For the Yupik Eskimos of southwestern Alaska, a primary goal of bilingual-bicultural education is to forge a society that represents the "best of two worlds." While this is an expressed ideal, educational programs have focused on first and second language learning and have not dealt with the relationship between Yupik and non-Yupik cultures or with the concept of culture change. This thesis describes a secondary-level bilingual-bicultural program designed by an anthropologist to address such issues. Background information is provided on Yupik culture and language and on the history of bilingual education in the region. The results of a survey of parent, teacher, student, and administrator opinions of bilingual education are summarized. The collaboration of the ethnographer with Native teachers in the development of instructional materials and methods is discussed. The paper discusses in detail the program projects that guide students to examine personal values in light of Yupik tradition and current social, economic, and political conditions. These projects include: (1) student interviews with community members; (2) radio broadcasts in Yupik by students; (3) two projects demonstrating the effects of technological change on culture; (4) a board game focusing on historical and contemporary aspects of subsistence; (5) a "card" game teaching Yupik kinship terminology and roles; and (6) development and publication of a Yupik language book on traditional religion and ceremonies. This thesis contains 96 references. Appendices contain notes on Yupik language terminology, spelling, and pronunciation. (SV)
MAKING THE BEST OF TWO WORLDS: AN ANTHROPOLOGICAL APPROACH TO THE DEVELOPMENT OF BILINGUAL EDUCATION MATERIALS IN SOUTHWESTERN ALASKA

A Thesis
Presented to the Faculty of the Graduate School of Cornell University in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

by
Phyllis Morrow
August, 1987
MAKING THE BEST OF TWO WORLDS: AN ANTHROPOLOGICAL APPROACH TO THE DEVELOPMENT OF BILINGUAL EDUCATION MATERIALS IN SOUTHWESTERN ALASKA

Phyllis Morrow, Ph.D.
Cornell University, 1987

For the Yupik Eskimos of Southwestern Alaska, a primary goal of bilingual-bicultural education is to forge a society which represents the "best of two worlds." While this is an expressed ideal, educational programs have focused primarily on first and second language learning, and have not dealt with the relationship between Yupik and non-Yupik cultures or the concept of culture change.

This thesis describes the design of a bilingual-bicultural program which is framed around such issues. Research is based on the author's experience as a bilingual materials developer and teacher-trainer in Bethel, Alaska. The thesis presents background information on the Yupik culture and the history and present setting of bilingual education in the region, and details the design and implementation of a secondary-level bilingual program. The program's projects guide students to examine personal values in the light of Yupik tradition and current social, economic, and political conditions. It is suggested that when students recognize continuities in the ideological bases for action, they draw on these as sources of cultural stability; in a position to make
conscious choices, individuals have more power to regulate change. The thesis suggests the applicability of the approach in other settings.

This description is framed in a discussion of the interaction of "two worlds" with each other, based on theories of translation and interethnic communication. The role of the anthropologist as participant in this dialogue is also examined.
I have vivid childhood memories of a favorite series of books about people around the world. I must have been very small when I first became fascinated with them, for their texture -- a tactile, coated cloth -- is as strong in my recollections as their content. Two, in particular, I studied over and over again. One showed pictures of classical Egypt, and the other, "Eskimos of the far North". I alternately imagined myself warmed by fur parkas and by the North African sun, and I wondered about the experience of life in such contrasting places. When my father returned from a business trip to Alaska in 1956, I was six years old. He brought me a seal-fur belt, adding more layers to my associations with the North, for I loved the distinctive smell of the seal leather, as well as its color and feel. Although I never thought consciously of going to Alaska myself, the place certainly had pleasant associations, even then.

Looking back, it is no surprise that I chose to major in anthropology when I entered Radcliffe College in 1968. By then, I had a broader interest in human cultures, and originally pursued Chinese studies. Although I enjoyed learning to speak different languages, I was overwhelmed by the study of Chinese characters, and gave up after two and a half years of language courses. By then, I had gotten a
brief initiation into "fieldwork," that anthropological rite of passage, with three months among the Overseas Chinese in Jamaica. The experience taught me how difficult it is to write about people who have given whole-heartedly of their hospitality to a stranger, and how complicated cultures are when met outside of textbooks.

In 1973, I entered Cornell University as a graduate student in anthropology, still vaguely committed to Asian studies. When I found myself researching a paper on the cultural interpretation of an Alaskan Inuit artifact, an interesting find brought to my attention by a fellow graduate student, it never occurred me that I might be en route to a career in the North. The idea of going to Alaska dawned on me after hours in McGraw Library, when I had gotten too involved in my reading to stop.

The following summer, I traveled around Alaska, visiting archaeological sites, for these were the most visible places to meet working anthropologists at the time. Still, what interested me more was to meet people who were healthy and vertical, rather than already buried. I was most drawn to the Kuskokwim region, for I had heard that this area was culturally very much alive. That summer, I spent two weeks in a Kuskokwim river village. In discussions with teachers and schoolchildren, I was struck with the complexity of issues surrounding education there, and decided that I would
like to return to the area to work. By 1976, I was married and had convinced my husband that we should go to Alaska together. We began studying the Yupik language with the aid of the as-yet-unpublished Yupik Eskimo Grammar and a Yupik-speaking tutor.

In 1976-7, I received a field research grant from the National Institute of Mental Health, and spent one year in a Yupik village. There, I rediscovered my early love for the smell of seal, and added a deep respect for a group of people seeking a healthy integration of tradition and change. While improving our language skills and learning more about Yupik culture, we taught courses part-time for the local community college. Commitment to and interest in Yupik language issues grew during this time, and in 1979 I accepted a job as coordinator of the Yupik Language Center at the Kuskokwim Community College. This position involved a series of activities aimed at increasing public awareness of and knowledge about the Yupik language and culture. The center staff wrote and published language textbooks, taught college courses and workshops for public agencies, and acted as translators and interpreters in a variety of situations. We also helped to train teachers for the Lower Kuskokwim School District.

From 1982-6, my husband, Chase Hensel, and I shared a job designing and implementing a secondary level program for the
Lower Kuskokwim School District's Bilingual/Bicultural Department. This thesis details how I used my anthropological background in the design of that program, and places the program in the broader context of education in a situation of culture change.
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This thesis grew out of the author's work with the Lower Kuskokwim School District of Bethel, Alaska. Thanks are due to all of the staff and administrators at the Bilingual-Bicultural Department between 1981 and 1986 who supported and assisted with the development of this program. Special and loving thanks go to my husband and co-worker, Chase Hensel, who shared the task of creating and refining the High School Language and Culture Program. Both on and off duty, he offered insights, participated in midnight inspirations, tolerated frustrations, and remained patient. Elsie Mather's comments, advice, and wisdom have also been a frequent source of inspiration. The dedication and enthusiasm of L.K.S.D.'s bilingual teachers and students have been constantly in mind throughout both the development of the program and the writing of this thesis. Without the high school review committee, in particular, the program would not have been possible. Elsie Jimmy, Paul J. Paul, Andrew Paukan, Sr., Michael Smith, Agnes Ashepak, Moses Peter, Henry Lupie, and Lincoln Enoch have put many hours of hard work into the program and its development.

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Although all of these people have contributed to this effort in different ways, any errors of fact or interpretation are my own.
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One cannot visit rural Alaska without becoming conscious, in any number of ways, of peoples' preoccupation with "two world" issues. There is no context in which this preoccupation is not obvious; if nothing else, the use of different languages -- including both Alaskan Native languages and varieties of English -- are a constant reminder that relationships between people of different cultural backgrounds tend to occur "in translation."

I first arrived in Alaska with the intention of doing fieldwork in 1974. A summer visit to the Yukon-Kuskokwim region quickly convinced me that culture and communication would be at the base of whatever I chose to research, and my prior interest in languages and other symbolic systems certainly led me naturally to this conclusion. Originally, I looked for a way to understand children's perceptions of their world, a world clearly conditioned both by the expectations of their Yupik relatives, and those of their non-Yupik teachers, who represented other American traditions. I knew that girls liked to play a traditional game, storyknifing, in which they told stories and illustrated them in the mud using stylized symbols. I hypothesized that a comparison of the form and content of these spontaneous stories, with the stories the girls wrote
and told in school, would reveal something about the childrens' differing relationships in these two contexts. I also told myself that the results would be useful, because they would potentially increase teachers' understanding of their students. In the school that I visited, there were no subjects taught in the childrens' first language, and curriculum materials in no way reflected the fact that this school was in an Eskimo village, far from the homes of the teachers and textbook writers. What were the educational needs of the children, and how could they be met under such conditions?

Research turned out to be much more uncomfortable than I had hoped. I did not know how to interpret the combination of gracious hospitality from people in the villages, especially as I learned to speak Yupik, with the hostility toward researchers of all kinds expressed in official contexts. My anxiousness to go through proper channels led me to bring my proposal before various Native organizations for review and approval, and there I was given the same message -- "It's nothing personal. You're nice and well-intentioned. You can do this research if you want to, but please go to some other village, not mine!"

At this point, I slowly began to realize some fundamental facts about the situation. First, I knew very little about the structure of relationships between Native Yupik people and inquisitive researchers, and second, it was presumptuous
to decide what would be "useful" without a better understanding of this time and place.

These conclusions forced me to change my direction. I decided to stay in a village for a year, learn what I could about the culture and language, and find out whether I really could make myself useful, given whatever skills I had. Based out of the village, I took a part-time job teaching courses for the regional community college, and also regularly travelled to several other villages to tutor Yupik students who were studying to be teachers under an extension program of the University of Alaska. I began to learn about the students' professional aspirations, and the difficulties they had reconciling the demands of village life with the demands of the university. My training in anthropology became increasingly useful, as I worked to translate academic concepts into understandable terms, with familiar examples. The students and I learned about each other's cultural assumptions. At the same time, I studied Yupik grammar and vocabulary and began to increase my understanding of the language itself.

At the end of the year, I returned to Cornell University with hopes of finishing my degree and moving back to Alaska, which had by then become home. Still daunted by my lack of knowledge and my fears of offending the Yupik people who had treated me so kindly, I turned towards a consideration of the historical relationship between the two
worlds in Southwestern Alaska. To this end, I researched archival materials held by the Catholic and Moravian churches who had missionized the Delta in the nineteenth century.

I became increasingly convinced that, from the beginning, one could analyze "culture contact" in the metaphor of mutual translation. Members of two cultures, seeking to understand each other, go through stages parallel to those involved in translating a foreign-language text. First, there is an initial approach of trust, during which the "translator" takes the risk of assuming the possibility of communication. Both missionaries, who assumed the translatability of doctrine, and Native Alaskans, who initially allowed the missionaries to participate in their ceremonies and customs, took such a stance of guarded trust. Next, translation is inherently aggressive. The idea of extracting meaning to "bring it home" is a way of appropriating another entity. All cross-cultural communication shares this underlying sense of intrusion. Third, the translator incorporates meaning into his own linguistic categories. Like any cross-cultural interchange, this movement risks transforming the form and content of the message: "the mere act of paraphrasing is evaluative" in that rewording inevitably adds to or subtracts from the original. Transfer of meaning is always approximate, at best. Finally, a complete translation
ideally restores the balance between texts, for the process involves both loss (a "residue" of untranslated meaning) and gain (an "enhancement" of the original). In the broader terms of cross-cultural understanding, perhaps restitution would consist of an awareness that, in the interchange of information, some meaning remains untransferred, and a respect for the other that enlarges one's sense of what is human. In summarizing this movement, George Steiner says,

> Good translation ... can be defined as that in which the dialectic of impenetrability and ingress, of intractable alienness and felt 'at homeness' remains unresolved, but expressive. Out of the tension of resistance and affinity, a tension directly proportional to the proximity of the two languages and historical communities, grows the elucidative strangeness of the great translation. The strangeness is elucidative because we come to recognize it, to 'know it again,' as our own. (Steiner, 1975: 393)

A thesis elaborating historical Yupik/non-Yupik relations in terms of translation, and the "space" that necessarily exists between languages and cultures, was never to be finished. But I had now arrived at the doorstep of several issues which became themes in my work: the relationship of language and meaning to culture, the idea of translation between cultures and languages, the politics of ethnicity, and the brokering of cross-cultural relationships in education. It was a short step to bilingual-bicultural education.

