

Arts Education in Micronesia: Professional Development and Resources

By

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While on Maap Island in Yap State, Federated States of Micronesia (FSM), former Director of Education Henry Falan shared a traditional Micronesian story about sailing a canoe to the moon. The full moon, a golden orb sitting low on the horizon, beckoned to five men who were resting in their carved canoe. After an hour of paddling furiously, the men discovered they were no closer to the moon. In fact, the golden orb was rising in the sky and even further out of reach. The men stopped and looked up. They moved to the back of the canoe to aim it toward the moon. With their canoe now poised upward, the men continued to paddle.

This story symbolizes the state of arts education for many Pacific island communities. The carved canoe represents a strong desire to preserve culture. The dream of reaching the moon represents an equally strong desire to attain something that appears to be out of reach—educational reform that integrates the arts into the curriculum. The arts encapsulate a variety of forms such as music, dance, and drama.

This essay will focus on the importance of integrating visual arts and crafts, storytelling, photography, and multimedia into core subjects (social studies, language arts, and science) to make both art and these content areas come alive in Pacific classrooms. It will describe various professional development models and provide classroom resources that can aid teachers in accomplishing this goal.

What is the current state of arts education in Micronesia? According to Mary Note, First Lady of the Republic of the Marshall Islands (RMI), arts education is informal and most often restricted to the community. In her welcoming speech to the International Children's Art Festival on September 10, 2003, she elaborated:

We struggle just to meet the basic requirements of education. Unfortunately, educational prioritization towards meeting these basic requirements has often meant that any comprehensive arts program has become last priority. As a result, many of our schools are lacking in the provision of arts-oriented activities and programs. For many schools, there simply are not arts programs. This is especially true of our rural, outer-island schools. You and I know that having an arts program will only benefit and enhance the development of our children's young minds, and foster creativity, individuality, as well as open-mindedness. As children belonging to both a local and global community, they are often unable to have access to, or experience the diverse and different art forms from throughout the world.

The following month, in October 2003, letters were sent out requesting information on any arts education and professional development instruction underway in Micronesia. The responses from the arts councils and educational organizations in the FSM varied from island to island, but generally echoed Mary Note's sentiments. In most islands, the arts were being taught by elders in the community and offered only to those who showed natural talent. Formal arts education in most schools in Micronesia, however, was found to be nonexistent.

In Micronesia, like most of the Pacific, the arts are alive, pragmatic, and functional in everyday life. They exist in the objects found in homes, the songs sung in church, and the stories told in the community. Arts education is defined as cultural preservation and perpetuated through handicraft classes and other traditions. There is a wealth of informal arts education available in the community, but a deficit in formal arts education in the school. Micronesian educators are beginning to recognize that children can grasp even serious and rigorous topics when they are approached through their senses and the affective medium of the arts. Thus, classroom teachers are asking for methodology to help them integrate the arts with other disciplines.

In order to do this, Pacific island policymakers, educators, curriculum resource developers, and artists must navigate to achieve two important goals: (1) offer quality professional development in arts education integration to educators and Pacific communities and (2) create exciting arts education resources that focus on the arts of the Pacific and which are culturally relevant to Pacific Islanders to aid in arts integration throughout the curriculum.

INTEGRATING THE ARTS INTO PACIFIC ISLAND EDUCATION

For centuries there has been no separation of the arts from history, culture, language, or science. Life and teaching about life in the Pacific flowed seamlessly, allowing and encouraging one to enrich the other. The excitement and pragmatism of the arts are often the glue that holds it all together.

Scientific research has shown that a multi-intelligence approach—using the arts to teach other subjects—works. Students learn better when their senses are involved (Gardner, 1983). In the 1980s, educators began studying standards-based art education and how language speaking, listening, writing, and reading could aid in understanding art (Eisner, 1988). More recently, art has been used as a vehicle to improve learning.

The cultural reality of the islands must be combined with educational research to create a vision in which school subjects are taught through one integrated curriculum. To reach the moon, one's own culture must be celebrated alongside the culture of others. Arts education offers a sensory way of understanding the world.

