalized my interest and appreciation in local and Hawaiian culture. Other teachers noted that Kahua provided opportunities to connect with people and resources within the community:

[If I had not participated] I would not have been aware of all the resources in the area. I feel privileged to have met so many committed and focused individuals. I also feel that I can continue to contact these individuals for advice in the future.

I would have had to discover resources (both people and materials) on my own, which would have been time consuming and I may not have done it for that reason.

These comments characterized the benefit of Kahua to participants: the building of a bridge between new teachers and their teaching community.

Other constructs contained in the retrospective survey also showed significant growth: family, t(22) = -4.61, p < .001; language, t(22) = -5.11, p < .001; and assessment, t(22) = -5.53, p < .001.

Although not corroborated qualitatively, evident in the end-of-year findings were significant increases in knowledge of the KKP complex area, acknowledgment of the importance of family and community involvement, and indications of how to incorporate Hawaiian issues into classroom practice. Table 4 offers a comprehensive review of the findings (beginning and end-of-year perspectives are compared) and displays the construct questions and their assigned weight values.

	Mean Rating		
Construct	Retrospective	End of the year	
Context: Structuring the school and the classroom in culturally approp	priate ways		
Generally speaking, teaching can be more effective when it builds on my students' cultural identity and sense of place (3).	7.8	9.4	
Teaching should integrate opportunities for intergenerational learning, where students learn from each other, from teachers, and from kūpuna (elders) (3).	7.1	9.4	
My classroom learning environment and daily practices are informed by Hawaiian beliefs and ways (4).	4.5	6.6	
Content: Making learning meaningful and relevant through culturally	grounded content	and assessment	
I understand how using culture- and place-based curriculum are important ways to connect and engage student learners (2).	6.4	8.7	
I am comfortable incorporating Hawaiian cultural examples into my teaching (3).	5.8	7.8	
I incorporate Hawaiian culture into my curriculum to produce culturally relevant material for my students (3).	5.0	7.5	
I believe that understanding the community where I teach is important to being able to connect and engage student learners (3).	7.7	9.3	
Language: Recognizing and using native or heritage language			
I am comfortable using simple Hawaiian words and phrases in my teaching (2).	5.6	7.3	
Assessment: Gathering and maintaining data using various methods culturally responsible ways	to ensure student	progress in	
I currently (or plan to) assess my students by using multiple forms of assessment (2).	7.0	8.5	
Knowledge: Awareness of students, families, communities, and the st	ate of Hawaiʻi		
I have a general understanding of Hawaiian issues, history, and culture (2).	5.3	7.2	
I know where to look for Hawaiian resources regarding culture/place-based educational strategies (2).	4.8	7.8	
Family: Actively involving family in the development of curricula and e	everyday learning		
It is important to seek opportunities outside of the classroom to build relationships with my students' families (3).	6.5	8.0	

 TABLE 4
 Selected responses from the retrospective and end-of-the-year survey

*Note:* A 10-point scale was used, with 1 = *strongly disagree* and 10 = *strongly agree*. Question weights are indicated in parentheses. All results are significant at the .001 level.

## DISCUSSION

In its simplest form, Kahua strives to support and retain new teachers by providing them with a strong cultural, linguistic, and place-based foundation to conduct their work in the classroom. The vigilant monitoring of Kahua in its pilot year suggests that (a) Kahua participants were more likely to be retained than non-Kahua participants, and (b) Kahua participants showed significant gains in their understanding and implementation of appropriate and effective family, community, culture-based, and place-based strategies to educate Native Hawaiian and other local students.

Studies suggest that feeling isolated is a primary reason for teacher attrition (Heller, 2004). Kahua is grounded in the belief that by reducing the isolation faced by many first-year teachers and by providing meaningful support that includes a community/cultural mentor, teachers would be more likely to remain teaching in their respective schools for the following school year. When the retention rates were compared between current Kahua and non-Kahua teachers as well as between current and previous complex area retention rates, the results identify a strong likelihood that participation in Kahua positively contributes to higher teacher retention.

Comments by participants support this finding. Teachers indicated they would have felt more isolated without the networking experienced during the Kahua program.

I would have felt more isolated, alone, and frustrated. I would have felt less supported and less connection with the school.