My arrival in Alaska roughly coincided with the
beginnings of bilingual education in the Yukon-Kuskokwim Delta, accelerated research on the Yupik language, and the passage of the Alaska Native Claims Settlement Act (ANCSA). Bilingual education became a focus for the expression of cultural identity, in an atmosphere where that identity increasingly required public expression. Efforts to settle land claims required people to declare their "Nativeness" for a new and pressing purpose. Communication barriers barred some from taking advantage of the possibility of claiming Native Allotments, and confused the enrollment efforts of others. It was difficult enough to grasp the implications of the Settlement Act if one understood the language of its provisions. More often, people did not. The need for educated, fully bilingual leaders became more critical than ever. At the same time, on a national and international level, ethnicity became a plea for diversity and humanity as opposed to standardization and mechanization. (Fishman, 1981: 524)

My own concerns with language use and ethnic identity formed in this environment. As I worked to preserve the Yupik language through projects of the Yupik Eskimo Language Center from 1979-81, my efforts became increasingly political. While the majority of educators have concentrated on improving skills in English and content areas to "mainstream" Native students, in the name of social equality, a small number of us have concentrated on
promoting an awareness of the importance of the Native language and culture, and the interrelationships between cultures, in the name of informed diversity.

In 1981, I was pleased to begin work with bilingual-bicultural department of the school district, where I had the opportunity to help create a new program in which some of these concerns might find expression. It is now thirteen years since I first set foot in Alaska, and I have lived and worked there for ten of those years. At last I feel more comfortable about writing about my experiences and ideas, for I have much less doubt of their usefulness to others. Perhaps, like a good translator, I have begun to "know what I do not know" (Steiner, 1975: 392), while at the same time knowing enough that I can begin to at least sense a total context.

In the best anthropological tradition, it has thus taken many years of immersion in an unfamiliar cultural setting to find an intersection between my interests and those of the people with whom I have lived. Unlike the first generation of anthropologists, today's researchers often go the "field" for a year, pursue a research project formulated in advance, and return home to analyze their data. This project has benefited from the formulation of its concerns in context, and an investment in the authenticity and outcomes of the work. This sense of responsibility lends a particular strength to this study.
For most anthropologists, responsibility to their sources results in an attempt to disguise the community and the people they study. Unfortunately, such disguises are rarely impenetrable, and may lend the anthropologist a false sense of security. In fact, the need for anonymity itself suggests that anthropological studies are harmful at worst, and useless at best. This study is presumed to be neither, and its authenticity depends on its particular and identifiable circumstances. People who want to be heard need not be disguised; I hope that I have accurately represented their concerns, although I realize that my words can not fully express their ideas.
CHAPTER ONE

INTRODUCTION: TOWARDS A PHILOSOPHY OF EDUCATION BASED ON AN ANTHROPOLOGICAL VIEW OF CULTURE

Bilingual-bicultural educators, in addition to relying on research in the field of education itself, have increasingly turned to linguists and anthropologists for professional advice. Research in these disciplines continually underscores the fact that every educational decision and action reverberates in the larger community, and the patterns of that community, in turn, reverberate in the classroom.

Yet, there are no studies which document a bilingual program that justifies its design in terms of specific cultural and sociolinguistic research. What is lacking is a highly particularized description of how a social scientist, in collaboration with native speakers, might try to tackle the particularly thorny problems of program design, field-testing, revision, implementation, teacher training, school board review, community participation, and all of the other dimensions of work in the field. The present study attempts to document such a program, and in so doing suggests one way that an anthropologist might apply her own and others' research findings in a self-conscious manner to the design of a linguistically and culturally-appropriate program.
Partially because of the interdisciplinary nature of the problem (or the fact that disciplines are themselves arbitrary cultural dividers), this work moves in and out of the anthropological tradition in a number of ways. To begin with, it is addressed to different audiences. Educators, and bilingual educators in particular, will find it relevant to an understanding of culture and language in the schools. Chapters One through Three provide a backdrop for the consideration of these issues in a particular cultural and educational setting; while these chapters include an historical overview, however, they do not attempt to present a detailed and comprehensive history of bilingual education in Alaska. Chapter Four discusses the contradictions inherent in most purportedly "culturally relevant" programs. In Chapters Five through Nine, an alternative approach to bilingual-bicultural education, based on essentially anthropological principles, is presented. These chapters describe the author's collaboration with Native teachers and bilingual education specialists and the high school program which has resulted from that collaboration. The final chapter broadens the applicability of this approach to other multicultural educational contexts.

People who speak minority languages and represent minority cultures may also find this study encouraging in their efforts to make educational systems responsive to
local needs; it suggests that, however complex the surrounding social issues, there are ways to collaborate with professionals and still produce a program that genuinely reflects local control. At the same time, it is a reminder that choosing cultural priorities, and making programs meaningful to students (in both what is taught and how it is taught), is no simple matter. Perhaps the greatest danger lies in assuming mutual understanding and shared expectations. When one's own cultural assumptions are unexplored, and the cultural assumptions of others are equally implicit, negotiations may not result in the agreements that people think they have reached. Furthermore, to understand what sense people make out of what they hear and say takes an extensive knowledge of the immediate and historical context of their speech. Interethnic communication forms a fragile connection, and it requires energy, insight and mutual goodwill to keep it unbroken.

Linguists comprise yet a third potential audience. The study shows that sociolinguistic research forms a practical basis for improving not only interethnic communication but also culturally appropriate educational materials. The thrust of the program is away from language teaching, per se, to language learning in a cultural context. Many of the cultural referents in designing materials also center on linguistic issues: the
transformation of oral narratives into written form in Native languages; questions of the development of literacy skills that can go beyond orthographic instruction to include non-Western principles of rhetorical organization; generational differences in language use; and the possibility of maintaining Native language use in bilingual settings. In a large sense, this entire work is an ethnography of communication: it is a dialogue between anthropology, linguistics, and education; between the author and various Yupik people involved in education; between Yupik teachers and their students; between students and other members of their communities; and between school administrators and the people they serve.

This conception of the work, then, leads back into the field of anthropology. In the pages that follow, I explore interethnic relationships in general, and my own interactions in the educational context, in reference to three interpretive models. All three are ways of thinking about communication. One depends upon a so-called "dialogic" viewpoint. This is a term originally derived from the works of literary critic Mikhail Bakhtin, but it has inspired anthropologists to rethink the ways in which they have conceived of and written about cultures (see, for example, the essays collected in Writing Culture: The Poetics and Politics of Ethnography [Clifford and Marcus, 1986]). Another is a concept of negotiation which Laurence
Rosen (1984) terms "bargaining for reality," and which I apply to certain types of interaction common between members of minority and majority cultures. Finally, I suggest that theories of discourse analysis (such as those of John Gumperz) which describe the ways in which communicative competence depends upon "conversational inference," are helpful in understanding "two world" interrelations.

In general, contemporary anthropologists have begun to change their perspective on the interrelationship of individuals and society. Where traditional anthropology followed various normative paradigms, which conceptualize individuals as responding to fixed rules and social institutions, more interpretive models focus on ways that individuals continually reshape themselves and their society through their own interpretations of experience. These interpretations are manifest in the conversations people have, the stories they tell, and the cultural events (such as rituals and games) in which they participate. Both the individual, and by extension society, are seen as being in process, continually molded in a complex interplay between tradition and personal experience. Change is the norm, and norms are therefore problematic; cultures thus consist of individuals improvising upon common themes.

Normative conceptions of society are said to be monologic, as are standard ethnographies, which are written
from a single authoritative viewpoint. In that they assume uniformity in culture, they presuppose the adequacy of uniform descriptions. In contrast, a dialogic conception of society is multivocal or polyphonic, and must, it is suggested, be described in such a way that other voices besides that of the ethnographer are "audible."

In this way, as notions of the social world become less rigid, so do the traditionally implicit distinctions between anthropologist and studied people. The anthropologist is another actor in, and interpreter of, social events; she must be able to center her own interpretations, as well as those of the people she studies, in as complete a context as possible. While under the best of circumstances this is no easy task, a task always conditioned by the limits of interpretation imposed by the anthropologist herself, it becomes particularly difficult in an applied context. Here, the anthropologist bears a more direct responsibility for her interpretations.

This work reflects the activities of an anthropologist in three different contexts: the immediate context is that of understanding the interaction of cultures in process; the intermediate context is that of applying interpretations of those processes to a practical task, the design of educational materials; and the more removed context is that of interpreting the interpretations, that is, writing this description. The
intermediate context -- in which an educational program came to be -- again moves outside of the usual anthropological tradition, which generally includes only studying and reporting.

The ethnographic context can be described as the interplay between "two worlds," one more or less representing Yupik culture, and the other more or less representing the culture of Outsiders (non-Yupiks from the "lower 48" states). These cultural divisions are "more or less" because their representation changes in the dialogue between members of each, although each may express their perceptions of self and other in relation to a sense of discrete boundary. In other words, the "two world" model, as frequently invoked by members of both cultural groups, sounds relatively fixed, deriving as it does from an originally profound historical and geographical separation. For Yupik people, in particular, there is a sense that a body of tradition, a language, and a genetic heritage set them apart from others. Non-Yupiks tend to claim more diversity in their own heritages and offer a wide range of responses to questions about their varied ethnic identities. Still, for most purposes, they define themselves as distinct from Yupik people (or at least they define Yupik people as distinct from them). In fact, however, the interactions between the two worlds often attack the solidity of this perceptual boundary.
The variability of ethnic origin and identification among non-Yupiks, for example, has the effect of calling Yupik identity into question. As Yupik people increasingly participate in interethnic dialogue, boundaries become harder to define, while at the same time their necessity becomes more critical. It is in reference to such boundary disputes that the distinctions between the "two worlds" are repeatedly questioned. Such divisive questions as who should be enrolled as a Native for the purpose of claiming land, or who should be able to hunt and fish for certain resources, or who is eligible for bilingual programs, have forced Yupik people to redefine their identity. This process can be seen in an examination of the kinds of communications about such issues that have become common.

Any communication involves a presentation of self in relation to other(s). In the course of conversation, differences in these presentations are, in some sense, mediated. The wider American ethic of individualism and charismatic leadership, for example, tends toward contrast with Yupik ethics of individual accountability to the group and reliance on collective wisdom. These differing ethics form a common ground of assumptions which inform dialogue among members of each group. Internally, for example, when Euroamericans negotiate their interests, they may do so with primary recognition of the multiplicity of individual opinions that will compete to influence the outcome of the
negotiation. The process becomes one of directly convincing or persuading others to adopt one's point of view. In a parallel situation, Yupik decision-makers (in particular, elders) more often refer to shared traditional principles, relating a present situation, by inference, to paradigmatic stories that remind everyone of more fixed, shared cultural standards. Similar situations tend to elicit similar appeals, and as context and redundancy are built, individuals develop expectations about the types of communication that are effective in different contexts, thus increasing communication potential.

What this suggests is that individuals tend to become intuitively convinced of the appropriateness and logic of such cultural constructs, as communication strategies. This is not to say that one culture is inherently more "monologic" or "dialogic" than another. Rather, the interplay of structure and flexibility is always highly implicit and context-bound in any particular cultural representation. In some cases, people tend to emphasize improvisation, and in others, the common themes upon which improvisation is based; but the range of variation of speech, movement and gesture is a familiar one. If it were not, there would be no sense of shared identity or communicated meaning. In the context of interethnic communication, however, the logic of these differences in self-description may be extended to others, who share a
different set of assumptions. Given that members of each ethnic group have relatively little knowledge of the structures of the others' society, the perceived range of individual variability, or the ways in which these variables shape each other in different circumstances, communication becomes problematic.

As an example, let us examine interethnic dialogue in the context of subsistence issues. Small-scale societies today are imminently threatened by economic exploitation. For this reason, Yupik people, like others under similar pressure, defend their culture by defending their livelihood. Yupik subsistence and land rights have been the main line of defense against cultural extinction, in recent years. Yet, the negotiations which affect subsistence are strongly dependent on the way boundaries between cultural groups and the relationship of self and society are perceived and expressed by the people involved.

