When schools fail to educate minority children effectively, it is logical to examine the interaction between the children's culture and the culture of the school. The task of KEEP's anthropological research has been to study modern Hawaiian culture, both in the home and as it is manifested in the school setting, and to search for ways in which the results of such study can inform educational practice. The ultimate goal of the work has been to contribute to the development of school programs that are compatible with Hawaiian child culture in ways that produce educational success. We will discuss here the ethnographic investigation of the natal culture of Hawaiian children and a major line of home-school interface research generated from that ethnographic work. Over a number of years, this line of work has examined teaching and learning as they appear in Hawaiian homes, in controlled-setting interactions between Hawaiian parents and children, and in peer teaching/learning interactions in the classroom. We will also outline work currently underway and prospects for the future.

Home Culture Ethnography
The use of ethnography as a tool in the investigation of Hawaiian educational problems began in 1965 with the inception of the Hawaiian Community Research Project, HCRP, sponsored by the Bernice Pauahi Bishop Museum. The project was originally directed by Alan Howard, professor of anthropology at the University of Hawaii at Manoa and one of several anthropologists who participated in the study. Ronald Gallimore, a psychologist, later joined the Project as co-principal investigator, thus beginning cross-disciplinary work. The HCRP was an anthropological and psychological study of a Hawaiian community located in a semi-rural area of Oahu. It was the first systematic investigation of the culture of modern Hawaiian people. As the project developed, it also began to study the interaction between Hawaiian culture and the educational system—that educational system in which the children of the community fared so poorly. Among the results of the five years of work were an ethnology of Hawaiian culture, studies of the mutual problems of Hawaiians and the schools, and a number of hypotheses concerning specific sources of conflict between the two cultures of the Hawaiian child and of the school which might account for the failure of the schools to educate Hawaiian students.

In order to understand the reasons for the frequent mismatches between Hawaiian children and the school, it is necessary first to understand something of the background from which the children come—that of a modern Hawaiian subculture. Especially relevant are patterns of family life and socialization practices and the consequent behavior patterns of Hawaiian five- and six-year-olds. We will outline these patterns as they were discovered in the course of the HCRP and as they are described in Gallimore, Boggs and Jordan.

The Hawaiian socialization system is organized to teach young people to be contributing members of a family. Childhood is not a training ground for leaving the family, but a time for learning to become increasingly responsible and competent within the family system. The basic values of the family are interdependence (rather than independence), responsibility for others, sharing of work and resources, cooperation, and obedience and respect toward parents. Responsibilities assumed by
young people, starting at an early age, involve critical family functions, to which they typically contribute as members of a work force of siblings. Child care is shared by parents and older children, and after the age of two or three, children are expected to operate as part of the sibling group and to turn to siblings for help with routine kinds of problems and needs. Children learn to approach their elders with respect, make requests indirectly, and to accept decisions without arguing. Direct confrontation or negotiation with adult authorities is rare. If one compares this socialization system with the general expectations of the culture of the school, some potential areas of conflict can be seen. Gallimore, Boggs and Jordan offered a list of these, which is paraphrased below:

Hawaiian children measure success in terms of contributions to the kin or peer group. Task performance and completion are valued as contributions to the needs of the group. In the classroom, individual accomplishment is valued above cooperative or helping efforts; competition is valued over cooperation, in practice, if not in theory.

Because of the “shared function” organization of the family, involving role flexibility and joint responsibility for family tasks and obligations, young people are accustomed to flexible rearrangement of work schedules and responsibilities, worked out within the sibling group. In school, contingencies are fixed on the individual and work can not normally be shared or assignments shifted to meet personal interests and needs.

Sharing functions allows youngsters a measure of independence and a good bit of felt autonomy and competence, even for children of six or seven. Adult supervision is indirect and mediated through older siblings. In school, adult supervision is characteristically direct and intrusive and even adolescents are treated as much less competent than is the case in the home. This contrast is especially sharp for boys, who by the time they are in the first grade have begun to separate themselves from women and to resist the authority of women under some conditions.

When problems occur, Hawaiian children tend to turn to siblings and peers for help and to disengage from displeased adults. Teachers, when difficulties occur, typically want to confront the issues directly and negotiate with students. Hawaiian students have been taught that confrontation and negotiation are not acceptable behaviors to display toward elders, and they try to avoid confrontation.

