

Ho'opilina Kumu

Culture-Based Education among Hawai'i Teachers

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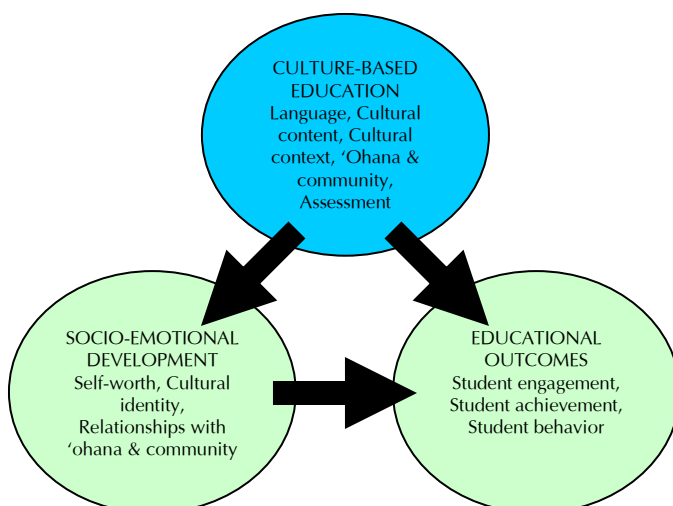


OVERVIEW OF STUDY

At the state, national, and international levels, culture-based educational (CBE) strategies are increasingly seen as a promising means to address the educational disparities between indigenous students and their peers. *Hawaiian Cultural Influences in Education* (HCIE) is a joint research project of Kamehameha Schools, the Hawai'i Department of Education (HiDOE), and Nā Lei Na'auao, an alliance of Hawaiian-focused public charter schools, and seeks to understand and share best practices of culturally relevant education in Hawai'i's classrooms.

The premise of this study is that culture-based educational strategies affect socio-emotional development and educational outcomes. Our initial analyses explore these highly relevant practices, and research in the near future will examine the direct and indirect effects on student outcomes as depicted in the figure below.

Figure 1: Hawaiian Cultural Influences in Education theoretical model



As shown in the blue oval, culture-based education has five domains: use of the heritage language, culturally relevant content and contexts, involvement of the family and community, and indigenous forms of assessment.¹ An important

objective of this study is to examine critical outcomes beyond test scores, as shown in the two green ovals.

HOW IS CBE MEASURED?

An indigenous framework to measure culture-based education was created in a community partnership comprised of a multi-faceted research advisory group including a private school curriculum coordinator, professors from the University of Hawai'i at Hilo and the University of Hawai'i at Mānoa, members of the Kamehameha Schools Research & Evaluation Division, and the Department of Education's testing and evaluation offices. It was piloted and validated in several community contexts, including by private school teachers at two Kamehameha campuses, teachers in several different Hawaiian-medium school settings, teachers in HiDOE settings, and by a leadership group representing the Nā Lei Na'auao Native Hawaiian Charter School Alliance.

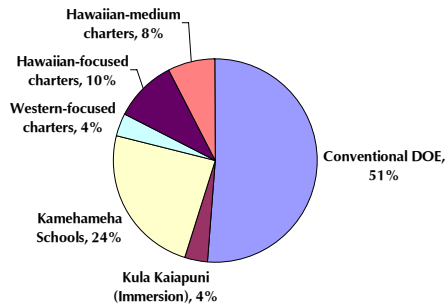
Based on this framework, the effects of culture-based approaches on student outcomes, such as self-esteem, school engagement, and academic growth are measured by a uniquely developed and interlocking set of surveys for school administrators, teachers, students, and parents/caregivers.

The findings reported here focus on the teacher survey (*Culture-Based Education Teacher Tool, CBETT*), which includes 600 teachers in 62 schools. Participants represent five islands (Hawai'i, O'ahu, Kaua'i, Maui, and Moloka'i), including conventional and Kula Kaiapuni (Hawaiian immersion) schools in the HiDOE, Hawaiian- and Western-focused charter schools, Hawaiian-medium charter schools, and Kamehameha Schools. The following graph contains the breakdown of participating teachers by these six school types.²

¹ For a more detailed description of the five domains, please see Kana'iaupuni's (2007) *A Brief Overview of Culture-Based Education and Annotated Bibliography*.

² We began with three official school types (DOE, Kamehameha Schools, and Charter), but expanded to six when independent t-tests revealed statistically significant differences at the $p < 0.05$ level.