To begin with, the question of how we are all the same, and how we differ, is a critical one in determining public policy. In Alaska, for example, legislation pertaining to many aspects of Native life hinges on proving that Native cultures still follow traditional patterns. Most indigenous rights are no longer protected on the basis of heredity (percentage of Native blood) alone. In law courts and political debates, factions argue what constitutes tradition and custom in order to defend or
oppose policies affecting Alaska's Native peoples. In a recent legal case, for example, two boys were charged with shooting a musk ox out of season. The musk ox, not a game animal typically found in the area, had wandered near the boys' village. The boys, concerned about taking appropriate action, apparently asked elders whether or not they should shoot the animal. They were encouraged to do so: the musk ox had come to them, and was fair game. In other words, the boys went to the authorities of tradition to determine what rules applied in an anomalous situation. After the boys harvested the animal, the meat was also distributed to the entire village according to cultural patterns. The prosecutor, however, argued that since musk oxen were not a traditional source of game, and since the boys did not shoot out of immediate need, a cultural argument did not hold.

On the one side, an individually anomalous case brought a pre-existing rule into play; the irregularity was made regular through the morality of the boys' actions. On the other side, because the case was anomalous, it was argued that the boys' actions could not be considered traditional. One side emphasized the way in which a specific cultural rule was interpreted to encompass an unpredictable, individual event. This rule was amenable to "shaping" in this instance, in this way. The other side invoked a more narrowly defined rule, which could not be
stretched to incorporate this new situation. While the boys' actions were clearly within the improvisational range of Yupik culture, they did not fit within that range as defined by representatives of the other culture. The boys were found guilty.

Every day, critical decisions about Alaskan Native life hinge on such definitions of culture. The irony is that the more traditional ones' cultural style, the more difficult it is to claim the rights to which one may be legally due. That is, the greater the barriers to communication in the form of language, communicative style, and implicit cultural models, the more one must rely on translators and spokespersons to make one's position known.

An awareness of these disadvantages creates pressure towards assimilation in order to communicate a traditional viewpoint. The more assimilated one's appearance, however, the more the law questions one's traditional rights. Native Alaskans who speak fluent English (especially if they do not speak their Native language), wear clothing ordered from Sears, and hold satellite teleconferences do not appear traditional to the Anchorage sports hunters and fishermen who lobby against subsistence priorities. Again, one group imposes rigidity (based on a non-Native conception of the interplay of individuality and cultural rules) on the other group's self-definition (which actually employs different equations interrelating the two cultural
forces). Insofar as you are like us, the argument goes, you have to live by the same limits as we do. And insofar as we are like you, we should have the same legal privileges. Ironically, an argument on the grounds of equal treatment of individuals under the law may thus become an impediment to the rights of indigenous groups.

While monologic and dialogic tendencies tug against each other within a given culture, as individual actions both reflect back on individual lives and reconstitute tradition, the dynamic tension seems, in the normal course of events, to admit change without disintegration. In dialogue between cultures, however, it is the differences which are thrown into sharp relief, and the dynamic becomes more threatening to cultural integrity. The possibilities for questioning one's own belonging in a group widen as members of another group question one's identity. To be a Yupik is, by literal definition, to be a "real person." Now, people may refer to a real "real person," implying that some Yupik Eskimos are less than genuine. The minority culture may begin to adopt these majority culture judgements of authenticity, if heterogeneity increases more rapidly than the minority culture can interpret it. Cultures may indeed be considered as "complexes of points of view," as Bakhtin describes them, but they remain complexes only in the balancing of those views.

Thus, when members of different cultures enter into
conversation with each other it is the sense of collective
difference which demands our attention. Anthropologists
may see dialogue even within a culture as a negotiation, in
which speakers "bargain for reality" (Rosen, 1984). In
this bargaining process, people may possess different
orientations to concepts that on some level they also
share. Again, while social standards and rules exist, they
are essentially problematic and can not be used to deduce
the ideas and beliefs that will actually be manipulated in
diverse ways in a specific interaction. Rosen suggests that
the unequal power relationships between negotiating parties
may be the determining factor in whose "reality" influences
the outcome of a negotiation. It is not within the scope
of this paper to discuss the degree to which this
legalistic and competitive social model may have heuristic
value within any given culture (I suspect that Yupik
people, for example, would see their internal processes of
reaching agreement as less concerned with "winning"). In
interethnic settings, however, the discourse of public
policy is clearly a "bargaining for reality" in this sense.
At the same time that members of different cultures may
invoke differential views of social relationships, they
employ terms of discussion which, although assumed to
reflect a shared universe of meaning, actually represent
non-congruent realities. These terms tend to be
"essentially contested concepts."
Corresponding to the criteria described by Rosen, for each essentially contested concept there exists an ideal type whose authority all parties acknowledge. The very fact that each party enters competing claims to the proper use of these terms is a reinforcement of their authority. For concepts such as "subsistence," and "cultural relevance," this authority is equally clear, although neither are concepts that existed as isolated referents in the Yupik language before they became contested. For each, rival descriptions compete, and they are used both offensively and defensively in argument. Each also has an open quality, amenable to unpredictable modifications as they are used in different situations. But they share very little ground, and the different realities they represent are rarely, if ever, acknowledged.

Negotiations over subsistence issues may again serve as a case in point. While subsistence rights are both rationalized and attacked on an economic basis, on a deeper level, Yupik and non-Yupik fishermen, for example, perceive their relationship with the fish in fundamentally different ways. This may be true whether the fish are caught for subsistence purposes or for commercial ones, and whether the Yupik members of advisory boards are wearing suits or sealskin boots. Underlying interethnic exchanges at fish and game meetings is the Yupik concern that a disrespectful interaction with the environment is leading towards
catastrophe. Changing major weather patterns, a decrease
in frequency of supernatural encounters, reduced fish and
game stocks -- all are often considered to be effects of
human failure to respect nature. Non-Yupik scientists are
also conservationists, but according to a different view of
reality. In their schema, destruction of habitat and
overhunting along the Pacific flyway physically threatens
birds, who are perceived to exist in limited stocks, self-
renewable only by biological reproduction and not, as the
Yupik people believe, by will. (In the Yupik schema, the
real reason that habitat destruction threatens harvests is
because birds do not return to hunters with so little
regard for them). Following their own perception of human-
animal relationships, biologists count eggs and band
migratory birds to get data which may be used in the legal
battle to preserve hunting rights; at the same time, Yupik
people may believe that such meddlesome studies themselves
offend the animals and keep them from returning. The two
theories of declining bird harvests are thus fundamentally
at odds, although each is based on notions of
"conservation." "Conservation" and "subsistence" are thus
essentially contested concepts in this negotiation of
reality.

The inequality of the relationship between
negotiators also stacks the deck in favor of the non-Yupik
paradigm. This becomes clear when one considers that
Natives are forced not only to speak through cultural brokers, but also to couch their arguments in terms of the non-Native paradigm. Education and the media, for example, try to convince the Yupik public to adopt the scientific viewpoint. Yupik Eskimos have no choice but to defend their subsistence economy with harvest statistics and other scientific data, but they are often left with the nagging conviction that the heart of the problem has been overlooked. In Euro-American culture, a scientific defense brooks no argument, where a defense in terms of cultural values may be scarcely tenable. A Yupik description of the problem is either unknown to scientists, dismissed, regarded as a lovely but irrelevant metaphor, or seen as an annoyance. Yupik people see the non-Yupik paradigm as a power with which they must reckon; non-Yupik people do not extend quite the same courtesy. Given the structure of this interrelationship, one must ask whether the Yupik subsistence rights that may be "saved" by science will include what the Yupik people most want to preserve; that is, not just subsistence as the right to hunt, but subsistence as a way of relating to the world.¹

¹ A mixed cash-subsistence economy can be rationalized according to integrated cultural principles. According to the popular evolutionary model of societies, however, subsistence must ultimately give way to the cash economy. This is often couched in terms of "allowing people the opportunity to participate in economic development." The possibility of a stable mixed economy is rarely considered.
These processes characterize all "two-world" negotiations, and will be seen to strongly affect the institutionalization of Native culture and language in the schools. In each case, the costs of yielding sovereignty are very high, and yet rarely recognized, because people assume that they are discussing the same things, when in fact winning on another's terms is a form of losing. I would suggest that minority-majority relations must therefore be understood as communicative events occurring in a political arena in which realities compete.

Complicating this picture is the fact that miscommunications are made even more likely by differences in the ways that people infer meaning from paralinguistic cues such as pause patterning and intonational structures, in addition to relying on other shared cultural knowledge. These interpretive processes can be studied concretely, and verified by interviews with the people involved in conversations. By asking what was understood, and how that understanding was reached in particular instances, culturally-shared discourse cues can be described with relative ease. Such analyses reveal that miscommunication lies not only with differences in meaning, but also in the culturally-distinct ways that meaning is conveyed.

In short, the nature of communication is such that contrasting realities are never fully comprehended by participants in a dialogue. Just as a translation between
languages always leaves a residue of untranslated meaning, so does communication in general; there are varying degrees of overlap, but never complete congruence. Indeed, no transference of meaning is complete, whether from thought to speech, or from one individual to another. This may seem to indicate a grim prognosis for understanding in our multicultural world, but if this basic fact is not admitted, communication becomes even more problematic. Insofar as we want our actions to reflect a maximal degree of mutual understanding, we must know where the limits to understanding may lie. And it is important to remember that the stakes are unusually high in interethnic negotiations; the problem, again, is a political, and not merely an intellectual one.

For some anthropologists, a related line of thinking has led to experimental approaches in the writing of ethnographies. They have tried to turn away from describing cultural groups with a distant "authorial" voice, to reflect the co-authorship of numerous individuals from the culture in question. More collaborative ethnographies, which try to place the anthropologist's voice on a par with those of the people she studies, are useful in keeping readers aware of the artistic and interpretive nature of anthropology, and the coinfluence of differing interpretations of cultural experience, but they are always, by nature, only partially successful.
Where this work moves even farther from established ethnography is less in the writing than in the activities about which I have written. Rather than "giving voice" to others as a discursive exercise, I have attempted (in the work, not its description) to provide a forum in which conversations which were already occurring could turn towards collaboration in achieving the goals expressed by people engaged in the dialogue. This is applied anthropology, but of a different sort than that generally practiced in the history of the discipline.

In the past, applied anthropologists commonly participated in development projects, attempting to assure that changes were consciously planned with cultural consequences in mind. Thus, an applied anthropologist might gather and interpret information from indigenous people as to where a public facility should be located, and

\[\text{\textsuperscript{2}}\text{ If we admit that the anthropologist's interactions are subject to the same parameters as all other communication, then the task of describing cultures becomes fraught with difficulty: "The ethnographer presents culture as a discrete entity. But how do we know that unity is not a function of the ethnographer's collapse of dialogue into monologue, however reproduced?" (Bachnik, 1986). Bachnik's solution, to show how rules generating discourse in the ethnographer's and the Natives' societies apply both reflexively and across cultures, creating shifting perspectives that define relative distance in relationships encompassing both other natives and outsiders, still begs the question: who reveals the rules? No matter how we incorporate Native voices into an anthropological text, no matter how we write about culture(s), our own filters color our presentations. No matter how we try to account for the way we are perceived, and the way we influence interactions, it is our own perceptions which determine the accounts.}\]
how it should be designed for maximum use and convenience with minimal disruption of cultural patterns. More recently, applied anthropologists have also become political activists -- advocates who try to protect cultures from change or to delay and buffer its effects. Anthropologists are trying to intercede, for example, to prevent the destruction of habitat (such as the South American rainforests) on which small-scale societies depend. In both cases, the anthropologists are cultural brokers, translators who present their understanding of one culture to the other, and express their own professional opinions on the nature of desirable and undesirable change.

Anthropologists who wish to reach the ears of policy-makers, however, must describe indigenous cultures in terms that correspond to the policy-makers' paradigms. Again, in the area of subsistence, most anthropological studies stress the economic and nutritional rationality of subsistence, backed by statistical data. While the harvesters themselves are quick to point out that they occasionally ("inefficiently") go far out of their way to gather certain desirable resources, such assertions do little to help them protect their rights, and may, in fact, be used against them. Even anthropologists who are concerned with explaining such facts in terms of cultural value systems (c.f., Fienup-Riordan, 1986) must correlate income with harvest costs, reckoning in pounds of food and
30
dollars expended, to actually convince policy-makers. Bargaining results in one reality obscuring the other.