In the family, the child depends on and learns from siblings. At relatively early ages, peer affiliation becomes important. Correspondingly, children are less likely to attend automatically to and orient towards adults. In the classroom, opportunities to attend to peers are available, but must often be ignored in favor of orienting to the teacher. Teachers may regard peer interaction as disruptive or as cheating.

When KEEP began in 1971, the HCRP work provided it with the original base of cultural knowledge and hypotheses. Since KEEP’s inception, this foundational database has been supplemented by less extensive, but more focused, home-culture ethnographic work. The later work, including interviews with parents of both urban and rural children, and observational study of the activities of KEEP children after school, has revealed a wide variety of childrearing beliefs and practices and of family characteristics, which, however, do seem to share the general patterns that were found in the earlier work: Interdependence, shared functions, benevolent authoritarianism, sibling caretaking, affiliation motivation, and peer orientation. All of these appear to be important for KEEP families, as they were with the families in the HCRP community.

To give one example, sibling caretaking, with its consequent peer orientation, seems especially relevant to schooling. An observational study of sibling caretaking was carried out on a sample of urban KEEP children during their after-school hours. The study found that in that 70 percent of the total observations in which any caretaking was noted, children were involved in child care 40 percent of the time; mothers were present and judged the caretaker only 43 percent of the time. In an analysis of mother’s reports concerning sibcare, 73 percent of the mothers interviewed reported that their five-to eight-year-old boys and girls took care of younger sibs “sometimes” or more often. Sibcare has thus been revealed to be important in KEEP families, as it was in the earlier rural community study.

Further analyses of these data and of the rural and urban interview data are ongoing. This work represents a continuing effort to provide accurate home culture information for the different populations and (eventually) different generations of children that KEEP is charged with serving.

From Community to Classroom: Hawaiian Teaching/Learning Modes

One of the ideas to emerge from the natal culture ethnographic work concerned patterns of teaching and learning, or “teaching/learning modes.” In different cultures, skill-, rule-, and task-oriented information is taught and learned within different social contexts and by means of different interactions. The idea that culturally-distinct peoples may learn and teach in cognitively and behaviorally different ways is not a new one. Mead,10,11 Rohner,12 Cole, Glick and Sharp,13 Cazden and John,14 Phillips,15 John;16 Scribner and Cole,17 and Lee,18 among others, have suggested the general hypothesis and/or described particular cases. The literature will not be reviewed here, but its existence encouraged the attempt to systematically study Hawaiian learning and teaching modes.

Ethnography made it clear that Hawaiians were very competent teachers and learners when operating within their own culture.
Ethnographic observation also suggested that much learning took place in a process which involved modeling, observation, imitation, and mutual participation by teacher and learner in the skill to be learned, but which included relatively little verbal direction (detached from modeling or participation) or explicit rule statement.\textsuperscript{19, 20} For example, when the work histories of men in the HCRP community were examined,\textsuperscript{21} it was discovered that many of the men had acquired their first work skills by going to the job with an older, employed relative or friend and for a time, simply observing the job being carried out. Gradually the younger man would begin to participate in the work, doing increasingly larger or more complex pieces of the task. Finally the younger man would become skillful enough to try for a similar job of his own. This was a much more common course than any formal schooling or training program.

Another example: Field workers noted that children seemed to receive very little in the way of explicit direction about skills which are necessary for full participation in a Hawaiian household. Instead, they spent a great deal of time observing older siblings exhibiting such skills. Gradually, the younger children would increase their own participation in the household activities, until by the age of 10 or 11 most (especially girls) were very competent in cooking, housekeeping, and child care. Concomitantly, mothers often replied to queries about how their toddlers learned basic self-care skills (e.g., using the toilet) by saying that they didn't know for sure but thought it must have been by watching older brothers or sisters.