I would have felt alone and without anyone to turn to. I watched it happen to other teachers who didn't have this program and they were so discouraged.

Another key component of the Kahua program was the support to new HDOE teachers in bringing greater place-focused, cultural relevancy to their curriculum, instruction, and assessment. Overall, Kahua participants showed a significant growth in their belief of the importance of incorporating Hawaiian culture into education. Participants indicated that, as compared with the beginning of the year, they now more strongly believe that teaching can be more effective and can benefit all students when it builds upon students' cultural identity and sense of place. In

addition, participants felt they have an increased number of resources to turn to for help regarding Hawaiian language, history, values, protocol, and culture/place-based teaching strategies.

#### LIMITATIONS

There are several key limitations to this study. First, the evaluation did not include a control group. As such, we could not eliminate external variables affecting participants that may or may not have contributed to Kahua's intended goals. In future evaluations, we will determine the depth to which Kahua acts as the primary vehicle in retaining teachers and assisting them in the implementation of place-based, culturally relevant educational approaches.

Second, because participation in the program is voluntary, selection biases affected receptivity of Kahua knowledge and strategies. Again, the use of control grouping in future studies will reduce the effect of voluntary participation while also broadening the scope of evaluation to include induction elements evident in programs beyond Kahua. In this way, comparisons between Kahua and non-Kahua participants can better articulate the impact of the program on new teachers.

Third, in terms of qualitative data, short answers do not provide the detail and depth of understanding in exploring participants' multiple and complex views about program participation and outcomes. We now have access to end-of-year portfolios, which require participants to examine their experience in Kahua as well as the subsequent school year. However, a full investigation of thematic implications attached to the portfolios was beyond the scope of this year's evaluation. Instead, we are pursuing focus groups made up of 1st- and 2nd-year participants that will provide initial data on the use of Kahua strategies in classrooms.

Future topics of exploration include examining specific components of Kahua, particularly the integration and implementation of a community mentorship. Although mentoring, in general, is essential to successful teacher induction, studies often limit these relationships to academic and not cultural/community-based experiences. Organizations such as the NEA Foundation recognize the need for incoming teachers to understand academics and the students they work with,

their families, and the culture and traditions of the community (Loschert, 2007). Kahua's design of partnering a community/cultural mentor with an academic mentoring process is ahead of the curve.

Critical to establishing program effectiveness will be the evaluation of Kahua's impact on teacher practice and, ultimately, on student performance. On the horizon, the link between instructional practice and how students, especially Hawaiian haumāna (students), benefit from practices learned in the Kahua program will be analyzed. Key to this goal is the development of a culture-based classroom observation tool, which will allow data to be gathered on the use of CBE strategies by a third party. Future publications will address these limitations and build upon standing results, particularly in light of the program expansion from the original single complex area (Ka'ū, Kea'au, Pāhoa) to seven complex areas<sup>8</sup> in 2009–2010.

## CONCLUSION

The Kahua Induction Program has shown great potential to positively enhance and enrich the experiences of first-year teachers in Hawai'i. By exposing incoming teachers to the vast diversity and rich culture of Hawai'i's people, Kahua provides teachers with an increased understanding of students, families, and the communities in which they work. Participants have also formed strong relationships with one another, their mentors, program staff, and HDOE administrators, a crucial component in decreasing the isolation they face in their first year of teaching, and a strong contributing factor to high teacher attrition.

There are many opportunities to expand on this foundational study and further explore specific program components and linkages to student outcomes. The Kahua pilot has proved to be an innovative teacher induction program that provides incoming teachers with knowledge of Hawai'i, its culture, and communities and with a variety of resources while fostering the development of relationships within, and extending beyond, their school.

*E hana mua a pa'a ke kahua ma mua o ke a'o 'ana aku iā ha'i.* Build yourself a firm foundation before teaching others.

-- 'Ōlelo No'eau (Pukui, 1983, p. 34, no. 276)

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#### Notes

1 The Hawai'i Department of Education's complex areas are made up of several complexes. A complex is typically made up of a single high school and its feeder schools, that is, the middle and elementary schools that send students to this high school.

2 Teachers entering their first teaching year in the complex area were eligible for participation in Kahua, regardless of the amount of previous teaching experience in another complex area.