Figure 2: Participation by school types



The Hawaiian Indigenous Teaching Rubric (see Figure 3) measures critical indicators (with a scale of None, Emerging, Developing, and Enacting) across five domains that include language, content, context, family and community, and assessment. For example, teachers respond to survey items about integration of Hawaiian language in class. Teachers are “emerging” in this indicator if they use simple Hawaiian words or songs to expose students to Hawaiian language. Others are “enacting” if they teach and communicate in ‘ōlelo Hawai‘i. For each item, means are determined and weighted to calculate summative scores for each domain.

Figure 3: Rubric for developing the indigenous framework

Domain Name				
Critical Indicators	None	Emerging	Developing	Enacting
a.				
b.				
c.				

Domain is described in behavioral terms to illustrate different levels of indigenous education domain

Questions from the teacher survey correspond with items on this rubric. Nine questions reflect standards issued by the Center for Research on Education, Diversity, and Excellence (CREDE) for effective education and reflect best practices for pedagogy for both majority and minority students.³

WHAT ARE THE MAJOR FINDINGS OF THE STUDY?

Finding #1: Despite different school settings, teachers share many beliefs and practices

Analysis of teacher-reported data indicates that teachers across the six school types consistently share several beliefs and practices. For example, teachers in all school types seek to build on diversity. Teachers design their classes to support the diverse cultural backgrounds of their students.

They also value and extend relationships by encouraging students to learn from one another.

Nearly all teachers in all school types agree that improving students’ academic achievement is their primary goal, and teachers across the board also encourage family participation. One way that they consistently do so is by contacting family members when students have problems in class. Additionally, teachers use multiple approaches to assessment. Most teachers in the various school types use some multiple-choice and other paper/pencil tests to assess students. Some teachers also assess students through projects and performances that are culturally purposeful and useful.



Finding #2: The data indicate no trade off between conventional research-based “best practices” & culture-based approaches

Teachers who report using CBE strategies in their classes also say they implement practices in line with CREDE standards. CREDE’s five standards for effective pedagogy include: collaborative teacher-student activities, literacy across content areas, connecting lessons to students’ homes and communities, engaging students with challenging standards, and emphasizing instructional conversation instead of lectures.

Although we might suspect that teachers using highly relevant cultural strategies do so at the cost of conventionally known “best practices,” we actually find a reverse trend. The highest rates of teachers using CREDE standards are found in school types that also report higher usage of CBE (Figure 4). Kula Kaiapuni, Hawaiian-focused charters, and Hawaiian-medium charters consistently report the highest rates of cultural education strategies along with the highest CREDE scores.

³ For more information about CREDE, please visit: <http://crede.berkeley.edu>.

Figure 4: Mean scores for CREDE domain by school type.

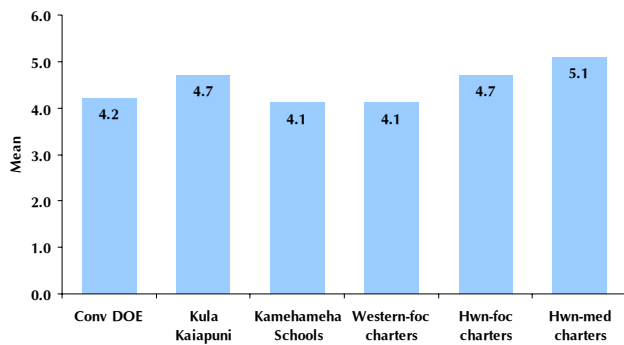
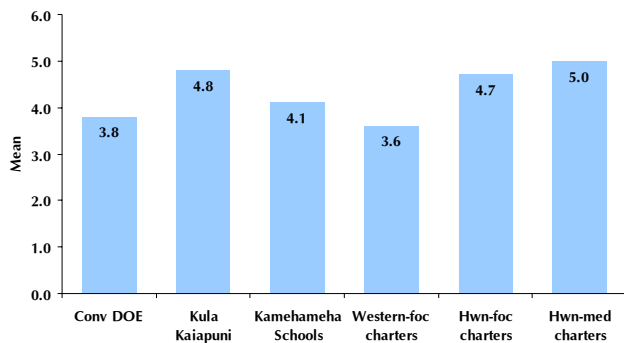


Figure 5 illustrates this typical trend using the context domain, which measures the structuring of the school and classroom in culturally appropriate ways. For example, the highest rates of teachers that integrate Hawaiian practices, rituals, and protocols as part of the learning experience are found in Hawaiian-medium charters, Hawaiian-focused charters, and Kula Kaiapuni. This pattern remains consistent except for the assessment domain where teachers in Western-focused charters report the third highest rate of CBE approaches.

Figure 5: Mean scores for context domain by school type.



This finding suggests that although some may assume that teachers cannot implement both CBE and “best practices” at the same time, the data indicate that it does happen and that it occurs at varying rates across the school types.