Observations of this kind led to the hypothesis that perhaps Hawaiian people in general, and Hawaiian children in particular, were accustomed to distinctive modes of learning and teaching, and that these differed in many respects from those generally used in schools. These, the literature and our own observation suggested, relied heavily on verbal direction (often out of context), and learning (evidenced by being able to repeat) explicitly-stated rules.\textsuperscript{20, 22}

One investigation of the teaching/learning modes hypothesis was a contrived-setting study of the interactions between KEEP kindergarten children and their mothers.\textsuperscript{23} Mother-child pairs were asked to work on four different tasks or “games” and their interactions were videotaped. The variables of interest were the amount of use by the mothers of non-participatory verbal direction of their child’s activity, as opposed to demonstration and/or participation (with or without accompanying verbalization). The results of the study indicated that KEEP mothers used the school-teacher-like verbal directing techniques in interacting with their children to a significantly lesser extent than did a comparison group of mid-Western, middle-class mothers of a school-successful population of children, although the overall interaction rate was the same for both groups. Among the KEEP mothers, those who used relatively more of the “directing” techniques had children who, by the end of the first grade, were doing better in school than children whose mothers used these strategies less frequently. In other words, in comparisons both across cultures and within the Hawaiian group, the more the mother’s teaching mode resembled methods often used by teachers, the better the child adapted to school requirements. One might suppose that the more successful children found the behaviors of school teachers more familiar and more congruent with their own learning modes.

These results supported the hypothesis, but they did not address what actually happens in the school environment. To examine one aspect of that environment, an investigation was undertaken of peer teaching/learning interactions in the classroom.\textsuperscript{24, 25} It was decided to focus on peer teaching/learning interactions for three reasons. First, siblings and other near-peers are often important as sources of help and information in the nonschool environment. Second, and as a consequence of the first, Hawaiian children tend to orient very strongly toward their peers in the school context. Third, in the school environment the teacher exerts much more control than does the student over the form of teacher-student interactions. Therefore, peer interactions should more accurately reflect the children’s home-learned teaching/learning modes than would teacher-student interactions.

Data were collected through a combination of direct observation and videotaping.\textsuperscript{24, 25, 26} Results indicate a high frequency of peer interactions in the classroom, a significant number of which were teaching/learning interactions. An intensive study of the interactions of a sample of seven Hawaiian children in a KEEP kindergarten class found that these children were interacting with one or more peers about 50 percent of the time observed.\textsuperscript{26} About 10 percent of the peer interactions were teaching-learning interactions. This means that for roughly every 20 minutes of observation of one child, one peer teaching/learning interaction occurred, almost all having academic content. However, the rate of teaching/learning interaction was considerably higher when data were collected in group settings where the children had tasks to do. In these work-tables and learning center settings, roughly one individual child involvement in a teaching/learning interaction occurred for each three minutes of observation of one kindergarten child; and about half of these had academic content. In the first grade, one such interaction was found for every 2½ minutes of observation, with about two-third being related to academic matters.
This data suggest that if one focuses on school contexts which are characterized by requirements to learn new behaviors and material, and where children have access to each other, Hawaiian children may frequently employ one of the strategies which they are accustomed to using outside of school: They turn to other children for aid.

The classroom peer teaching/learning interactions exhibited characteristic patterns, which can be seen to share two dominant and related features. The first is contextuality; that is, teaching/learning interactions usually took place as part of ongoing attempts to perform an activity to which the content of the teaching/learning interaction was related. While a great deal of verbalization might be part of a teaching/learning interaction, and the enterprise itself might be a verbal one, such as an insult rhyme, the children seldom simply talked about how to do something, without at least one of them being actually involved in doing it. This links up with the second major characteristic of such interactions, which is mutual participation. In most peer teaching/learning interactions, the teacher as well as the learner became involved in the enterprise at hand.

These pervasive features of mutual participation and contextuality or enterprise engagement were exhibited in the two major teaching strategies favored by the children: modeling and intervention. Modeling (which has verbal, nonverbal, and mixed varieties) occurs when one child performs a behavior which is, in that situation, appropriate for a second child (but not necessarily for the first), thus showing the second child what to do. Intervention occurs when a child actually performs the correct behavior for another child, or physically causes the other child to do it. Both of these are contextual, mutual-participation techniques. In the example below, a combination of strategies was used:

A substitute first-grade teacher was trying to help John figure out the math assignment, which was written on the chalkboard. She had him go to the board and point to the various words and numbers as she said them. He was obviously making an effort, but he was getting almost everything wrong. After he'd been up there for perhaps a minute and a half, one of the girls, Carol, came by. At the next direction from the substitute teacher, Carol pointed to the appropriate word, and John imitated her. The teacher gave another direction and John again hesitated. At this point, Carol took John's hand and pushed it over so that it pointed to the right word. She also pointed to the right word herself. Then John, on his own, pointed to the correct word, and Carol, seemingly satisfied, left the scene. (Jordan, Observation notes: Cohort IV)

Techniques not much used by the children were verbal direction isolated from intervention or modeling, and decontextualized statements of rules or principles. This is not to say that the children did not learn principles from each other; but this appeared to take place through a process of induction from repeated examples, rather than by direct teaching of rule statements. When rule statements were made, it was usually when the rule had been violated or was threatened with immediate violation. Then a rule might be stated as part of the attempt to correct the situation.