INTEGRATING THE ARTS INTO SOCIAL STUDIES

Learning about one's own culture and the cultures of others is emotionally, intellectually, and aesthetically stimulating. Exposure to the arts of other cultures broadens our understanding of the human condition. Art provides us with ways to feel what others have felt and know what others have known (Keith, 1993). The arts are also effective media for communication. They open doors to the world of nonverbal communication by carrying powerful messages about thought and culture. Art reflects what is important in life, to an individual and to a culture, and it is an important aspect of a well-rounded curriculum.

Understanding one's own culture for the purpose of cultural preservation and making connections between many cultures are two goals of multicultural education. Multicultural education helps students develop insights into their own and others' cultural backgrounds, thus reducing stereotyping and promoting intercultural understanding (Rubalcava, 1991).

James Banks, a respected theorist, criticizes various models of multicultural education for emphasizing cultural differences instead of similarities. He, among others, feels that the similarities are what allow connections to be formed between cultures (Banks, 1989). He stresses the need for educators to understand the distinction between multicultural understanding and global education. Teachers should be careful not to confuse studies of ethnic groups with studies of nation-states. They may assume, for example, that while teaching about Mexico, they are teaching about Mexican Americans. Some teachers may be more comfortable teaching about art from Africa than about Afro-American art created in American communities (Banks, 1988). However, in comprehensive art education, local creations as well as objects from around the world are studied, and their similarities are examined.

Ernest Boyer (1995) believes the purpose of studying culture is to affirm the sacredness of individuals and their different cultures, while recognizing the universal nature of all peoples. He believes all people share eight universal cultural traits or human commonalities. They are as follows:

- 1) All of us experience the cycles of life.
- 2) All of us develop symbols.
- 3) All of us respond to the aesthetic.
- 4) All of us have the capacity to recall the past and anticipate the future.
- 5) All of us develop some forms of social bonding.
- 6) All of us are connected to the ecology of the planet.
- 7) All of us produce and consume.
- 8) All of us seek meaning and purpose.

These commonalities are reflected by the art produced in many different cultures. The elements of art are universal. For example, the concept of artistic balance is important in Chinese art, as well as in Kosraean dance; unity can be associated with an African community's problem-solving rituals, as well as with Polynesians paddling an outrigger canoe; and a closer look at how lines are used in Micronesian stick charts can offer new insights into Japanese *ikebana* flower arranging. Awareness of these commonalities can aid teachers in planning learning experiences that help students build an understanding of the similarities and differences of individuals and cultures. An effective method for teaching multicultural awareness and appreciation is through the world of art.

Today, much of our exposure to other cultures comes through television and commercial advertising. Mass media, however, are often products of a dominant culture and might not always convey accurate pictures of different people and places. Visual arts, on the other hand, are created in every culture and can convey more accurate information about other peoples. Personal engagement with the arts allows us to find lasting meaning in the world, making connections by communicating our ideas and values, and through our growing awareness of the meaningful expressions of others (Preble & Preble,

1996). Through the arts, students make connections with what they know and what they seek to learn. These connections are important in bringing about good relations between people wherever they live—whether it be in communities close to us or halfway around the world.

Universal art elements lend themselves to a universal curriculum. Teachers can expose children at an early age to examples of art from throughout the world and discuss comparisons between the different pieces of art. Questions such as, “How are we similar, and how are we different?” can work for both kindergartners and high school sophomores. Students can discuss Ku, the Hawaiian wood-carved sculpture, and compare it to the blocky modern style of Brancusi’s “The Kiss.” The world is full of similarities and differences that are reflected in the art of various cultures. Observing, raising questions, and discussing the arts are important ways to understand our own culture and the culture of others. Arts education helps children understand the relationship of art to culture and history, besides offering opportunities for them to communicate their views and judgments about art and its nature.