The applied anthropologist's ability to "give voice" to others is thus obstructed not only by the theoretical and practical limits of understanding and interpretation, but also by communicative constraints which force him to translate those voices into foreign idioms. When policy is mediated in this way there is already a great deal of ground lost before the intercession even begins, and while the anthropologist may be sensitive to the costs of cultural change, he is not the one who can decide whether or not any of those costs should be paid.3

My work suggests that such inherent communication problems may also be approached from a different direction. A collaborative exploration of cultural and cross-cultural issues may involve the anthropologist as one who suggests activities that will increase awareness of cultural processes. This becomes a basis for each individual to recognize the consequences of "boundary disputes" such as

3 Anthropologists will continue to play critical roles as cultural advocates despite this disadvantage. Even those who may not consider themselves political activists are frequently called as expert legal witnesses to testify in such cases as the musk ox shooting mentioned above, as well as cases involving the interpretation of traditional kinship (e.g., adoption hearings), sexual practices (rape and abuse cases), and communication styles (e.g., the cultural understanding of confessions). Such testimony not only describes Native cultures, but also influences their future, as it shapes popular and legal definitions of culture.
those described above. The educational program which has resulted is not a description of Yupik culture for the students, but a series of community-based projects which takes students where they can hear many different Yupik voices representing their own cultural views. Throughout, the students are encouraged to listen to their own voices, and to hear those voices, too, as authentically Yupik. As an interactive model, this builds in certain safeguards against misrepresentation, and assures that the anthropologist receives at least as much direction as she offers. The program thus reflects the struggle of indigenous people themselves to find out the limits of diversity in claiming their own ethnic identities, and the anthropologist's concern to avoid a rigid, synchronic presentation of culture.

In other words, the program exists in a living culture. As much as possible, the teaching methods and materials express awareness of existing cultural viewpoints, while at the same time giving those viewpoints play in the activities of the students. Culture is never objectified; rather, it is personalized through the students' experience and communicated through the experiences of the teachers and community members who also act as teachers. Students who take these bilingual classes do not become anthropologists; their goal is not the analysis of cultures (even their own) according to general
anthropological principles. They have a vested interest in the outcome of cultural processes -- they are not bystanders.

Naturally, in creating such a program, one risks the danger of "confusing science and politics" (Paul Rabinow, discussing the dangers and possibilities of an interpretive anthropology in "Representations are Social Facts" [Clifford and Marcus, 1986: 257]). In such a situation, however, where science and politics are already inextricably confused, the task becomes, not separating them, but assuring that it is not the scientist's political persuasions that prevail. This is the true danger of anthropologist as spokesperson. In this case, the anthropologist's politics, although clearly present, are in the end much less important than the politics of the students and community members. The program has a life of its own, in the hands of each group of students and teachers, and as such it differs from an ethnographic account of a culture. The words of a book, like a playscript, remain fixed, even though each reading performance changes them with respect to the reader. The events which are set in motion by this program, mirroring those of the culture at large, are more like improvisational theater performances; the words and actions are completely variable, in response to a suggested set of topics. Thus, the approach avoids some of the difficulties
of trying to write an avowedly multivocal text.

Through the program's activities, students' awareness of themselves as cultural beings is heightened. To twist a phrase, the emphasis changes from participant-observation to participant-participation. The observer steps into his own culture to gain insights in order to make informed cultural decisions rather than stepping away from it to generalize about culture in the abstract.

While the anthropologist can, in this way, help people find meaningful perspectives on culture and change, only members of a culture can choose the directions which they want their education -- and their future as individuals and as group members -- to take. For this reason, the anthropologist is not in a position to advocate change, but rather to provide methods by which people can discover potentials for clarity and confusion in their own society, in relation to their own, possibly changing, values and self-representations. An anthropological perspective can improve peoples' understanding of how members of their society interact with each other, and with members of other societies.

This perspective helps to provide people with a basis for establishing and choosing among options for cultural change, preservation and/or syncretization, when such choices are necessary or desirable. Rather than forcing one culture to describe its goals via another culture's
paradigm, the program stresses the importance of paradigms themselves for informing action.

An anthropological perspective is therefore essential in the creation and implementation of any educational program which purports to address the relationship between cultures, and/or which utilizes a non-English language to teach students from a unique cultural background.4

It is difficult to predict whether or not Yupik people, or people anywhere, will be able to define and achieve what they believe to be the "best of two worlds." An education which consciously examines the dynamics of cultural change, however, is necessary to any such effort. This work presents one way that an anthropologist might contribute to that effort.

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4 I recognize that this thesis addresses the educational needs of only one of the two cultures interacting in this context. Ideally, a similar program would assist non-Yupik people in the Yukon-Kuskokwim Delta, for example, to understand their own culture and its interrelationships with the Native culture, as well. For the Yupik people, however, non-Yupiks remain interlopers -- with linguistic, economic and social power -- in a Yupik land. The Yupik stake in self-preservation motivates cultural education to a degree never experienced by non-Yupiks. Thus, while educational programs must be directed towards both groups, it is the Yupik people who feel the most critical need.
The Setting and the People

The Yukon-Kuskokwim Delta of Southwestern Alaska is the home of approximately 20,000 Central Alaskan Yupik Eskimos. Bordered on the north by Norton Sound and on the southeast by the Kilbuck mountains, the Delta is a vast, silted plain, dotted everywhere by innumerable ponds and lakes, and interwoven with winding sloughs. The western coastline of the Bering Sea, between the mouths of the two great rivers that form the Delta, is some 250 miles long. The adjacent waters abound in seals, walruses, beluga whales, and many species of fish. The rivers themselves are host to an abundance of fish, including five species of salmon. Throughout this Central Yupik heartland, extending another 200 miles inland to the edge of the Kuskokwim Mountains, millions of waterfowl nest during the brief summer months. Furbearing animals also make their home on the tundra. The low-lying vegetation, often broken by stands of spruce along the inland waterways, everywhere includes berries and other edible plants.

This rich ecology has also supported human life for hundreds of generations: although archaeological evidence is scant, Paleo-Eskimo people have apparently inhabited
the Bering Sea coast of the Delta for millenia. Some of these people then moved up the rivers to harvest salmon about two thousand years ago. The Norton culture of that period gave way to Neo-Eskimo patterns, primarily characterized by specialized techniques of sea mammal hunting, between 600 - 1200 AD. These and related innovations of the Bering Strait people spread across the Arctic, forming the basis for the Western Thule culture that was characteristic of most Eskimo areas until the historic period (Fitzhugh and Kaplan, 1982: 245-6). Thus, Southwestern Alaska can be said to be the "cradle of civilization" of the Inuit peoples.

The best-documented period of Yupik life was the mid to late nineteenth century, on the eve of accelerating change. European explorers and early missionaries left some records of their observations during this time, and Edward Nelson, a field naturalist for the Smithsonian Institution, compiled an extensive monograph and collection of artifacts from the area. Although the ethnographic literature is otherwise limited, one can cross-reference and verify this data with oral tradition and the memories of today's elderly Yupik people in order to reconstruct an accurate general picture of life prior to the turn of the century.

From these sources, it is clear that the immediate ancestors of today's Central Yupiks (c. 1600 - 1850 AD)
developed the most complex social organization and ceremonial system of any Inuit people in the world. Ernest S. Burch (1984: 5) describes this culture as "nearly comparable to that of the Northwest Coast Indians in its complexity and richness." The dependability of salmon resources in particular, enabled historic Yupik Eskimos to form large, semipermanent (winter) villages which became centers for technological, artistic, and spiritual development.

Historic Yupik Eskimos lived in societies comprised of one or more permanent settlements, the residents of which ideally "reflected continuous kinship ties" (Shinkwin and Pete 1984: 99). In addition to ceremonial cooperation, members of such a group tended to intermarry, share a common pool of names (indicating some degree of kinship), speak a single dialect, and maintain an alliance in warfare. According to Fienup-Riordan (in Burch, 1984), these "regional confederacies" were socially rather than territorially bounded; Shinkwin and Pete (ibid.), however, convincingly argue that "societies were characterized by a distinct territory although each village had a resource use area within the larger territory." Diffuse links with other groups, through occasional marriage, provided a basis for trade, travel hospitality and sometimes political alliance.

While the larger group was important for these
reasons, an individual’s primary identification was with the village. Village endogamy was preferred, and residence tended to be duolocal: daughters were raised in their mothers’ homes, and raised their own daughters in the same household (VanStone, 1984: 233), while boys left their mothers’ homes when they were about five years old to live in the men’s house. Kinship was reckoned bilaterally; parallel cousins were designated as siblings, with cross-cousins designated separately (according to the Iroquois type). A village was made up of several groups of relatives, generally extended families, each of which provided a focus of interaction for its members. In 1891-2, for example, the Catholic missionary Aloysius Robaut reported that a large four generation family made up 44% of the population of one Nelson Island village, with two other extended families and eleven nuclear families adding up to the total population of 115. (Shinkwin and Pete, 1984: 101). While some winter settlements were much smaller, others numbered several hundred residents.

Women and children of a given family group inhabited a semi-subterranean, sod-insulated house, with central skylight and smokehole, and sleeping/storage benches along the walls. Boys above the age of five and men lived in a large communal house called a qasgiq ("kashim"); a large village might have more than one qasgiq, each undoubtedly associated with a dominant extended family. The men ate,
slept, worked, and sweatbathed in the qasgiq, paying conjugal visits to their wives late at night. Here, too, young men were formally educated: a description written near the turn of the century by Moravian missionary John H. Kilbuck parallels the recollections of Yupik elders raised in the qasgiq:

The old men are the recognized monitors - and their suggestions bearing on general comfort in the kashigi are of the force of mandates....These talks given as monologues or dialogues - bear on every phase of life and cover every stage - from childhood to manhood - on conduct in the home - in public - in travel - on land and water - in accident and emergency. - The hour chosen for these lectures are (sic) usually early in the morning - before there is any stir - while the audience is still apparently asleep. -- Formerly a wand was placed across the entrance - indicating that there shall be no exits. (from "Something about the Innuit of the Kuskokwim")

Men's and women's spheres were thus rather separate and well-defined -- men, for example, controlled the distribution of harvested game until it crossed the threshold of a woman's house, at which point it became hers to distribute. Women were responsible for childcare; food processing, preparation and storage; sewing and basket-making; and gathering greens, roots and berries. Men made and repaired hunting and fishing equipment, and harvested fish and game. Individuals with expertise in particular skills (e.g., proficiency in a certain craft, or a knowledge of curing) were respected and consulted; they were not specialists, however, in the strict sense of the
term. In general, group decisions were made by consensus, with the opinions of certain recognized elders, successful hunters, and shamans carrying particular weight. Shamans were usually, but not always, male.

The qasgiq was the center of ceremonial activity for the entire village, the place where a shaman would conduct rituals to cure illness, detect and expose wrong-doing, predict the movements of game, and influence the weather. Everyone participated in the cycle of major winter ceremonies held in the qasgiq, as well. These often involved hosting visitors from other villages within the same regional group, and featured large-scale gift exchanges. In addition to several smaller rituals, there were four centrally-important ceremonies. First, was the Bladder Festival (Nakaciuq), in which the bladders containing the souls of seals caught during the past year were returned to the sea to regenerate, so that the same hunters might catch them again. Second, was the Memorial Feast (Elriq), in which the dead were fed, clothed and gifted through their living namesakes. Third, was the Messenger Feast (Kevgiq) in which accumulated wealth was redistributed, and the previous year's wrongs were redressed through ritualized teasing and ridicule. Last, was the Inviting-in Feast, or Masked Festival (Itruka’ar or Kelek), in which spirits were impersonated in elaborate masked dances and supplicated to provide plentiful
resources in the year to come. A central theme of the belief system, reflected in ceremonies, naming, mythology and symbolic representations was the idea that human and animal souls continued to be cycled in perpetuity.

Subsistence and social organization were characterized by seasonal alternations between the winter villages and smaller camps, to which families dispersed to harvest resources during the spring, summer, and fall. Although there were differences between primarily maritime and primarily riverine emphases, all Yupik Eskimos travelled widely to harvest resources from both ecozones. In particular, inland people desired seal skins and meat, while coastal people wanted salmon. Tomcod, Northern pike, burbot, needlefish, and blackfish were also important food sources for residents in various parts of the Delta. In the spring, people from the Lower Kuskokwim usually moved by dog sled to camps on the tundra to trap fur-bearers, such as muskrat, and to harvest migrating birds. Caribou and whitefish were also spring resources inland, with herring and seals staples of the coastal dwellers. A Lower Kuskokwim family might use the same tundra camp for several generations, and in larger camps a qasgiq sometimes constructed. After "break-up," families moved by skin boat to camps or permanent villages along the Kuskokwim to fish for smelt and then salmon, each species ascending the river in turn. During the long summer days,
intense labor was required to cut and dry enormous quantities of fish which were stored to feed people and dogs. In the fall, trapping and hunting again became important. During these seasons, women also gathered some forty species of edible plants, including berries. Many other plant species were gathered for ceremonial, utilitarian, and medicinal uses. Grasses were used to weave baskets, as well as for other purposes. Driftwood was essential for the construction of house and boat frames, caches and fish-drying racks, containers, masks and tools, as well as for the large quantities of fuel required to heat the qasgiq for frequent sweatbaths. Subsistence activities, except for some ice-fishing, wood gathering and trapping, were minimal during the cold months of winter.