3 Thirty-six teachers originally began the Kahua Induction Program. In March 2008, 1 participant passed away. From here on, a count of 35 teachers was used for analysis.

4 Taped by a company that was hired to chronicle the year's event with permission from participants.

5 This retrospective survey was originally designed as a pre- and postsurvey that participants completed upon entering the program. Preliminary analysis done in the beginning of the 2007-2008 school year of the quantitative data gathered by the pretest survey indicated that participants reported very high levels of agreements to the majority of the questions. These strong scores may mask any changes in knowledge and behavior if participants overestimated their knowledge and skills on the pretest. Substantial research shows that pretest-posttest surveys may not be a sufficient means to gather information pertaining to ratings of self-perceptions of knowledge and/or attitude (Howard et al., 1997). Research suggests an alternative of collecting current and retrospective information at the conclusion of a program to avoid misleading pretest-posttest comparisons (Goedhart & Hoogstraten, 1992). Research studies also show that retrospective selfratings of a pretest status are closer to a criterion rating than self-ratings during a pretest (Lamb & Tschillard, 2005; Pratt, McGuigan, & Katzev, 2000). Due to results from the pretest survey and the research, a modification of the evaluation plan was made and a retrospective survey was designed in place of a posttest survey.

6 Retention rates were calculated based on the number of teachers returning to teach in the same complex area in the 2008–2009 school year.

7 One Kahua participant, who passed away in March of 2008, was included in the original count of Kahua participants but was not included in the calculation of the following retention rates

8 For the 2009–2010 school year, Kahua is in the following HDOE complex areas: Kaʻū-Keaʻau-Pāhoa; Hilo-Laupahoehoe-Waiakea; Kohala-Honokaʻa-Kealakehe-Konawaena; Kailua-Kalāheo; Castle-Kahuku; Nānākuli-Waiʻanae; and Hana-Lahainaluna-Lānaʻi-Molokaʻi.

## Appendix The Kahua Induction Program Components

The Kahua components include the following:

- COMMUNITY/CULTURAL MENTORS. The program uses kūpuna (elders)/ mākua (parents) as mentors to assist new teachers in building positive relationships with peers, parents, guardians, other family members, and the community.
- HUAKA'I. Participants visit the residential, business, and cultural areas surrounding their worksite to become familiar with the community served by their school.
- SEMINAR/FOLLOW-UP DAYS. Three seminars at significant cultural sites in each complex area provide place-based, culturally relevant approaches to teaching local Hawai'i students. Additional workdays are provided to participants to prepare for the hō'ike.
- **HŌ'IKE**. This showcases teachers' work in using place-based, culturally relevant teaching strategies.
- HAWAIIAN CULTURAL FRAMEWORK FOR LEARNING AND TEACHING. Culturally relevant teaching strategies/framework, such as *Nā Honua Mauli Ola* (cultural guidelines; Native Hawaiian Education Council, 2002) and *Moenahā* (framework for teaching), are included in orientation and seminars.
- **TEACHING RESOURCES**. Each participant is provided sample placebased, culturally relevant curriculum materials, a toolkit of resources, visual aids, Web site resources, and others to support their work in their classrooms.
- DATA COLLECTION/EVALUATION. Kahua evaluates itself through a systematic collection of teacher/personnel information, pre/post surveys, interviews, and other pertinent data.
- **FACILITIES**. The core planning team secures large-group meeting places within the complex area, with computer access, for program events.

- **KEY SPEAKERS**. Noted educational and cultural consultants from the community are invited to share perspectives about teaching and learning in Hawai'i and, in particular, what works best for Native Hawaiian children.
- INCLUSIVE STAKEHOLDER DECISION MAKING. The program seeks to include all stakeholders, including teacher union representatives and retired teachers from the area in the core planning team's decision-making process.
- ONSITE CORE PLANNING TEAM. Key stakeholders who can help guide/ shape Kahua's development and implementation serve as an onsite core planning team.
- ONSITE/ISLAND PROJECT COORDINATOR. A community person serves as a liaison between HDOE and Kamehameha Schools, ensures program components remain intact, and helps to generate community interest in supporting Kahua.