



## Commentary

# Culturally Responsive Instruction: Listening to Children

Beverly Kutsunai and Kathryn Au

### ABSTRACT

Culturally responsive instruction aims to promote the academic success of young children of diverse backgrounds, closing the achievement gap that typically exists between these children and their mainstream peers. Culturally responsive instruction is illustrated here through science lessons taught to young Hawaiian children around themes based on plants and the water cycle. Such place-based education provides a framework for building on the knowledge young children bring from the home and connecting them to the ways of their ancestors. Teachers seek to introduce themes in an engaging manner, including hands-on activities with artifacts and the reading aloud of literature.

The joyful voices of kindergarten children float through the early morning sunlight. They are outside in the garden, painting pictures of plants.

"This tree has funny flowers!" says an observant child.

"What do you notice?" asks the teacher.

"The flowers look pokey," the child replies.

"Touch it gently," the teacher responds.

"Wow, it's soft!"

"How can you show that in your work?"

Another student chimes in, "It's really 'ula'ula." And another adds, "That's Pele's flower. My uncle says if you pick it, she'll be unhappy and it will rain 'cause she is sad."

This is a science class focusing on parts of plants. The teacher's strategy for successful plant study is to take the children to explore plants in the school's small garden. The lesson incorporates elements of successful early childhood education, such as direct, hands-on experience with nature. The children are observing their world and sharing their observations through art—visual art and the art of conversation. Painting and open discussion help them make the most of the experience. They express themselves in their own styles and learn from each other. After working in small groups, painting and talking, they will return to the classroom to record their observations in their science journals, through both writing and drawing. Some plants in the garden are endemic and indigenous, having taken root in the Hawaiian Islands without human intervention. Others are popularly referred to as “canoe plants,” having been brought to the islands by early Polynesian settlers in their voyaging canoes (Abbott, 1992). These children examining the plants are descendants of these settlers, and they are enrolled at a school for students of Hawaiian ancestry.

‘Ohi’a lehua (*Metrosideros polymorpha*) is a hardwood plant of the Hawaiian Islands considered sacred to the volcano goddess Pele. After just a few moments, the teacher has learned that some children already know about this plant, while others have never seen it before. She makes note of the knowledge the children already possess. One of the children knows of the plant's connection to Pele and of the belief passed down through many families that picking a lehua blossom will cause it to rain. Flowers of the ‘ohi’a lehua may range in color from a fiery red to yellow. In the school's garden, the plant's flowers are red, prompting one of the children to describe them with the Hawaiian word for red—‘ula‘ula.

As they progress through the grades, the children will learn more about how the plants in the garden were and still are used by the Hawaiian people. At the same time, they will explore and begin to build the foundations for basic botany from the perspective of western science. The children will learn about such biological processes as reproduction, adaptation, capillary action, and photosynthesis as they investigate how plants grow and change, how water travels through plant parts, and how leaves use this water with light to make food for the plant to survive.

In our example, culturally responsive instruction has been applied in the teaching of science as way for young children to make sense of the world around them, in a manner that builds on their prior knowledge while expanding their horizons. Notice in this example that there are no longer walls separating school subjects such as science, English language arts, and visual arts. Other subjects, such as Hawaiian language and culture, math, and health and wellness, can easily be brought into this unit on plants.

In fact, one of the children has already introduced Hawaiian vocabulary. As this example shows, culturally responsive instruction offers the potential for improving the opportunities for young children of diverse cultural and linguistic backgrounds to excel in academic learning through building on the knowledge they bring from the home. Teachers face the challenge of recognizing and celebrating this knowledge, while enhancing it in ways contributing to children's academic success.

### Definition

Because culturally responsive instruction is a term that lends itself to different interpretations (Au, 2009; Osborne, 1996), let's explain how it may be defined in the context of early childhood education. In our view, the goal of culturally responsive instruction is to promote the academic success of young children of diverse backgrounds, to close the gap that typically exists between the achievement levels of these children and their mainstream peers. Studies indicate that an achievement gap exists even at the earliest levels of schooling and that this gap only widens over the years (Au, 2007).