Yet, while starvation sometimes threatened before the spring birds returned, the environment was much kinder than that of the Far North.

A sophisticated subsistence technology helped to assure survival. Hunters used sinew-backed bows which are "among the finest native weapons produced in North America" (Fitzhugh and Kaplan, 1982: 104). The toggling harpoon was used for sea mammals, and three-pronged spears for birds. Spear-throwers extended a hunter’s range. Snares and bolas were also used to catch birds. Gill nets, dip nets and fish traps were constructed; large-meshed nets were also used for seals and beluga whales. Fish
were also caught with ivory hooks and lures, by jigging. Several types of sleds were built, as well as snowshoes for winter travel. In the summer, hunters used kayaks, the designs of which were the most "elegant and complex" (ibid.: 60) in the world, and the open skin boat (known as angyaq, rather than umiak, to the Yupik people) was also used for transporting goods and people.

In addition to being efficiently designed, almost everything people made was beautifully decorated with carvings, incised lines, and/or pigments. Ceremonial masks, often with moving parts and complex animal imagery, are the best-known artistic expressions of the Yupik people, but ordinary objects, such as dolls and men's tool boxes, were also highly decorated. Much of the iconography of such ornamentation related to supernatural beings and legendary creatures and might recall human encounters with them.

The human relationship with natural and supernatural worlds was harmonious to the degree that people observed the numerous prescriptions (alerquutet) and prohibitions (inerquutet) dictated by experience and tradition; these rules covered everything from maintenance and beautification of subsistence equipment, to injunctions regarding menstruation and parturition. Fish and game gave themselves freely to those who behaved according to the ideals; conversely, if harvests were poor, humans were
held accountable. It was not only one's individual luck which was affected; if one person was at fault, a whole community might suffer. Thus, human actions reverberated through all the realms of experience, and everyone bore responsibility for their consequences.

Even this brief description shows that Yupik Eskimos were a thriving people at contact. The first historic blow to this population was a devastating smallpox epidemic between 1837 and 1839. The epidemic took a terrible toll on life, and permanently altered tradition in ways that cannot fully be understood today. One indication of social change was the abrupt cessation of warfare among regional groups at this time (Burch, 5 and Shinkwin/Pete, 101). Other epidemics were to follow. Soon, contact with European cultures began to leave other marks, as well. The Russian fur trade and Orthodox missionization in the late eighteenth and early nineteenth centuries began to alter social life and material culture (Black, 1984: 21-37). The American purchase of Alaska in 1867 heralded new interests in the area. Compared to other parts of the state, seriously exploited for furs, whales and minerals early in contact history, the Yukon-Kuskokwim Delta, with its shallow waters and lack of easily extractable resources, moved more gradually into new ways. Still, an era of pervasive change had been launched, intensifying with the establishment of a permanent Moravian mission in
Bethel in 1885.

In this newly founded community, near the site of the small Yupik village of Mamterillermiut (numbering 29 in 1880), much of the groundwork was laid for the "two world" relationships that characterize the Yukon-Kuskokwim Delta today.

The missionaries who established Bethel came to meet preconceived social and spiritual needs among a people that they perceived as simultaneously different from themselves (superstitious and primitive), and also essentially equivalent (capable of salvation). On one level, Christian conversion was seen as independent from cultural change: it involved the revelation of truths that were thought to have a prior existence in the culture, although in primitive form. On another level, civilization was seen to be an "incidental" and "secondary" result of Christianization (Moravian Church, 1927). As the Moravians trained Yupik "Helpers," later known as lay pastors, to proselytize and act as cultural brokers and translators, the question of promoting Christianity while avoiding cultural imperialism became more acute. The missionaries worried that the Helpers would lose their efficacy -- and their moral stance -- if they became too representative of non-Yupik culture:

They should not be Europeanized or Americanized lest false pride ruins them ... They should retain their racial character, remain good Eskimos, expert, if possible, in Eskimo attainments, that they may remain suited to their environment and of truest
service to their people, even if essentially civilized." (undated "Memorandum with reference to the Employment of Native Assistants in Alaska," Moravian Archives, Bethlehem, Pennsylvania)

As the presence of traders and occasional miners began to be felt in the Delta, the Moravian missionaries became increasingly concerned that Natives adopt civilized virtues and not civilized vices, including the consumption of alcohol. Was it possible to become "essentially civilized" while remaining a "good Eskimo"? Already, an ambivalence had been associated with both sides of the ethnic equation. To emulate Euro-Americans fostered "false pride," implying that a Yupik could never achieve this presumably superior status. At the same time, it was not acceptable to remain fully Yupik: some emulation of non-Yupik values represented moral elevation. Yet, a model Eskimo should also retain Eskimo virtues. The constructed goal was already that of a person who embodied "the best of two worlds." The question of ethnic identity in relation to cultural change thus became an early and dominant theme in Yupik/non-Yupik relations.

Bethel grew over the next century to become the transportation and social service center of the Delta. A century later, Bethel's population exceeds 3500, almost half of whom are non-Native. A large proportion of the latter are professionals -- lawyers, educators, clergy, social workers, medical personnel and a variety of agency
administrators -- who devote their lives to worrying about the welfare of others in the surrounding villages. Yet, in most villages, Bethel, a plane ride away, still feels distant. Despite the economic and social changes of the past century, villagers in their seventies refer to their youth as a time when there were virtually "no Kass'ags here, only Eskimos." Separated from Bethel by distance and culture, people in the villages are quite absorbed in conducting their own affairs.

As schools, stores, and churches were built, today's Yupik villages coalesced into more permanent year-round settlements, each of which has its own distinctive history and present-day characteristics. There are now 56 villages in the Yukon-Kuskokwim Delta, which encompasses an area about the size of the state of Oregon.

The following broadly describes current village life. Physically, the villages differ greatly from those of the nineteenth century. Missionaries were adamant that Yupik people live in family groups more familiar to Euro-Americans, and the qasgiq (with its non-Christian religious functions) has been abandoned for close to fifty years. Husbands and wives now live together in single-family frame dwellings, made of imported rather than local materials. Public facilities continue to grow rapidly, and most villages now have a small clinic staffed by para-professional community health aides, a post office, a
washeteria, a city office building, a generator, and sometimes a recreation hall and guest house, in addition to stores, schools and churches. Television reception has been possible for about a decade, and individual telephone service is now increasingly available. Although no roads connect the villages, cars drive on the rivers in winter, and snowmachines and all-terrain vehicles follow well-worn routes across the tundra. In the summer, open skiffs are the usual means of transportation. A number of "bush plane" services, mostly based in Bethel, also make daily flights to villages in passable weather, all year round.

Today, as in the past, Yupik people identify themselves in terms of their kin and the villages of their birth. Extended families still make up the majority of each village's population, and clusters of houses reflect close kinship ties. Village populations average one to several hundred residents. Despite the presence of established public structures, villages retain a feeling of only conditional permanence. The subsistence calendar takes precedence over other schedules, and when summer comes, the residents of villages which have always done so, move to traditional family fish camps along the river. Although it is now rare for people to move to fall and spring camps, the same resources can be harvested in a shorter time and/or from a greater distance with mechanized transportation. Virtually all traditional food
sources continue to be harvested, and remain the core of the Yupik diet, with the addition of storebought goods such as flour, sugar, tea, coffee, shortening, and sweets. It is not only seasonal population fluctuations which make communities less permanent than they appear to outsiders. The Yupik conception of a village allows for change, when necessary. A large segment of a community may relocate to a more advantageous position, defined by subsistence or transportation opportunities, when it becomes socially and/or economically prudent to do so. Villages continue to use resource areas which are well-known to others, and regional affiliations still represent common dialects or sub-dialects, Yupík names, kinship ties, and subsistence patterns.

Village life is expensive, and cash comes from a variety of sources to pay for fishing and hunting gear, clothing, electricity, fuel and many other expenditures. There are a limited number of paid jobs in each community: one or two health aides, a village public safety officer, a few city government positions, maintenance workers for the schools and the generator, and teaching aides. A few families may operate small stores out of their homes, and if there is a store owned by the village corporation it may employ several people. Fur-trapping and the sale of traditional crafts provide supplemental income for some. On Nunivak Island, visiting musk ox hunters hire local
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In addition to subsistence activities, the church provides another central focus for village life. There are three main denominations (Moravian, Catholic and Russian Orthodox) in the region, and several smaller sects. In most cases, there is a majority religion in each village, although some people may belong to a different church. People may also attend services or activities at more than one church, although they identify themselves as members of only one. Ideally, tolerance, mutual respect and the closeness of village kinship ties prevent conflicts (although missionaries up through the mid-twentieth century often heightened factionalism in the process of championing their churches). As is true the world over, local expressions of each major church are flavored by cultural tradition. For example, the Russian Orthodox Christmas Slaaviq (literally, "praise," from Russian) is celebrated with gift and food distributions that are as reminiscent of earlier Yupik traditions as they are of Russian ones. Moravian song rallies, too, gather...
guests from other villages in the earlier traditions of hosting and feasting. To the participants, these aspects of tradition have blended seamlessly.

In fact, fundamental Yupik ideals of behavior and conceptions of the world form the basis for understanding and decision-making in many contemporary contexts. The effects of human actions on the environment, for example, are as important as ever. Perhaps, in fact, they are even more important, for the people who legislate land and resource use are usually not aware of the environmental impacts that Yupik people believe them to cause. Examples of this are numerous, but two may serve to illustrate the point. Alaskan resource managers weigh subsistence, commercial and sports interests against each other, in order to apportion harvests. At one recent meeting, Yupik participants tried to grasp the idea of catch-and-release fishing, which was proposed as a good way to satisfy sports users without jeopardizing subsistence harvests. Catch-and-release was abhorrent to the participants, because it is an offense to the fish. If fish give themselves to the fisherman, they should be accepted and used with due respect. To throw them back would assure that they would never come again to be caught. A similar contradiction surfaced when there was competition over musk ox use in one village. The sports hunters, in a spirit of compromise, offered to give villagers the meat,
taking only the heads and hides as trophies. The villagers could not easily convey the idea that it was inappropriate to take the animals if one did not want the meat in the first place. This was wasteful and threatened the future meat supply, even if this particular meat was not actually "wasted."

Yupik people today are constantly confronted with situations like these. From the perspective of bureaucrats and agency personnel, Yupik Eskimos are people with needs to be met by their organizations. Typically, their descriptions of Yupik life teem with negative statistics on income, educational level, housing quality, nutrition, communicable disease, crime, alcoholism and suicide. There is a constant flow of doctors, lawyers, law enforcement agents, and social service agents between the villages and Bethel. These people commonly see Yupik village life from the viewpoint of their professions; less often do they see day-to-day life as its healthiest. Depending on the situation, and their prior experiences with such professionals, villagers express many different reactions to these interactions, ranging from relief, gratitude, and pleased anticipation to fear, misunderstanding, anger, mistrust and resignation. Although usually gracious to the visitors, many seem tired of trying to explain what it is like to perceive social issues as a "we" instead of a "they."
After many years of exclusion from the external decision-making processes affecting Yupik resources and social life, it is now common for Native involvement to be solicited by participation in innumerable committees, surveys and public meetings. For the most part, the purpose of these forums is to find points of agreement between Yupik and non-Yupik cultural systems in order to plan actions which will in some way reflect Native agreement. Ideological differences between the systems rarely surface in such discussions; the focus is on what to do rather than why to do it. In the end, people may think that they understand each other, when in fact, their actions are rationalized on different bases. In some cases, everyone is pleased with the results and no problems surface later. In other cases, misunderstandings follow once the "agreement" is in effect. Agency representatives who have strong views on what needs to be done may view Native culture primarily as an impediment to their operations. For example, doctors are concerned about Yupik theories of sickness and curing primarily because they may contribute to or prevent "patient compliance" (Show, 1984).