In sum, evidence from ethnographic community study suggests that the modes of information transmittal used by Hawaiians may differ from customary school modes, with the former emphasizing in-context observation and graduated participation; the latter, decontextualized verbal direction. A contrived setting comparative study of maternal use of the verbal directional mode indicates that Hawaiians use this mode significantly less frequently than mothers of a school-successful Mainland comparison population. Within the Hawaiian group, higher maternal use of the verbal directional mode is correlated with greater school success by offspring.

Ethnographic observation in home settings also shows that the social organization of learning contexts most often involves groups of children working cooperatively under only indirect adult supervision. Help and instruction comes from multiple sources, with older siblings being especially important. Systematic observation of peer learning/teaching interactions in classrooms reveals a high frequency of peer teaching/learning in certain settings, and an emphasis on learning and teaching strategies, such as modeling and intervention, which are not emphasized by teachers in traditional classrooms.

Work in Progress

The work described thus far represents the main thread of KEEP educational anthropology research over the last five years and the debt it owes to earlier community ethnography. A number of new research lines involving both home and classroom work are now ongoing.

One current project is an attempt to identify socioeconomic and cultural correlates of "readiness" for reading. Most of the children KEEP has dealt with, both Hawaiian and non-Hawaiian, have arrived at the first grade able to recognize their own names in print, familiar with the idea of writing, and in general prepared to learn how to read. A sizeable minority, however, did not have this familiarity with literacy and its concepts. To learn whether there were any gross cultural and socioeconomic differences between the two sets of children which might be related to the difference in the degree to which they were familiar with print, data were examined from the home interviews mentioned
earlier, which had been carried out with mothers of children in both groups.

Analysis of relevant segments of the interview data is currently underway, with interesting preliminary results: The parents of children who had not been familiar with basic concepts of literacy (hereafter, "target children") were not as accessible to communication as the parents of children who were familiar with these concepts (hereafter, "control children"). It was harder to get in touch with target parents, harder to arrange interviews with them, and harder to make a face-to-face connection with them once dates had been arranged.

The above finding is associated with and may be related to the relatively low incomes of the target families. In addition, target families and households are larger, and target families tended to be less geographically mobile than control families and geographical mobility was associated with young, economically-successful families, that is to say, with ones having the means and inclination to move into homes of their own. Precisely how these variables relate to the acquisition of literacy concepts is not yet clear. However, it is an intriguing finding that relatively loose connection to the mainstream social structure—whether construed as the economy, the telephone book, the school directory, or the appointment—is strongly associated with relatively little connection to the concepts of literacy.

A second project now underway is an observational and sociometric study of the peer leadership and power structure of a second-grade classroom.28 The study has revealed two male playgroups within the classroom which were in competition with one another. A further distinction was made by the children between the girl's side and the boy's side. Some boys of lower status in the classroom were perceived to be not on the boy's side, but rather on the girl's side. Each of the boys' groups had a leader, but the two styles of leadership were very different. One's leadership rested principally on his size and strength and his willingness to defend any member of his group against any other boy in the class. The basis of the other boy's leadership, however, was managerial and interpersonal skills. He had the ability to lead without seeming to, and by means of joking or light ridicule to defuse the sorts of explosive situations that continually develop when boys must be prompt to perceive and respond to challenges in order to preserve their status. An illustration of the subtlety of his leadership was afforded by a conversation with one of his major followers at the beginning of the class' third grade school year:

This boy mentioned in his conversation with another boy that he was going to be leader of the group that year. "Simon's not leader this year?" I asked. "No," he said, "me. Last year was Simon, first grade was Joe, this year is me." "What do you guys do, trade the job every year?" "Yes." "Who decided that it was going to be you this year?" I asked. "Simon," he said.