Professional Development Opportunities: Social Studies

In September 2003, the Pacific Center for Arts and Humanities in Education (PCAHE) at Pacific Resources for Education and Learning (PREL) developed the Pacific Islands Territories project. The project is a collaborative effort among the arts councils in Guam, the Commonwealth of the Northern Mariana Islands, and American Samoa to integrate Pacific multicultural arts into the classroom curriculum and is funded by the United States National Endowment for the Arts. The councils have been collecting artifacts, images, photographs, and videos of master artists and storytellers to create lending boxes of Micronesian arts that will be housed in each entity’s museum. Professional development workshops focusing on teaching innovative arts learning experiences began in January 2004. These workshops are open to the arts council, arts education staff, museum docents, and community artists willing to teach in school classrooms.

Arts Education Resources: Social Studies

The *Art of the Pacific Islands* interactive CD-ROM is an exciting visual tool for both teachers and students. This CD presents more than 100 of the finest examples of art from the Pacific region in the form of museum photos, contemporary video segments, and music. It includes such artifacts as masks from Melanesia, canoes and storyboards from Micronesia, and *tapa* and feather cloaks from Polynesia accompanied by historical and cultural descriptions. All can be accessed by country,

usage, or keyword, making it possible to easily incorporate Pacific island art into a variety of disciplines, subjects, and grade levels. This material will enrich classes in multicultural studies, social studies, and humanities. Educators and others interested in Pacific island art will find this CD a valuable resource for exploring the arts and cultures of Pacific Islanders.

Another classroom multicultural resource developed recently for teaching is the *Island Worlds: Art and Culture in the Pacific* curriculum, which includes a set of three videos (31 minutes total). Created to introduce students in grades 4–12 to visual art from Micronesia, Melanesia, and Polynesia, the videos contain footage of a classroom hands-on art learning experience for students on making storyboards similar to the ones from Palau seen in the film. Full color reproductions of the art and a teacher’s guide are also included.

INTEGRATING THE ARTS INTO LANGUAGE ARTS

Children who struggle in school often have language problems. They process information through images instead of words: they think and learn visually. A study by Clemenina Kuhlman concludes that verbal children do well on tasks that require sensitivity to the conventional, culturally understood, functional qualities of objects (Olson, 1992). For example, a ball, balloon, and hula hoop would be linked together as toys. Visual children, on the other hand, tend to link objects on the basis of recognizing patterns in the physical qualities. The ball, balloon, and hula hoop are all objects they see as round. We might say verbal children are culturally sensitive, whereas visual children are physically sensitive.

Since children who are visual learners respond poorly to verbal instructions, they are sometimes classified as slow or daydreamers. They may not participate in class discussions or follow instructions. They are truly at a disadvantage in the conventional public school. But nothing is wrong with them; they are simply different from verbal learners. They need to be offered visual learning strategies to aid them in reaching their full language potential. For these children, initiating assignments with the image instead of the word may promote language skills.

Creating and using images to improve children’s writing is a subject of research at the University of New Hampshire through a program called Image-Making Within the Writing Process (Olshansky, 1995). In this program, children construct collages to illustrate a story. They orally rehearse their stories, then write, read, and revise them. The final products are published and kept in the school’s library. The Picturing Writing: Fostering Literacy Through Art program employs a simpler artistic process. A study of the impact of both programs revealed dramatic improvement in student writing, particularly among at-risk students (Olshansky, 2000).

Visual images play an extremely important part in learning to read and in the communication of information, ideas, and stories. When parents and teachers read picture books aloud to children, the children formulate ideas and images as they listen and look at the pictures. The book illustrations and the children's visual images become central to what the children understand (Knoell, 2000). In some storybooks, images tell the story without the help of text. Paul Johnson notes in his book, *Pictures and Words Together* (1997), that visual literacy is as important as verbal literacy; they are interrelated processes. Diagrams, charts for history and science, and sketches in notebooks and journals all help children read and understand content.

Research shows that reading scores can be improved through the arts. In New York City, students improved in reading for each month they participated in the city's Learning to Read Through the Arts program (New York City Board of Education, 1993). Similarly, in Ohio's SPECTRA+ arts program, students demonstrated gains in reading skills, reading vocabulary, and reading comprehension compared to those in a control group with no arts exposure (Luftig, 1994).