Depending on the context, differing cultural systems may interrelate in other ways. Where Yupik actions do not come to the attention of various authorities, Yupik ideologies dominate. Traditional methods of social
control, for instance, resolve many issues outside of the legal system, and, in some villages, are highly effective in preventing prosecutable crimes. Intersections with official systems, too, may simply parallel decisions already made locally. Cultural adoptions, such as that of a grandchild by a grandparent, for example, are traditionally common; now, they are usually brought before a judge for legal endorsement. As laws proliferate and economic pressures increase, however, more and more Yupik actions are subject to Outside regulation.

Politically, Yupik people are responding with efforts to organize local control, and to influence the legislative process. There have been movements to assume control of health services, schools, and local government throughout the region. Tribal courts have been established in several villages to handle misdemeanors, and to formalize adoptions under the Indian Child Welfare Act. The "bush" constituency, led by a state senator from Bethel, recently pressed for and achieved the passage of a state "local option" law allowing communities to ban the possession of alcoholic beverages, in order to help control abusive drinking. While the local option law received some negative national attention because of its implications for individual rights, it was a victory for Native peoples seeking the right to make laws deemed appropriate for their own communities. The Yupiit Nation, a growing sovereignty
organization, now has membership from Yupik villages around the Delta, transcending historical regional boundaries. A major political effort among all of Alaska's Native peoples, including the Yupik Eskimos, is to amend the Alaska Native Claims Settlement Act (ANCSA) to ensure that land ownership and management will stay in Native hands. The provisions of ANCSA have wedded survival on the land to survival in the world of national and international finance. Anxiety over ANCSA's effects increases as 1991, the year in which stock becomes alienable, approaches. ANCSA has also contributed to young people's sense of disenfranchisement from their heritage, by designating those born after 1971 as "new Natives" or "afterborns," ineligible to receive corporation stock as a simple right of their identity.

Overall, the relationship between the two worlds of the Yukon-Kuskokwim Delta is constantly in flux. Both worlds are changing, and not all of the changes result from mutual responses to events that evolve in the local context. Policies which have far-reaching effects on Alaskans, for example, may stem from conditions on Indian reservations elsewhere in the country, or the lobbying efforts of urban Hispanics, or the decline in state oil revenues. Such changes, initiated out of context, are often unpredictable, as are their local consequences. While change in each culture remains continuous, the continuum
becomes increasingly uneven with reactions to influences that are themselves reactions to other influences. Many older people remain grounded in the comparatively smoother continuum of their youth; younger people strive to create new ethnic identities that reflect the realities of their lives.

All of these examples suggest that, while local autonomy has always been characteristic of Yupik culture, recent history has been characterized by increasing conflicts between this independence and a newly emerging sense of interdependence. Bethel, Anchorage (the state’s population center), Juneau (Alaska’s capital), and Washington, D.C. form a remote chain of bureaucracies set up to mediate these conflicts.

Bilingual education is another strong focus of mediation, for it is a conscious attempt to express the nature of the relationship between Native Yupik and Euro-American cultures.

Brief History of Native Language Education in the Delta

Euro-American institutions of education, staffed first by missionaries and later by federally and state-employed teachers, were, of course, present in the Bethel area long before the words "bilingual education" were ever coined. And in these schools, the tensions of the wider society have always been present. The following three quotations, from 1882, 1926, and 1980 respectively, reveal
a common assimilationist thread through the last century:

With regard to this people, it may be observed that they are docile, peaceful and have here and there some knowledge of useful industries; are apt in the mechanical arts, and anxious for instruction.... If given an opportunity for this kind of instruction for a few years, they would, it is believed, make good progress in throwing off tribal relations in preparation to becoming an integral portion of the American people.... John Eaton, Commissioner, from "Education in Alaska - Official Recommendations," Bureau of Education (1882)

Primarily the object of the Mission is to promote the Kingdom of God - not to spread civilization. Yet this it also does incidentally and as a secondary result. Therefore the missionary shall encourage cleanliness and thrift and everything that elevates the mental and moral and physical condition of the people, whilst laying special stress on the truth that life comes first of all from above. from "Rules and Regulations of the Moravian Mission in Alaska, 1927" (adopted by the General Mission conference at Nunapitsinghak Orphanage and School, August, 1926)

In...areas where the schoolchildren still speak an Alaskan language .... there may still sometimes be found, in this day and age, educators of the old assimilationist school, who are either hostile or indifferent to the survival of Native languages.... If used at all, Native languages are merely tolerated in a policy still aimed at transition to English. The tragic consequences of this have already been clearly demonstrated. Michael Krauss, Director of the Alaska Native Language Center. (Krauss, 1980: 55-6)

Currently, despite these historic barriers, Central Alaskan Yupik remains the first language of approximately 15,000 speakers, and is, with Navajo, one of the two strongest Native North American languages extant. It
survived a period of active suppression in the schools, although there are communities where, for this and other reasons, it has seriously declined in use. As the above quotations indicate, forced assimilation was the stated goal of schools in the early American period, a goal that changed the area permanently. However, there were fluctuations in policies and practices dealing with the use of the Native language throughout the history of post-contact schooling, some of which were less deleterious to Yupik.

In the 1840's and 1850's, the Russian Orthodox Church translated religious texts into Central Yupik and promoted some Native language literacy. (As early as 1824, Russian Orthodox clergy had established bilingual [Russian-Aleut] education in the Aleutians [Dauenhauer, 1980]). Russian missionaries and traders did not discourage Native language use, and the marks left on Central Yupik, in the form of some 190 Russian loan words, did not threaten its integrity.

After the American purchase of Alaska in 1867, there was a twenty-year period of "benign neglect" (Krauss, 1980: 19) before the first commissioner of education in Alaska, Sheldon Jackson, instituted his rigid English-only policy in federal schools. In the Central Yupik area, however, Roman Catholic and Moravian missionaries developed orthographies for the Native language, and used
Yupik for religious instruction. During this time, church language policies, to some extent, 'helped to buffer the official federal policy. Although churches promoted Native literacy only in liturgical contexts, some people began to extend its use to secular purposes. One Native lay pastor of the Moravian church, Helper Neck (Uyaquq), even devised a complete writing system for Yupik which was not based on Roman letters. Neck taught his system to a number of students, although it did not become widespread. Thus, even before the advent of modern bilingual education, "there was a modest tradition of literacy in many parts of the Yup'ik area, with letters, town ordinances, and similar material being written in the Native language." (Jacobson, Central Yupik and the Schools, 1984, p. 16)

After about 1910, however, the use of Native languages was completely forbidden in American schools, and probably in most mission schools as well (ibid.: 24). When the Bureau of Indian Affairs (B.I.A.) took over the administration of Alaskan schools from the United States Bureau of Education, it continued this policy of suppression. Not only was English the official language of education, it was also encouraged outside of the schools, and in the home. Over the years, as the social and economic advantages of speaking English became apparent, this became a source of stress within the culture; many parents and grandparents began to support children's
efforts at school at the expense of the transmission of their own culture and language.

The English-only policy was in effect until 1960, leaving lasting scars on the people of the Delta. Because adults remember being punished for speaking Yupik, some remain leery of bilingual programs to this day. They fear that their children might suffer as they did, if school officials revert to an anti-Yupik stance. Policy shifts are common, and seemingly arbitrary; these people feel no assurance that a liberal attitude towards Native languages will prevail.

Current bilingual policies have their roots in the 1960's, when the American social climate became more favorable to minority rights. At this time, linguists began to teach Native languages at the University of Alaska, and also became concerned with re-establishing bilingual education in the public schools. Research on the grammar of Central Yupik and the development of a consistent orthography were underway during this period. These efforts paved the way for bilingual programs to be initiated, when the Federal Bilingual Education Act was passed in 1967. The Act permitted (but did not require) schools to bilingually instruct children who were primary speakers of a language other than English.

In 1968, however, a proposal to begin Yupik bilingual education was rejected by the State Commissioner of
Education. Notably, one of his objections was that such instruction would "undermine the authority of the teacher in the classroom" (ibid.: 29). Dr. Michael Krauss, one of the originators of the proposal, has remarked that this was true, since "the teachers in those classrooms at that time could not speak Yupik and were extremely unlikely to learn to do so. Having a teacher who could teach in Yupik would, without being a racial requirement, practically guarantee Yupik control of the classroom" (loc.cit.).

By 1970, authorities were at last persuaded to try bilingual education in four Central Yupik schools. The Primary Eskimo Program, or PEP, as it was called, was the first federally-funded bilingual program in the state. Beginning with four schools in the Bethel region, the pilot program rapidly expanded to include 17 schools, some in the Bristol Bay area (Reed, 1974: 57). This original program continues to be used in some Central Yupik area schools, with various modifications and in addition to more recently developed materials.

Throughout the 1970's, the federal Office of Civil Rights pressured Alaskan schools to submit a bilingual education plan that would meet the requirements of federal law. Representatives of the Alaska Department of Education submitted several "compliance plans," all of which were rejected. At stake were nineteen million dollars of federal funds to the schools. Finally, in
1978, state and federal representatives reached a policy agreement. Ramona Suetopka-Duerre, in "Case Study of Implementing Alaska's Bilingual Education Policy" (1982) suggests that these pressured conditions resulted in a plan which neglects the diversity of needs in rural and urban Alaskan settings. It prescribes no way to determine students' levels of proficiency in either first or second languages, no program models for students at different levels, no career ladder plan for training Alaskan Native teachers, no meaningful parent involvement, no plan for augmenting insufficient bilingual materials, and an inappropriate adaptation of national program models to Alaskan Native Languages. In short, it addresses policy, and not implementation.

In the midst of this frantic scenario, in 1971, Alaskan state law began to require that eligible children be educated bilingually. The law mandated that every school with fifteen or more (later amended to eight or more) students whose dominant language was other than English must offer a bilingual-bicultural education program, defined as "an organized program of instruction in elementary or secondary education which is designed for children of limited English-speaking ability, uses English, the child's primary language, or both as a means of instruction, allows children to progress effectively through the educational system, and which may include
elements of the culture inherent in the language" (quoted in Coon, 1979: 2). With Yupik the dominant language of the Yukon-Kuskokwim region, the law guaranteed that bilingual programs would be instituted in every state-funded school. Federally-funded B.I.A. schools in the Delta also complied, although voluntarily. It will become apparent, however, that legislating programs without well-defined outcomes created a number of problems.

During this period, the Alaska State Operated School System was reorganized, and "bush" public schools are now operated under a statewide system of "Rural Educational Attendance Areas." Students who had been required to attend distant boarding high schools were now given the legal right to get a high school education in their own villages. The Lower Kuskokwim School District, with its administrative center in Bethel, was formed as a Rural Educational Attendance Area encompassing these secondary schools. By 1983, as the Bureau of Indian Affairs relinquished its educational functions, the state absorbed B.I.A. elementary schools, as well. L.K.S.D. now administers all primary and secondary programs in twenty-one villages over an area of 40,000 square miles. The B.I.A.'s Bilingual Education Center was absorbed into the L.K.S.D.'s Bilingual/Bicultural Department in 1980-1, and this department became the locus of teacher training, materials development and program monitoring for Lower
Kuskokwim's bilingual programs. Similar centers operate around the state in other school districts, but the L.K.S.D. center has continued to be in the vanguard of program and materials development, both because of the Delta's comparatively long experience with bilingual education and because of the funding base guaranteed by the large numbers of speakers which the district serves.
CHAPTER THREE
BILINGUAL EDUCATION, PROMISE AND PRACTICE

The Promise of Bilingual Education

Currently, parents look to the schools to provide young people with the moral and intellectual skills necessary to accomplish a balance in an unbalanced world. Although the Yupik people of the Lower Kuskokwim region have maintained their land base, a primarily subsistence lifestyle, and many aspects of traditional social structure into the present, there is now a widespread sense of cultural loss. Increasing state and federal restrictions on resource harvests and land use, as well as the proliferation of laws pertaining to health care and social services, have contributed to a growing sense of frustration and powerlessness. Along with the desire to preserve an essential sense of Yupik identity and tradition, exists the desire to operate effectively in the cash economy and to increase political power. Local control, here as elsewhere in the Arctic, has become a pressing issue, and a revitalization movement is growing.