Finding #3: Use of CBE is found in all school types

Figure 6 contains summative scores for each school type by the five domains. It shows that although certain school types are strong predictors of CBE use, culturally relevant strategies are not exclusive to these groups. Summative scores indicate that teachers in all school settings practice CBE, albeit at varying degrees. Increased administrative support for CBE approaches within Hawaiian-focused schools may account for higher summative scores in one or more of the areas shown.

Figure 6: Summative scores for all domains by school type. Percentages are standardized to 100 to allow comparisons.

	Content	Context	Assessment	Family & Community	Language	N = 600
Conventional DOE	33.1	58.2	68.7	57.0	31.3	307
Kula Kaiapuni	42.2	75.5	81.0	68.8	85.4	22
Kamehameha Schools	34.5	63.8	72.6	56.4	49.8	144
Western-foc Charters	33.3	55.4	77.0	57.2	28.7	22
Hwn-foc Charters	42.4	74.0	77.9	71.2	66.7	60
Hwn-med Charters	46.0	79.8	85.2	84.1	89.4	45

(Numbers highlighted in blue indicate the school types with the higher summative scores for each domain. Numbers highlighted in yellow indicate the lower.)

In addition, although Hawaiians are more likely to be intense CBE users, teachers of any ethnic group can and do employ culturally relevant strategies with their students. They do so by drawing upon a shared sense of place, making explicit connections to Hawai’i, and establishing good relationships with community experts. For example, of non-Hawaiian teachers 13.5% are intense users of culturally based content, and 23.4% are intense users of culturally purposeful and useful assessment strategies.⁴



Many of the activities that teachers describe focus on the integration of family and community in education. In one example, teachers assigned students to create an iMovie of what it means to be Native Hawaiian. Through this process students interviewed kūpuna and family members. In integrating mālama ‘āina and community service into the curriculum, another teacher partnered with Paepae ‘o He’eia for a service learning project about the science and cultural aspects of fishpond

⁴ Responses in the upper quartile of the “Enacting” column of the Indigenous Teaching Rubric are defined as “intense users.”

maintenance. This teacher recognized that he did not need to be an expert in Hawaiian culture himself, but he could connect his students to people in the community who possess relevant knowledge and experience.

Other teachers have students host a conference to exhibit what they have learned to their families and community. Students present their knowledge to others as a form of *hō'ike*. When students are unable to leave the classroom, teachers invite family and community members to teach about different life and cultural skills like *lā'au lapa'au* and *kāpala* stamping. These invited guests sometimes share their *mana'o* in the Hawaiian language as appropriate.

In general, the culture-based activities can be categorized into seven broad themes:

- **PILINA 'OHANA:** Involvement of the family in education;
- **PILINA KAIĀULU:** Incorporation of community members into the classroom and the classroom into the community;
- **HAKU:** Development of original compositions;
- **MĀLAMA 'ĀINA:** Land stewardship and environmentally-based projects;
- **KŌKUA KAIĀULU:** Active service promoting community well-being;
- **HŌ'IKE:** Authentic performances and demonstrations of competency;
- **OLA PONO:** Practical application of life and cultural skills and the teaching of values.

WHAT ARE THE LIMITATIONS OF THE STUDY?

There are a few restrictions attached to the findings reported here. However, the research team believes the results of the study are valid and meaningful.

- Sample sizes are small for some schools and school types limiting broad generalizations;
- There is an overrepresentation of Hawaiians and Hawaiian language and studies teachers in the survey relative to HiDOE schools.⁵

Lastly, there may be additional explanatory variables that are not accounted for in the study. The current study is descriptive, but our future work will look at the conditions that facilitate culturally relevant strategies such as school population size, average class size, and average student to teacher ratio.

⁵ According to the 2006 Superintendent's Annual Report, 9.9% of HiDOE teachers are Hawaiian/Part-Hawaiian. However, 23.9% of HiDOE participants in the study are Hawaiian/Part-Hawaiian.

WHAT ARE THE NEXT STEPS?

Work on the *Hawaiian Cultural Influences in Education* study is ongoing and additional findings will be made available soon. From 600 responding teachers, nearly 9,000 students along with one parent or caregiver per student were invited to participate in the study. The next phase of the project involves linking responding teachers with their students and their students' parents/caregivers to gauge outcomes relating to cultural influences in the classroom and the home.



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Note: Full article forthcoming in 2008, see www.ksbe.edu/spi.

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Sources:

Ka Huaka'i: 2005 Native Hawaiian Educational Assessment
State of Hawai'i Department of Education 2006 Superintendent's 17th Annual Report