According to the National Art Education Association, effective arts education should encourage students to produce, read, write about, and interpret visual images (Qualley, 1986). Three disciplines of comprehensive art education—art history, art criticism, and aesthetic inquiry—rely on language skills to improve knowledge of art (Dobbs, 1992). When children are asked to write about or compare artwork of other cultures, they learn about art history (Eisner, 1988). Building student's "allusionary" (image) base helps them to find or make meaning in others' art and relate it to their own. Art criticism asks students to interpret meaning and make critical judgments about specific works of art. Aesthetic inquiry involves reading, discussing, and writing (language arts standards) about the nature of art to engage students in philosophical questions. Investigating these issues offers children opportunities to see that sometimes there are many answers to one question. Through carefully considered and articulated responses, students contribute possible answers to the questions that have concerned people throughout the ages.

Professional Development Opportunities: Language Arts

There are several successful programs in the Pacific whose goals are to improve reading and writing and produce books in the local language. For example, a Yap Department of Education (DOE) project trains young adult artists to design and produce beautifully illustrated, culturally appropriate books in their own languages. In Guam, Dr. Marilyn Salas has held a series of workshops for teachers, promoting quality writing in students' first languages. And Kalihi-Waena Elementary School in Hawai'i has created an after-school pro-

gram that successfully improved children's ability to draw, discuss art in depth, and write in a descriptive manner (Pacific Resources for Education and Learning [PREL] 2000a) with the aid of a 21st Century Community Learning Center Grant.

According to an ongoing needs assessment (PREL 2000b), research, innovative methodology, and professional development are needed to improve literacy in native languages and in English, to aid teachers in meeting language arts standards and arts education standards, and to create culturally appropriate, child-made reading books in native languages.

PCAHE offers professional development throughout Micronesia that integrates art and language arts through its Image to Word – Word to Image program. The program seeks to

- improve language arts skills such as listening, speaking, writing, and reading through art;
- focus on narrative, expository, and ethnographic language and art skills;
- offer a spiral curriculum that allows teachers to tie standards to learning activities and apply them at appropriate grade levels;
- offer a culturally- and ethnographically-based approach (i.e., one that asks students to look for cultural meaning in both images and words);
- examine quality children's literature and discuss fine art or cultural artifacts; and
- offer children an opportunity to create their own books using words and images from their own cultures.

The Image to Word – Word to Image program uses standards-based art education experiences that include art history, art criticism, aesthetic inquiry, and art production. It affords students opportunities to write in both English and their own languages; develop knowledge of visual language; become more thoughtful; and develop abilities to raise questions, investigate concerns, and solve problems.

The approach incorporates students' experiences, powers of observation, and desire for communication into a learning process that develops language skills (listening, speaking, reading, and writing). At the same time, it develops students' ability to express themselves artistically. This approach to teaching visual and language arts enables teachers to meet required standards in less time than it would take to teach the curriculum areas separately. And because the technique uses local culture and arts as points of departure, the content is relevant and important to the students. A welcomed by-product of the process is creation of texts in local languages appropriate to local cultures.

Teachers begin each learning experience by reading from children's literature, discussing the illustrations, and relating them to fine-art examples (this discussion enhances speaking and listening skills). Then teachers present a mini-lesson in

which they demonstrate the use of an art medium as they focus on a specific art element, such as line or color (this experience improves the quality of the children's art production). The students are now prepared for the image-making lesson, which will build on the language arts experience. The image may be created first and the writing elicited from the image, or vice versa. No matter which comes first, or whether it is done in children's first or second language, the lesson relies on established language arts standards.

Pacific Voices, which focuses on integrating technology with visual arts and language arts, is another professional development project offered to teachers and students in Micronesia. A collaboration between the University of Hawai'i and the Pacific Regional Technology in Education Consortium (PR*TEC), *Pacific Voices* celebrates the beauty and diversity of Pacific teachers, children, and families by developing and sharing cultural packages and thematic units. These units are supported and enhanced by educational technologies, including multimedia, video, and telecommunications.

Using the power of multimedia technologies, students have an exciting medium to extend language arts, art, and cultural activities done in class. Students typically use their thematic art and digital pictures to complete guided assignments that ask them to write or talk about the artwork. The writing, art, and digital photography are combined on the computer using software such as *PowerPoint* or *iMovie*.

