The HCIE study examines the relationship between Hawaiian culture-based educational (CBE) strategies and student outcomes. As part of the study, we asked 600 middle and high school teachers to share their educational strategies with us. We also surveyed students of the same teachers to obtain a better sense of their educational experiences. These data help us understand the range of teaching and learning practices being used across Hawai'i's schools.

Preliminary analyses reveal that students whose teachers use greater amounts of culture-based educational approaches are more likely to report higher rates of cultural knowledge and practice, community attachment and giveback, school engagement, and positive self-concept. This report looks specifically at levels of positive self-concept among participating students.

**WHY DOES POSITIVE SELF-CONCEPT MATTER?**
Creating positive views among students, as individuals and members of larger communities, is often stated within the educational mission of schools. Three ways that researchers conceptualize self-concept are ethnic/cultural identity, self-esteem, and self-efficacy. Ethnic identity pertains to how a person views oneself in the context of their ethnic or cultural group. Self-esteem is an overall evaluation, positive and negative, of one's value or worth. Self-efficacy refers to a person's perceived ability to produce some kind of effect whether internal or external.

**HOW DOES CULTURE-BASED EDUCATION FIT IN?**
Hawaiian culture-based education grounds teaching and learning in culturally relevant content, contexts, and assessments, which draw heavily upon 'ohana (family), ka'aiulu (community), and 'ōlelo (Hawaiian language). To better understand the ways in which culture-based educational strategies may influence positive self-concept, respondents are classified into two groups: students who have at least one teacher who uses the highest levels of culture-based education (High CBE Teachers) and students who do not have any teachers that use high or even moderate levels of culture-based education (Low CBE Teachers).

**WHAT ARE THE RESULTS OF THE SURVEY?**
Across three areas of self-concept, we see that the greatest impact of culture-based educational approaches is on students' ethnic identity. No statistically significant differences between students' self-esteem and self-efficacy owing to increased CBE use are found. While not incurring any negative affects, culturally relevant teaching strategies contribute to positive self-concept by cultivating students' ethnic identity development.

**ETHNIC IDENTITY**
Using a modified 10-item version of Phinney’s Multigroup Ethnic Identity Measure (MEIM), items are adapted to gauge Hawaiian culture specifically. The modified scale contains a total of 50 possible points, and higher points indicate higher ethnic identity. There are also two sub-factors within MEIM: ethnic identity search (4 items) and affirmation, belonging, and commitment (6 items). Sample items include, “I have a clear sense of my Hawaiian background and what it means to me,” and “I think a lot about how my life is affected by my Hawaiian ethnicity.”

For ethnic identity as a whole, students of High CBE Teachers score significantly higher than students of Low CBE Teachers (44.1 vs. 39.4, respectively), indicating higher Hawaiian ethnic and cultural identity. Students of High CBE Teachers also score significantly higher than students of Low CBE Teachers for both sub-factors.

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SELF-ESTEEM

Rosenberg’s self-esteem (RSE) scale is a measure of global self-esteem. Ten items assess an individual’s self-worth and self-depreciation, and all items are on a 4-point Likert scale ranging from “strongly disagree” to “strongly agree.” There is a total of 30 possible points, and higher points indicate higher self-esteem. Examples of items include, “I feel that I have a number of good qualities,” and “I feel I do not have much to be proud of.”

As a whole, there is not a significant difference in self-esteem between students of High CBE Teachers and Low CBE Teachers. Although the data portray the two groups as virtually identical, internal consistency reliability is relatively low at 0.61 (standardized). This suggests that Rosenberg may be an inappropriate gauge of self-esteem for Native Hawaiian students whose culture tends to be focused more on the group rather than on the individual.

SELF-EFFICACY

Perceived self-efficacy gauges the degree to which a person feels that s/he is able to produce some kind of effect. Seven items assess an individual’s self-efficacy: five items are from an existing scale, and two items were developed to encompass a more collectivist orientation. There are 28 possible points, and higher points indicate higher self-efficacy. Examples of items include, “I am responsible for what happens to me” and “I can make the world a better place.”

Similar to self-esteem, there is not a significant difference in self-efficacy between students of High CBE Teachers and Low CBE Teachers. The internal consistency reliability score for this scale is relatively high at .79 (standardized). The overall reliability for self-efficacy is higher than self-esteem (.61) but lower than ethnic identity, which has the strongest reliability (.90) of the three measures of self-concept.

SUMMARY AND LIMITATIONS

Educators and researchers agree that nurturing students’ self-concept will likely lead to positive educational outcomes. Of the three common measures of self-concept, CBE has the greatest impact on students’ ethnic identity where students of High CBE Teachers score significantly higher than those of Low CBE Teachers. Although no significant differences appear between CBE use and students’ self-esteem or self-efficacy, reliability tests indicate existing scales for these components may be inappropriate for use with Native Hawaiians whose culture emphasizes a more collectivist orientation.

Still, using conventional tools, the impact of CBE on students’ overall self-concept appears positive. Future analyses will account for potential mitigating factors, such as school size, to better understand the impact of CBE use.

A CLOSER LOOK AT THE STUDY

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. The goal is to improve student outcomes by sharing best practices of culturally relevant education.

The study also seeks to recognize and measure student outcomes beyond grades or standardized tests. To determine the impact of CBE approaches on student development, a uniquely interlocking set of surveys was developed for school administrators, teachers, students, and parents.

HCIE data include responses from teachers, students, and parents in 62 schools across Hawai‘i. Participants represent five islands (Hawai‘i, O‘ahu, Kaua‘i, Maui, and Moloka‘i), including conventional public schools, charter schools, and Kamehameha Schools.

For more HCIE information visit www.ksbe.edu/spi/projects.php.


Endnotes

1 For this report, the sample of ~3,000 students is limited to Native Hawaiian participants in public school settings (conventional public schools, kula kiaiapuni, and charter schools) in grades 7–10 in school year 2005–2006 who are matched with at least one participating teacher.