Culturally responsive instruction is central to a pluralist vision of society in recognizing that heritage cultures have a central place in a school's curriculum. In this way, culturally responsive instruction can help children simultaneously achieve academic success while taking pride in their heritage cultures. Culturally responsive instruction is based on the idea that young children of diverse backgrounds bring assets a skillful teacher can build on. Culturally responsive instruction is proposed as a way of narrowing the gap, by building on the values, knowledge, and behaviors that young children of diverse backgrounds bring from the home.

Culturally responsive instruction is not intended to limit young children to content and learning activities they find comfortable and familiar. Rather, it involves giving children opportunities to find success in school by learning through means that are responsive to their cultural backgrounds, while at the same time introducing them to the new curriculum content and patterns of interaction needed for success in mainstream academic contexts.

In this commentary, we present science examples from lessons taught to Hawaiian children. We know, however, that many teachers work in urban settings where children come from a dozen or more different cultural backgrounds. What can these teachers do to bring culturally responsive instruction to their classrooms? Part of the answer is to plan lessons that foster a classroom environment where children are provided with common experiences and knowledge, while simultaneously inviting children to make

contributions from their various heritage cultures. In this way, a shared classroom culture can evolve to include and engage all children, as everyone in the class weaves a tapestry that represents expanding views of the world. Young children are eager learners of all that surrounds them. Active and enthusiastic, they are willing explorers. Teachers can take advantage of this energy and curiosity to develop culturally responsive lessons that engage children in exploring the world together.

**Place-based education.**

Place-based education (Gruenewald, 2003) is a key to culturally responsive curriculum and entails strategies that can be used by teachers in diverse, multi-ethnic classroom settings. Developing a sense of place is a way to awaken children's reflections of personal identity and connections to the environment, both natural and man-made. It gives children the opportunity to investigate their potential and who they can be in the inclusive global world that surrounds them. They can begin to discover more about the importance of their culture and cultures through history with a respect for their own education and the future of their people. In the Hawaiian Islands, people have been linked to the land and the sea through generations. As Hawaiian people today look towards sustaining a vibrant culture for future generations, they look to their language, their traditions, their arts, and their children. Revitalizing the culture creates new learning opportunities for families as well as their young children. They can share common experiences and access new knowledge linked to their ancestors and their history. They can redefine and reconnect with their sense of place on their land in their culture today.

A basic cultural link is easily enhanced in content areas utilizing real artifacts or materials. In Hawaii, as in other cultural areas around the world, natural materials still link people with the land across time. For example, first graders examine and test three types of volcanic rock in basic lessons from an exemplary U.S. science education program. The teacher enriches the module lessons by adding a place-based focus to include the location of these types of rocks in Hawaii. Basalt, cinder, and tuff are all common in the islands. In Hawaii, tuff results from volcanic eruptions near the sea, and it often holds fossils from the ocean. These fossils show children evidence of the origins and history of living things in the islands.

Children investigate further by testing the rocks as geologists do: a color test, a streak test, and a hardness test with a scratch plate of glass and their own fingernails. They learn that tuff crumbles easily. Connection: No wonder hikers in areas with tuff get into trouble when they leave marked trails.

The children learn that basalt is hard and dense. Connection: The early Hawaiians used basalt to make tools, including knives and adzes. Sample artifacts show children what their ancestors were able to accomplish using these natural materials. The children gain insight about the pivotal role of the natural environment, realizing that their ancestors had to use the type of rock available to them. Children then compare rocks from Hawaii with rocks from continental North America. They examine arrowheads made by North American cultural groups in the past, using available rocks for tools that met their needs in various environments. Involving children with artifacts from multiple cultures allows them to note similarities and differences and to see how what they have learned in one context may or may not apply to another.