The software provides a creative canvas for students, combining digital pictures, voice, and video. Students can record their knowledge and add creative touches of their own to their multimedia projects. They develop oral communication skills, often wanting to edit and refine their narratives, and take pride in their projects. Using computers has proven to be especially motivating for students who have alternative learning styles or special needs. Technology provides a non-judgmental, interactive medium where students can proceed with a project at their own pace. The strategies have also proven successful for English as a Second Language (ESL) learners and students with disabilities.

Arts Education Resources: Language Arts

The Regional Education Laboratory (REL) at PREL, in partnership with Bess Press, has developed alphabet books that offer materials to educators in seven Micronesian languages, as well as in Hawaiian, Samoan, and English. The books were written and illustrated by children and teachers of Micronesia.

INFUSING STORYTELLING INTO THE CLASSROOM

Storytelling is one of the most basic ways of sharing knowledge, making sense of experiences, and seeing oneself in someone else. In the classroom, storytelling is an important activity with strong links to language arts and literacy.

The following excerpt from Stan Koki's *Storytelling: The Heart and Soul of Education* (1998, p. 1–2) illustrates this point.

The cultural, ethnic, and linguistic diversity of the Micronesian region gives Pacific educators an excellent opportunity to enrich children's learning. Diverse points of view, personal histories, prior experiences, and learning styles can be used to greatly enhance teaching and learning. The professional literature suggests numerous ways for teachers to design instruction so that all children learn. Storytelling is one way – it costs nothing, is enjoyable, and can be used anywhere and at any time (Zabel, 1991).

All people have a basic need to share stories. Stories organize experiences and record important happenings. As common forms of discourse, stories are of great interest and significance in language and literacy development, especially when considering the increased linguistic and cultural diversity of students in Pacific classrooms. Stories enable teachers to learn about their students' cultures, experiences, and meaningful relationships. Through the sharing of stories, teachers and children "create the potential for new connections that link them together inside a new tale" (Dyson & Genishi, 1994)....

Stories first arise in the context of relationships when small children acquire the ability to verbalize their experiences. With this verbalization, children become the "narrated selves" of their own lives, sharing interpretations with others. Like adults, children use narrative to shape and reshape their lives, imagining what could have or should have happened, and reviewing what actually did happen (Stern, 1985). Thus, stories have interrelated social and evaluative functions (Dyson & Genishi, 1994). The stories we tell help define our socio-cultural landscape in particular ways and demonstrate connections between language, culture, and power (Dakhtin, 1981).

Storytelling is as old as mankind, predating any other form of oral history (Zabel, 1991). Joseph Campbell believes that stories in the form of myths represent "a cacophonous chorus" that began when our primal ancestors told stories about the animals they killed for food and the supernatural world to which they thought the animals departed after death. People tell stories in an attempt to come to terms with the world and to harmonize their lives with reality (Flowers, 1988).

Stories have been used since time immemorial to record important events, celebrate the feats of heroes and heroines, transmit the spirit and facts of a major occurrence, and point out patterns of human experience and behavior. Storytelling is a cornerstone of the teaching profession (Zabel, 1991).

Researchers have noted the significance of storytelling in [Pacific] oral cultures that have persisted over time. Stories help tribe members make sense of their collective experiences, such as illness, death, and conflict, as well as interrelationships, including courtship, marriage, childbirth, and stewardship of nature. An oral culture teaches tribe members to preserve the wisdom of their heritage, transmit skills, maintain respect for elders, and understand how children fit into their lives (Van Groenou, 1995).

Because they rely so much on words, stories offer a tremendous source of language experience for [Pacific] children. Stories are motivating, easily accessible, and immensely interesting. “Surely, stories should be a central part of the world of primary teachers whether they are teaching the mother tongue or a foreign language” (Wright, 1995).

It is important for children to make up stories, just as it is important for them to hear and respond to stories told by others. When children create and tell a story in their own or a second language, the language becomes theirs (Wright, 1995). Oral language is an important tool for the cognitive growth of young children (Van Groenou, 1995).