In particular, bilingual education programs seem to offer a potential for resolving some of these issues. This is because bilingual education promises both improved skills in English, necessary for success in the dominant society's political and economic spheres, and the
maintenance of Native language and culture, necessary for survival in and perpetuation of the ethnic community. Americans often look to the schools to solve social problems; here, where the schools are the major representatives of the English-speaking world in the villages, they are naturally expected to help students mediate between the two cultures. Bilingual education is also an expression of local control within the schools: the instructors are Yupik and the materials are locally produced. In contrast, other classroom teachers are generally non-Native and use texts produced for mainstream American schools.

In the Alaska Administrative Code, these hopes are clearly expressed. The stated purpose of bilingual/bicultural education is to provide "equal educational opportunity" to children of limited English-speaking ability, "through the establishment of bilingual/bicultural programs of education (which) will provide more effective use of both English and the student's language, foster more successful secondary and higher education careers, facilitate the obtaining of employment, tend to bring about an end to the depreciation of local cultural elements and values by the schools, stimulate better communication between the community and the schools in solving educational problems, effect a positive student self image, allow
genuine options for all students in choosing a way of life, and facilitate more harmonious relationships between the student's culture and the mainstream of society." (quoted in Coon, 1979: 20).

Superficially, bilingual education is presented as a language policy. In fact, it is intended to be a rather all-encompassing social policy. It is assumed that a change in institutional language use, by itself, will bring about widespread social changes. Note that the definition of bilingual education (previously quoted) only includes the proviso that programs "may include elements of the culture inherent in the language." Aside from the ticklishly Whorfian question -- just which elements of culture are inherent in language? -- it is important to note that the incorporation of cultural features in so-called bilingual/bicultural education programs is here made optional: they may be included, but they do not have to be. The emphasis is on language use as the key to social transformation.

Social transformation, in itself, is a familiar educational goal. Earlier policies stressed the notion that Natives "ought" to change and become "civilized." Now, the necessity for economic and social participation in the "mainstream of society" can taken for granted, assumed to be mutually accepted by members of both
societies. But bilingual education promises more than entry into the dominant culture; it promises an open ticket to travel freely within and between two different societies. This is the desire of many minority cultures worldwide; to "walk in two worlds with one heart."

Fostering ease in two cultures is a problematic task, however, both to define and to achieve, particularly when a language policy is the avenue of approach. It will, argued that a program which attempts to facilitate intercultural relationships will have more success if it deals directly with such issues. In bilingual/bicultural education, the anthropologist's skills are needed to complement those of the linguist and the educator.

Program Development

Separating this idealistic policy from reality is a complicated set of rules and regulations. To begin with, Alaska state law requires bilingual education for students in five categories of language dominance, known as Lau categories (after the federal class action suit brought on behalf of Chinese students in San Francisco, Lau vs. Nichols, 1973). These include students who speak a language other than English exclusively (category A), those who speak mostly a language other than English, but also speak some English (B), students who speak a language other than English and English with
equality (C), students who speak mostly English but also speak a language other than English (D), and students who speak English exclusively but whose manner of speaking reflects the grammatical structure of another language (E). This complicated categorization is intended to reflect the reality of multilingual situations, in which speakers may enter school with varying degrees of competence in one or more languages, or may speak a local variety of English which is influenced by another language. Determination of a child's placement in one of these categories depends on parental perceptions of the child's language use in conjunction with language dominance testing and observation in the schools. These determinations, like the categories themselves, are not precise: characterizations such as "mostly," "some," and "with equal ease" are difficult to measure. At the same time, a student's Lau category is the significant factor in determining what type of bilingual education, if any, he receives. Bilingual funding to the schools is also proportional to the number of students in each category.

For students in categories A - D, schools may offer one of several types of programs (federal law does not require bilingual programs for category E students [Suetopka-Duerre, 1982: 30]). For elementary students in categories A and B, those clearly dominant in a language other than English, a program may be "bilingual/bicultural,"

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or "transitional bilingual/bicultural." At the secondary level, A and B students may be offered either of the above or a "high intensity language training" curriculum. Category C and D students at all levels, those fully bilingual or somewhat English-dominant, may be offered a bilingual/bicultural program, an English as a Second Language Program, a "supplemental English skill and concept development" program, or a Language Other Than English as a Second Language program. For category E students, any of the latter except a bilingual/bicultural program is an option. The law, however, does not describe these different program options, so individual schools and school districts have a bewildering degree of flexibility. At the same time, the "bookkeeping" tasks associated with bilingual programs sometimes threaten to take precedence over the programs.

Funding is directly tied to the number of students in each category, determined by numerous forms and a formula based on school attendance (L.K.S.D., with its strong Native language population, receives about one-fifth of the state's bilingual funds). As a result, bilingual educators whose strength is a commitment to and familiarity with a particular culture often find themselves unwilling bureaucrats, when they would rather be idealistic educators. Some of the bureaucratic confusion in bilingual education is a result of the tension between advocates of local control, who seek the guaranteed flexibility to accommodate the
variable linguistic needs of specific populations and individuals, and state and federal authorities who are concerned with creating a structure to facilitate program administration. The resulting law is sometimes rigid in areas where flexibility is required, such as in the classification of students according Lau category, and ill-defined where structure would be helpful, such as in the lack of program models and implementation strategies.

The guaranteed funding formula also limits the state’s power to monitor bilingual programs, although it is the state Department of Education which is primarily responsible for this task. Suetopka-Duerre suggests that this, along with the ambiguity of the state’s administrative guidelines for bilingual programs, the small number of personnel assigned to evaluate programs, and the decentralized nature of the Lower Kuskokwim School District, fosters a situation of tremendous program variation on the village level.

Materials development and teacher training are the hands-on tasks of bilingual departments, limited by time, funding and precedent. Materials developers for the Yudik programs, for example, started their efforts completely from scratch. Beyond liturgical texts, there was simply no printed literature in the language. This is in contrast to some of the other languages for which bilingual programs are designed in the United States,
such as Spanish. Although Spanish-speakers must struggle for status in American society, still there are innumerable works of Spanish fiction and non-fiction which represent a prestigious literary tradition, and a good source of material for programs. Hispanic programs make up the vast majority of bilingual programs nationwide. In the 1970's, for example, there were 340 Spanish projects in fifty states. The remaining eighty-five projects represented sixty-seven different language groups (Epstein, 1977: 79). Only one of these was a Yupik program. Thus, while Hispanic educators can tap a large network of people involved in similar programs in the U.S., Yupik educators have been extremely isolated, both professionally and geographically.

With no indigenous literature, and no professional network, educators had to draw models either from related languages/cultures, or from English. Although there were no other bilingual programs in Alaska at the time, there were some efforts in Canada, and a large body of Inuit writings, some original, existed in Greenland. These materials were of limited use, however, because of the extreme differences in the Inupiaq and Yupik languages, the existence of a number of divergent orthographies in those two countries, and the difficulties of communicating between rural areas.
across international borders. Most significantly, perhaps, the materials had to fit into an American educational model.

The original PEP program was transitional in nature; kindergarten students were instructed only in Yupik, with subject matter repeated later in English. Each year the amount of English was increased and the amount of Yupik, decreased. Of course, the English curriculum was not entirely comprehensible to Yupik students entering school, and so adjustments in cultural content were also made. These adjustments involved such things as the familial and environmental settings of children's stories, for example. But the structure of the program was defined by standard divisions (Language Arts, Mathematics, and Physical Sciences) and the majority of the materials were translations and adaptations from English.

These materials have recently come under some criticism for incorporating not only English cultural concepts but also English grammatical structure (Mather, 1986: 15). In retrospect, Irene Reed, director of the Alaska Native Language Center and the linguist who spearheaded the PEP Project, feels that they could have been more appropriate. In its time, however, PEP was a radical innovation, and had it been any more radical, it might never have received support. As it was, PEP marked
the beginning of organized Native involvement in both curriculum development and teaching.

With Native instructors speaking Yupik in the classroom, school became immediately more accessible to the students. Whatever the PEP program lacked in terms of beauty and sophistication (the need for high speed, low technology, and low cost production dictated that materials would be black and white, non-durable, and simply illustrated), it made up for by having Native teachers. A film study by John Collier, Jr. (.973) clearly demonstrated that Yupik children visibly responded better to Yupik instructors, even before bilingual materials were used. In the 1980's, as notions of communicative competence and the ethnography of speaking become more sophisticated (c.f. the works of John Gumperz, Dell Hymes, Susan Phillips, and, for Alaskan Natives, Ronald Scollon), research on communicative styles confirms that pacing, turn-taking, and gestural signals are synchronous between members of the same linguistic community, and asynchronous between members of different linguistic backgrounds. And, in addition to sharing interactive styles, students shared cultural values and expectations with teachers from a similar background. As much for these reasons as for the language of instruction, Yupik students and educators greeted bilingual education with relief and enthusiasm. Debate over who should teach Native students (Native or non-Native teachers, and in what
ratio) continues to rage (Sharpsteen, 1983), but bilingual education remains the one area that has an unambiguous claim to Yupik-speaking teachers.

Over the years, however, the shortcomings of the PEP program became more obvious. People who were not directly involved as bilingual educators often questioned whether or not it "worked." That is, as a transitional program, did it ultimately improve children's English ability? In an attempt to answer this question, Sue Hare, LKSD Superintendent, statistically analyzed the data for the school years 1982-3 and 1984-5 from sixteen LKSD schools, comparing scores on the California Test of Basic Skills (CTBS). Her study indicates that, as shown on standardized tests, children educated first in Yupik have not developed better English skills than their peers who were forcibly immersed in English. Test results do suggest that reading and language achievement are comparable between ninth and tenth graders who participated in PEP during the primary years and those who had no first language program. In other words, they have not surpassed their peers in English development, but they have kept pace with them. In addition, of course, they have gained Yupik skills, which are also quantifiable, and perhaps other benefits such as self-esteem and cultural awareness which are less measurable. In terms of the purported goals of bilingual education, however, the latter advantages do not "count."
Bilingual education research in other cultural contexts shows similar findings, and has led to much debate over the question of why bilingual programs do not necessarily bolster general academic achievement. In addition to the ironic fact that the major success of bilingual programs may be in their unmeasured results, another major problem is that program success may also be influenced by social variables as yet unknown and/or unmeasured. The "utilitarian" emphasis in bilingual education evaluation, which stresses the overall needs of all individuals in society, with a particular emphasis on those in the economic and social mainstream, is contradictory to the very constitution of bilingual programs, which are designed to meet special and individual needs of a minority student population (Gonzalez, in Padilla, 1981: 382-6). Evaluation on the basis of standardized testing and behavioral objectives is also impossible because no one knows how long it "should" take for bilingual programs to have measurable results, such objectives can not measure longterm social change, and bilingual programs have diverse goals, many of which are not assimilationist (ibid.: 388).

In the meantime, while the success of L.K.S.D.'s program, like others in the nation, was debated, bilingual department personnel continued to produce new materials and programs, building on accumulated experience and searching for improvements. With the paucity of material available,
however, it proved almost impossible to jettison earlier mistakes. In village schools, the most flawed works stand side by side with the best, and teachers are understandably loath to throw anything out. A few books have been revised or reillustrated, but materials development efforts have also had to focus on filling large gaps in the rest of the curriculum. For one thing, the PEP Program only extended to the third grade. What happened to students in the fourth through twelfth grades?

It soon became apparent that the transition to English in the fourth grade was too abrupt. For one thing, children still spoke English as a second language, and needed to improve their skills. At the same time, the PEP Program had taught Yupik literacy and acknowledged the unique nature of Yupik life -- but then there was nothing else for the children to read in Yupik, and no continuing support of the culture in the schools. The confusion in goals for bilingual education became more acute. What did the children need: ESL, Yupik, or both? It became clear that many people actually wanted a maintenance program, which would enforce cultural values as well as language, and not simply a program which transitioned students to English. In other words, the stress on Yupik language and culture gave bilingual education its popular worth; but at the level of state and federal policy, this aspect was merely incidental to the program's goals. Those who
supported Yupik education on its own merits opted for continuing programs beyond the third grade. But those who looked for English competency as the main outgrowth of the program also realized that the transition in the fourth grade was too abrupt. This added up to continued support for bilingual education beyond the primary years, although from people with varying philosophies.