### **Starting with literature.**

Literature from a heritage culture can also be a way of introducing an inquiry in a culturally responsive manner. Oral chants are the literature of the heritage culture of Native Hawaiian children. With guidance from a cultural archivist and educator, a teacher experimented with using a historic chant to highlight examples of natural sources of water in the children's environment. The chant provided a culturally responsive introduction to a science unit on the water cycle from a native perspective. It was entitled "Aia i hea ka wai a Kāne" (Emerson, 1909), which may be translated as "Where is the water of Kāne?" Kāne, the highest of the four major Hawaiian gods, is associated with procreation and with the sun, dawn, and sky.

The children were excited to discover that they drank water from the same sources as their ancestors. They learned the key patterns in the chant, as each verse began by repeating the question, "Aia i hea ka wai a Kāne?" They identified sources where water could be found in the world of their ancestors, soon realizing that their ancestors were keen observers of their environment and practiced natural scientists. Children then considered sources of water in the present environment. They experimented with the water cycle and used modern resources, such as videos and brochures from the local water supply board, to find out more about what they could do to maintain an ample supply of water, as well as good water quality, in their island home.

### **Teaching tips.**

We hope these examples will inspire early childhood educators and other teachers to bring culturally responsive instruction into their classrooms, not just through science but all subjects. We close by offering some tips for getting started, applicable to the teaching of all subjects.

- 1) Introduce the topic in a manner that makes a strong impression on children. For example, have children's first involvement with the topic occur through nature or the handling of artifacts, or use a powerful story or chant from a heritage culture. Do what you can to make learning concrete and meaningful, and allow children to make connections to their knowledge brought from the home and community.
- 2) Give children multiple ways of expressing themselves, such as through conversation, writing, drawing, drama, and music. Relying just on one mode of expression, such as talk, may not be a sound strategy. For example, children from some families may have been encouraged to state their opinions, whereas children from other families may have learned to wait to find out the answer the adult expects. The latter group of children may be more comfortable drawing their observations and sharing these with the class, rather than speaking at length.
- 3) Give the children a chance to explore on their own first, so you as a teacher can understand how they see the topic through their own cultural lenses. Have children elaborate on their thoughts and encourage further exploration. Children will be able to grasp conventional scientific or western explanations more easily, if they can make connections to these explanations, comparing and contrasting them with what they already know.

## References

- Abbott, I. (1992). *La'au Hawai'i: Traditional Hawaiian uses of plants*. Honolulu HI: Bishop Museum Press.
- Au, K. (2007). Culturally responsive instruction: Application to multiethnic classrooms. *Pedagogies*, 2(1), 1–18.
- Au, K. (2009). Isn't culturally responsive instruction just good teaching? *Social Education*, 73(4), 179–183.
- Emerson, N. (1909). *Unwritten literature of Hawaii: The sacred songs of the hula*. Santa Cruz, CA: Evinity Publishing.
- Gruenewald, D. (2003). The best of both worlds: A critical pedagogy of place. *Educational Researcher*, 32(4), 3–12.
- Osborne, A. B. (1996). Practice into theory into practice: Culturally relevant pedagogy for students we have marginalized and normalized. *Anthropology & Education Quarterly*, 27(3), 285–314.



**Beverly Kutsunai** is the Primary Science Specialist at Kamehameha Schools in Honolulu, Hawaii. She has presented science workshops in the U.S. addressing learning with young children for schools, the local and National Science Teachers Association, and the local and National Associations for the Education of Young Children. She presented at the World Indigenous Peoples' Conference in Australia. She has written for the IRA journal of Australia, *Practically Primary* and is an author of the series of Big Science for Little Hands, featuring *Squishy, Squashy Sponges*. She received the U.S. Presidential Award for Excellence in Mathematics and Science.



**Kathryn Au** is known for her research on culturally responsive instruction, and she has published widely on school improvement and the literacy achievement of students of diverse backgrounds. She is currently Chief Executive Officer of SchoolRise, LLC. A past president of the International Reading Association, she began her career as a teacher of kindergarten and first grade children. She received the Oscar S. Causey Award for outstanding contributions to reading research, was elected to the Reading Hall of Fame, and was the first person to hold an Endowed Chair in Education at the University of Hawaii.