With the increased use of the whole language approach to reading and writing, storytelling has taken on an important role. Students with experience in hearing and telling stories such as myths, legends, and folktales are eager to begin creating or writing their own stories. Critical thinking skills, vocabulary, and language patterns are enhanced through use of stories (Zabel, 1991).

Using stories in the classroom results in enhanced cultural awareness through the glimpses that stories afford into other people’s worldview. Because stories have been handed down through time, they are

“examples of the heart and soul of the people who created them. They are treasured reminders of how life used to be (in both good and bad times), and how they show non-members of that culture some of the thinking strategies and beliefs that have made different groups what they are today” (Zabel, 1991, p. 33).

Research clearly suggests that teachers must encourage and enrich oral development in young children. Egan (1993) states:

“Oral and literate are not opposites; rather, the development of orality is the necessary foundation for the later development of literacy.... Indeed, a sensitive program of instruction will use the child’s oral cultural capacities to make reading and writing engaging and meaningful “ (p. 37–38).

When presenting stories to children, teachers should keep the following premises in mind:

- The affective domain—the world of feelings and emotions—is relevant in education; children experience the world as a whole; words are not separate from life experience.
- Narration of personal experience makes lessons more captivating and meaningful.
- Stimulation of the imagination assists development of metaphoric fluency.
- A teacher’s enjoyment of language resonates with children (Van Groenou, 1995).

Professional Development Opportunities: Storytelling

Jodrikdrik ñan Jodrikdrik ilo Ejmour, a nongovernmental youth organization in RMI, hosts trainings for 13 to 25-year-olds every summer. The trainings begin with social, health, and cultural specialists leading discussions on topics as varied as AIDS, teen pregnancy, and cultural pride. Later, intensive workshops in theater skills prepare participants to devise short dramas based on their discussions. These dramas “humanize” the issues and shape them into accessible and entertaining performances shared throughout the islands.

A key element in the drama training is reviving a sense of ownership within the youth in their cultural heritage. They create songs, drawing on their cultural talent for music; they teach each other dances, as well as learn traditional dances from elders; and they showcase their musical skills on guitars and ukuleles to create performances utilizing their cultural folklore. Through the process, participants discover a sense of power, of being able to do something, to be heard, and to have others listen. It is a tradition that is accessible, hip, and highly sought after by youth and celebrated by the Marshallese community.

Arts Education Resources: Storytelling

Useful for teachers seeking to develop literacy skills in elementary school students through storytelling is *By Word of Mouth: A Storytelling Guide for the Classroom*. Information and classroom activities from three unique perspectives on speech and performance are included.

INTEGRATING THE ARTS INTO SCIENCE

Science teaches systematic, controlled, empirical, and critical investigation about natural phenomena, guided by theory and hypotheses to find relationships among such phenomena

(Kerlinger, 1986). Science helps students use this type of controlled thinking, called the scientific approach, to create questions and find answers about their world. If we consider the idea of words finding relationships, we begin to see similarities between the scientific approach and the stages of creative process used in the arts (see Table 1).

TABLE 1
Stages of the Scientific Approach and the Creative Process

Stage	Scientific Approach	Creative Process
1	First insight	Problem–obstacle
2	Saturation	Hypothesis
3	Reason–deduction	Incubation
4	Observation	Illumination
5	Test–experiment	Verification

The first stage of both the creative process and the scientific approach is marked by a period of distress when thinkers are saturated with ideas (Edwards, 1986). Similar parallels exist between the reason–deduction stage and the incubation stage, as well as between the test–experiment stage and the verification stage. Both methods aim to find connections between two unlike ideas. The arts allow students to express their understanding of scientific study with both a concrete scientific approach and a metaphoric creative process.

Teachers who wish to extend their units of learning in science may find that integrating the arts offers students another option to show what they know. Through utilizing both the creative and scientific process stages, students use both sides of their brain (Edwards, 1986). To offer such learning experiences, it is crucial for teachers to create lessons that ask students to work with metaphors or synectic thinking, the use of metaphors in problem-solving and creative thinking about a specific idea.