Where the boys had a system of equal but opposed groups, the girls seemed to have a caste system in effect. Six or seven higher status girls represented an elite in-group. The other girls remained more or less at the periphery of their activities, particularly on the playground. The relationships of the upper-status girls centered upon one girl who was recognized as a leader, not only by the girls, but also by the boys of both playgroups. Though highly competitive herself, she often exercised a restraining influence upon the competitiveness of the boys. She was also capable of an extraordinary degree of nurturance in her relationships with her classmates:

The facilities at Ka Nai’i Pono are airconditioned, sometimes uncomfortably so. Children, in fact, would often bring in a coat or a sweater to wear when it got too cold in their rooms. One coat seemed to have been forgotten, however, and for about a week the second-grade teacher would remind the class that the owner ought to take the coat home. Finally she asked who the coat belonged to and was told that it was April. April, reminded directly, and having apparently forgotten again, the teacher was about to call the child's attention to the coat yet another time when one of the other children in the class told her that April had brought the coat to the school for the use of children who became cold but had nothing of their own to wear.

An outgrowth of the work on classroom social organization is a videographic study of recess play now being undertaken. We hope this study will help to illustrate how leadership roles and groups develop among young Hawaiian school children.

Currently in the planning stage is a comparative study of cooperation and competition behaviors by KEEP children. The data collected for this study will be comparable with data already collected for other areas of Polynesia and the Pacific,29,30 as well as with other U.S. populations. Also, it will be possible to look at these data in the light of the social and play relations of the children in the intensively studied class described above.

Another developing project involves the use of classroom space.31 It will study, by means of ethnographic observation and close analysis of videotapes, the use of space by Hawaiian children in first, second and third grade. It will examine the overall use of classroom space, the kinds of distances that the children preserve between themselves and other children and between themselves and adults, and the way spatial relations vary with situation.

Conclusion

As we stated at the beginning of this paper, the ultimate goal of KEEP's anthropological research has
been to contribute to the development of a school program that works for Hawaiian children. The study of the social organization of the contexts and interactions of teaching and learning at home and with peers, that has been the focus of much of the cultural research thus far, has proved a rich vein for educational application. Three examples of classroom adaptations were discussed earlier in this volume. Our intent is that the work currently underway or planned will also have classroom applications. We can not accurately predict, at this early point, exactly what the nature of successful applications may be. This is a matter for classroom experimentation. However, we can suggest some possibilities: Knowledge of the correlates of reading-readiness can help to predict for teachers which of their charges are likely to need teaching specifically geared to introducing literacy concepts. Also, developing some understanding of the kind of conceptual framework that such children bring with them to school, may be useful in determining how to go about teaching literacy ideas. Knowledge of the peer leadership and power hierarchy in a classroom may help teachers in understanding and solving “trouble cases,” such as fights. It may also be possible to take advantage of the leadership patterns to aid in classroom management. The work on cooperation and competition could contribute to the development of classroom settings better geared to the children’s natural inclinations. For example, if, as we suspect, the data suggest that KEEP children are inclined to cooperate rather than compete, classroom tasks that call for cooperative efforts should be maximized. Lastly, since the use of space is learned early and is very difficult to change, understanding Hawaiian children’s preferences can help to determine the best kinds of classroom space arrangements (e.g., where to place classroom furniture) and to adapt classroom practice with regard to how children are asked to arrange themselves in relationship to others (sit close together; not touch each other, etc.).

The prospects for the cultural research now in progress are exciting ones for KEEP’s anthropologists. We hope and believe that the work also holds promise of bearing fruit for Hawaiian children in the future, as it has in the past.

Footnotes


Cathie Jordan is Research Anthropologist with KEEP and the Kamehameha Educational Research Institute. She was formerly a Research Fellow with the Bernice Pauahi Bishop Museum and has, since 1985, worked on issues related to Hawaiian education.

John D’Amato is Doctoral Candidate, University of Hawaii at Manoa, and Research Intern in Anthropology at KEEP. He received his BA from Michigan State University and MA from the University of Hawaii at Manoa. His main theoretical interest is the process of resolving interactional problems.

Ann K. Joesting is Research Assistant in Anthropology at KEEP and will soon receive her MA in Anthropology from the University of Hawaii at Manoa.