Professional Development Opportunities: Science

Developed by Lori Phillips and Kavita Rao at PREL, *Picturing Science* is a cross-discipline professional development course that offers training in integrating art, science, writing, and technology in the classroom.

The project asks students to look at their environment through new perspectives, using both the scientific approach and the creative process. Teachers use science standards to

develop a central theme or concept around the science content in their classroom. Once students discuss the concept, they create a word board that displays related vocabulary. They work in groups to take digital photographs relevant to the subjects they are studying. Then they create large images and paintings using the photographs as inspiration.

After the art is complete, students work together to articulate the ideas behind the images. Referring back to the word board and the central concept, they are encouraged to write descriptively and to recreate their images in words using metaphors, analogies, and other literary devices. Teachers with bilingual learners have the option of having students write in their first languages, in English, or in both.

Capturing their images helps students take a fresh look at science content and rethink their relationship to it. By writing about the photographs they have taken, students explore the connections between words and images and the ways in which they reinforce each other. *Picturing Science* also offers students alternate ways to express their understanding of science through their cultural lens and local context.

Arts Education Resources: Science

The Polaroid Education Program offers lesson plans and other resources about visual learning curriculum strategies. These publications focus on making science visual and on improving writing and scientific thinking.

CONCLUSION

Infusing the arts into social studies, language arts, and science makes these subjects come alive. Arts integration is an approach with potential for complementary learning in both disciplines. In this essay, I have attempted to address educators' need for information about how to integrate the arts with other disciplines by describing various professional development projects.

REFERENCES

- Banks, J. (1988). *Multiethnic education*. Newton, MA: Simon Schuster.
- Banks, J. (1989). Integrating the curriculum with ethnic content. In J. A. Banks (Ed.), *Multicultural Education* (pp. 189–207). Needham Heights, MA: Simon and Schuster.
- Boyer, E. (1995, Summer). Education in a multicultural world. *North Texas Institute for Educators Visual Arts Newsletter*, 6(3).
- Dakhtin, M. (1981). Discourse in the novel. In M. Holquist (Ed.), *The dialogic imagination: Four essays by M. M. Bakhtin*. Austin: University of Texas Press.

- Dobbs, S. (1992). *Learning in and through art: A guide to discipline-based art education*. Los Angeles: Getty Center for the Arts.
- Dyson, A. H., & Genishi, C. (1994). *The need for story: Cultural diversity in classroom and community*. Urbana, IL: National Council of Teachers of English.
- Edwards, B. (1986). *Drawing on the artist within*. New York: Simon and Schuster.
- Egan, K. (1993). Literacy and the oral foundation of education. *The NAMTA Journal*, 18, 11–46.
- Eisner, E. (1988). *The role of discipline-based art education in American schools*. Santa Monica, CA: J. Paul Getty Trust.
- Flowers, B. S. (1988). *Joseph Campbell: The power of myth with Bill Moyers*. New York: Doubleday.
- Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. New York: Basic Books.
- Johnson, P. (1997). *Pictures and words together*. Portsmouth, NH: Heinemann.
- Keith, K. (1993, January). *Celebrating CTAPS*. Speech delivered to the 5th anniversary conference of CTAPS (Consortium for Teaching Asia and the Pacific in the School), Honolulu, HI.
- Kerlinger, F. N. (1986). *Foundations of behavioral research*. New York: Holt, Rinehart and Winston.
- Knoell, D. (2000). *Why is visual literacy so important to reading?* Wayland, MA: Polaroid Education Program.
- Koki, S. (1998). *Storytelling: The heart and soul of education*. Honolulu, HI: Pacific Resources for Education and Learning.
- Luftig, R. L. (1994). *The schooled mind: Do the arts make a difference? An empirical evaluation of the Hamilton Fairfield SPEC-TRA+ Program, 1992–3*. Cincinnati, OH: Author.
- New York City Board of Education. (1993). *Learning to read through the arts, 1992–93*. New York: Author.
- Note, M. (2003, September). *Art and imagination are keys to creativity*. Welcoming speech to the International Children's Art Festival, Washington, DC. Available from Yokwe Online website, www.yokwe.net/modules.php?op=modload&name=News&file=article&sid=557
- Olshansky, B. (1995, September). Picture this: An arts-based literacy program. *Educational Leadership*, 53, 44–47.
- Olshansky, B. (2000, October). *Picturing writing: Fostering literacy through art*. Workshop presented at the New England Reading Association 52nd Annual Conference, Portland, ME.
- Olson, J. (1992). *Envisioning writing: Toward an integration of drawing and writing*. Portsmouth, NH: Heinemann.
- Preble, S., & Preble, D. (1996). *Art forms*. New York: Harper Collins.
- Pacific Resources for Education and Learning. (2000a, July). *Evaluation report of the Image to Word – Word to Image, 21st Century Community Learning Program Grant*. Honolulu, HI: Author.
- Pacific Resources for Education and Learning. (2000b, July). *Regional Educational Laboratory at PREL proposal 2000*. Honolulu, HI: Author.
- Qualley, C. A. (1986). *Quality art education in the classroom*. Reston, VA: National Art Education Association.
- Rubalcava, M. (1991). *Transformative teaching in multicultural education*. Unpublished manuscript, University of California Department of Anthropology Special Project.
- Stern, D. (1985). *The interpersonal world of the infant: A view from psychoanalysis and developmental psychology*. New York: Basic Books.
- Van Groenou, M. (1995, Summer). “Tell me a story”: Using children's oral culture in a preschool setting. *Montessori LIFE*, 7.
- Wright, A. (1995). *Storytelling with children*. Oxford, U.K.: Oxford University Press.
- Zabel, M. K. (1991, Fall). Storytelling, myths, and folk tales: Strategies for multicultural inclusion. *Preventing School Failure*, 36, 32–34.

RESOURCES

Art of the Pacific Islands CD-ROM (\$39.00)
Pacific Resources for Education and Learning
900 Fort Street Mall, Suite 1300
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Phone: (808) 441-1300 (ask for Publications)
Email: orderinfo@prel.org

By Word of Mouth: A Storytelling Guide for the Classroom (free)
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900 Fort Street Mall, Suite 1300
Honolulu, HI 96813
Phone: (808) 441-1300 (ask for Publications)
Email: orderinfo@prel.org

Island Alphabet Books (\$4.95)
Bess Press, Inc.
3565 Harding Avenue
Honolulu, HI 96816
Phone: (808) 734-7159
Toll Free: 1-800-910-2377
Fax: (808) 732-3627
Email: info@besspress.com
Website: www.besspress.com

Island Worlds: Art and Culture in the Pacific (\$92.95)
CRIZMAC Art & Cultural Education Materials, Inc.
P.O. Box 65928
Tucson, AZ 85728
Phone: (520) 323-8555
Toll Free: 1-800-913-8555
Fax: (520) 323-6194
Email: crizmacinc@aol.com
Website: www.crizmac.com

Polaroid Education Program publications (various)
Polaroid Education Program
201 Broadway – 4
Cambridge, MA 02139
Toll Free: 1-800-343-5000
Email: breens@polaroid.com

PROFESSIONAL DEVELOPMENT

Image to Word – Word to Image (PCAHE) workshops

Lori Phillips
PCAHE Director
900 Fort Street Mall, Suite 1300
Honolulu, HI 96813
Phone: (808) 441-1340
Fax: (808) 441-1385
Email: phillipl@prel.org

Jodrikdrik ñan Jodrikdrik ilo Ejmour

Daniel A. Kelin, II
555 University Avenue #402
Honolulu, HI 96826
Phone: (808) 941-4829
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Pacific Voices project

Martha Guinan
Center on Disability Studies
University of Hawai'i at Manoa
1776 University Avenue, UA 4-6
Honolulu, HI 96822
Email: guinan@hawaii.edu

Picturing Science project

Kavita Rao
Pacific Resources for Education and Learning
900 Fort Street Mall, Suite 1300
Honolulu, HI 96813
Phone: (808) 441-1358
Fax: (808) 441-1385
Website: www.prel.org/picturingscience
Email: raok@prel.org

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