Around 1980, there was a headlong attempt to create a program for grades 4 - 12. L.K.S.D. and the Lower Yukon School District contracted the work to a resource center located in Anchorage, which had a short time and a large budget to complete the project. The enterprise became entangled in district politics and ended in lawsuits and the demise of the resource center. A series of texts were produced, however, comprising the Developmental English Language Program and the Developmental Yupik Language Program. In the melee, very few copies of the texts were printed, and they are now difficult for teachers to obtain, although some remain in use. In terms of content, the Yupik materials were the victim of extreme conflicting interests, representing many notions of what bilingual education "should be." The texts were divided into thematic lessons, which related well to cultural concerns, but consisted of a pastiche of grammar, vocabulary, and translation drills that simultaneously tried to teach Yupik as a second language to some students, reinforce Yupik as a first language to
others, and also reflect all of the dialectical and regional differences represented by the two school districts. In the end, the books were more useful as an additional teaching resource than as a coherent program.

Meanwhile, the L.K.S.D. bilingual department, newly merged with the BIA bilingual education center, was busily producing readers and activity books to supplement the PEP materials. A new administrator advocated the production of high-quality full-color Yupik materials, in order to bring them up to the standards of professional English-language texts. Rapid production of materials was facilitated by "gluing-over" Yupik translations in commercially-produced English children's books. Expensive and attractive Yupik books were also published, including reading pre-primers. Schoolchildren and village teachers appreciated the new look, which raised the status of Yupik materials.

During this period of transition, before L.K.S.D. assumed control of the BIA elementary schools, the school superintendant thought that bilingual program development should focus more on the secondary schools, for which the district was primarily responsible. As a result, high school materials suddenly became a priority over filling in materials for the middle grades.

By the time students reached high school, there was less concern about making the bilingual program a
steppingstone to improved English. Even in villages which looked dubiously on the use of Yupik in elementary schools (saying that the school’s purpose was to teach Western ways, and Yupik could be preserved at home), there was support of cultural and linguistic maintenance in high school, at least as an elective. In high school, problems of suicide, substance abuse, and confusion over life goals became apparent to adults. There was an obvious need for cultural integration, and parents strongly wished to inculcate traditional values and knowledge, before it was “too late.” Furthermore, since these students had been in English-speaking classrooms for years, it was now less a question of just helping them survive in a foreign environment, as it had been in the early elementary classes. The Yupik high school language and culture program, which will be described in detail in this thesis, grew in this context.

Teacher Training

At the same time that materials and programs were in development, instructors had to be trained. Some of the early bilingual instructors had classroom experience as teacher’s aides, while others were high school graduates with no previous experience. In the early years, the BIA conducted intensive training sessions during the summer months at the Oregon College of Education. Here, bilingual teachers were instructed in Yupik literacy and grammar and
trained to use the PEP materials. They were also taught standard methods of classroom management. During the school year, the bilingual center offered on-site training by itinerant personnel, and workshops in Bethel taught by instructors from the community college and the University of Alaska.

Since 1974, the Alaska Department of Education has also sponsored an annual three-day Bilingual-Multicultural Education Conference. A high percentage of the bilingual teachers have attended these conferences, where there is an opportunity to discuss issues with educators from other areas of the state and to be exposed to the latest findings on bilingual education. Guest speakers and "Outside" presenters have included such linguists and educators as Christina Bratt-Paulston, Stephen Krashen, Geneva Gay, and James Cummins, to name a few. Given the extreme isolation of teachers and bilingual department personnel, this conference has provided needed exposure to programs, materials, and people in other areas of the state and country. With the decline in state revenues, however, the conference has been cancelled for 1987.

Summer training sessions were discontinued for several years after the establishment of the Lower Kuskokwim School District, to be replaced by a less extensive week-long training session held each winter.
A summer session was offered in Bethel in 1986, but the midwinter training for 1987 has been cancelled, like the state conference, due to lack of funds (it has cost about $100,000 a year to sponsor this training). Itinerant trainers have continued to provide on-site services throughout each school year, and teachers come to Bethel occasionally for special workshops (concerning, e.g., secondary-level methods, critiques of materials in development, or literacy training). In general, training continues to emphasize literacy skills, language teaching techniques, and an introduction to curricula and materials. In addition, sessions often spotlight current methods and programs which have gained popularity in the rest of the country, such as the Writing Project, which encourages fluid and spontaneous writing, and the Total Physical Response Approach to second language teaching, which emphasizes "natural" language acquisition rather than formal grammar instruction.

The school district has a career ladder program in conjunction with the University of Alaska, Fairbanks and its branch in Bethel, Kuskokwim Community College. The career ladder is intended to encourage Yupik employees to earn teaching certificates. The Cross-Cultural Education Development Program, which offers distance education through the University of Alaska, has also
trained some teachers from the Lower Kuskokwim District. To date, the number of certificated Yupik teachers remains very small -- 7.6% of the 262 certificated teachers and administrators -- although this does represent a gradual increase over the past decade. Certificated teachers graduate with a variety of specializations; not all major in bilingual education.

The sum total of the training situation is that teachers now cover a wide spectrum of abilities. Some bring many years of training and experience to their jobs. They are mature adults with respected positions in their communities, and highly effective teachers. Others are young, inexperienced and unsure of themselves, hired directly out of high school, and required to pick up training in installments. In between these two extremes are many who have some training and experience, but feel generally isolated within their separate villages.

L.K.S.D.'s Bilingual Education Policy

The L.K.S.D. Regional School Board has the ultimate control over many district policies, including bilingual education. Although the publically elected membership varies, a large majority of the Board remains Yupik. This body has held innumerable discussions over the past decade about the purpose and nature of bilingual education. While there is no question of the Board's support of both Native
language and cultural skills and improved English skills, individual board members have disagreed about the degree to which Yupik skills should be emphasized at school, and have frequently requested clarification of bilingual program goals and objectives. The following discussion will serve to illustrate the diversity of opinions surrounding bilingual issues, among the public which the board represents. While the board continues to debate these issues, they have reached a consensus on general philosophy, which is reflected in the official policy which they have adopted:

Bilingualism is more than the ability to speak two languages. It is the ability to live and work with a positive sense of one's self, with comfort and understanding, in any area of the world where there are two or more distinct cultures. The Lower Kuskokwim School District bilingual program will assist children to develop the bilingual/bicultural skills necessary to participate in and partake of the best of two worlds:
- Encourage literacy in both Yupik and English
- Take pride in and encourage the acquisition, retention and appreciation of Yupik culture
- Adapt knowledge of Yupik language and culture to present day living
- Retain and/or acquire subsistence skills, as well as the technical skills necessary to adapt constructively to a changing world
- Develop a respect and appreciation for the dignity and worth of other cultures and individuals.
It is the intent of the Lower Kuskokwim District Board of Education that this policy will be reflected in the District's curriculum.

Here, the purpose of bilingual education is to reinforce Yupik language and culture, and to teach cross-cultural skills. The only specific reference to English is
in the encouragement of literacy. Unlike federal and state policies, there is no talk of mainstreaming, and no view of people from the minority culture as "disadvantaged."

Bilingual education is not strongly conceived as social reform. Bilingualism is a fact of life, and it is assumed that the best way to get on with this dual existence is to learn both sets of cultural rules.

Moreover, the philosophy stresses the strength of Yupik culture as a base for coping with change, in the suggestion that one can "adapt knowledge of Yupik language and culture to present-day living." Finally, there is an undertone of global consciousness in references to "any area of the world where there are two or more distinct cultures" and "appreciation for...other cultures and individuals." Where the state policy speaks of "elements of culture inherent in the language," the district policy speaks to cultural survival in broad terms, including survival of Yupik culture, survival in two particular cultures, and survival in a multicultural world.

In practice, it is not the district school board, but each local advisory school board which must choose what type of bilingual program will meet the needs of a particular site. The regional board now recommends three different models, depending on the language situation in each village (degree of English and/or Yupik fluency as specified by Lau category). (FIGURE 1)
Plan I is intended to address the needs of students who are not fluent speakers of Yupik, but whose English is considered to be limited and/or non-standard as well. It calls for instruction in Yupik as a Second Language, English as a Second Dialect, and English "reading and language." Suetopka-Duerre (1982) calls this an "enrichment restoration" approach. Plan II, designed for Yupik speakers (in Lau categories A and B) is transitional in grades K-3, and is based primarily on the PEP model. In order to encourage the use of this model, the district intends to give additional bilingual funding ($30,000) to all sites which use Plan II, beginning in fiscal year 1987. In grades 4 - 8, Plan II calls for an "enrichment maintenance" approach. The requirement for Plan III, a minimal general recommendation for the bilingual program, is for "enrichment maintenance" courses from grades kindergarten through eighth grade.

Except for kindergarten and first grade under the Partial Maintenance Bilingual/Bicultural plan, where more instruction is in Yupik, the overall policy translates, in Plans I and II, into one hour or less of Yupik in grades K-8 and up to about one and a half hours of English as a Second Language and/or Dialect. Secondary programs, not described in the Yupik/English Plan, are of the "enrichment maintenance" type, and are variously mandatory or elective in different schools, as decided by the local advisory
Language Other than English is a Second Language

I. Lau categories C/D/E/F

II. Lau categories A/B

III. Minimum

HOURS PER DAY

FIGURE 1: L.K.S.D.'s Yupik/English Plan - Recommended hours per day spent in bilingual instruction (Yupik as a Second Language, English as a Second Dialect, Yupik, English as a Second Language, or Bilingual/Bicultural Instruction) for grade levels K - 8. All other schooling (Content Area Instruction) is in English. Graph I shows recommendations for Language Other Than English as a Second Language Students; II shows a Partial Maintenance Bilingual/Bicultural Program, and III shows a Bilingual/Bicultural Program. Lau categories are specified for Plans I and II.
school boards. Content areas (regular subjects) are taught in English, under all of the plans (except, again, in grades K and 1 under the modified PEP model, Plan II).

As these models show, "bilingual education" in Alaska encompasses both English as a Second Language (ESL) programs, and Native language programs, which are more generally thought of as "bilingual" programs in the Lower 48 states. In fact, as a national issue, people representing these two groups are often seriously at odds.

To quote Kenji Hakuta (1986:227):

The debate over whether language minority students are best served by bilingual programs (in which the teachers 'happen to be' largely of the ethnolinguistic group of the students and belong to an organization called National Association for Bilingual Education) or by English as a Second Language Programs (in which the teachers 'happen to be' largely native English-speakers and belong to an organization called Teachers of English to Speakers of Other Languages) is cloaked in what (Christina Bratt) Paulston calls a 'pervasive technocratic concern with methods, techniques, curriculum and teacher training'... yet it can equally well be understood in terms of social conflict, for at stake are jobs and prestige.

In Alaska, a basic difference in cultural orientation between ESL and "bilingual" proponents is masked by the fact that bilingual education departments include both. The bilingual education law allows each village/school site to choose whatever approach -- transitional, ESL, and/or maintenance -- they think will most benefit their students.

Both in the L.K.S.D. area and statewide, the question "Are
you in favor of bilingual education?" is therefore relatively meaningless, without careful definition. Villages which have only an ESL program can legally satisfy the requirement that a bilingual education program be available for their students.

The intent of state and federal laws, then, differs considerably from the spirit of district policy. And the district program models are more in line with legal requirements than the district's own policy. Finally, the inevitable question is whether either academic mainstreaming or bicultural fluency can be fostered in programs that average a small proportion of the curriculum, include both Yupik language and ESL components, and are not integrated into the core curriculum.

Ramona Suetopka Duerre suggests that L.K.S.D. programs are generally successful from the local standpoint, because "each new program develops politically within the community's unique language and socio-political contexts. However, in practice, a balanced learning experience is not being realized, because both Yupik and non-Yupik teachers emphasize only their portion of the education agenda. The result is that students do not become equally proficient in two languages." Elsewhere, she says that federal and state goals for bilingual education are therefore not being met at L.K.S.D.. While Suetopka-Duerre sees this situation as a
problem of policy implementation, from the top down, it can also be understood from a different perspective. The desires of Yupik people are varied and sometimes conflicting. They do not know with certainty what types of education will best meet their own needs, although they have strong opinions based on personal experience. The school system is conservative and presses its own educational priorities. At the same time, administrators are seriously concerned with meeting public expectations. Thus, the confusion in goals and policies does not stem, as Suetopka-Duerre suggests, only from the administration. Rather, it reflects the uncertainties inherent in a fluctuating intercultural interaction.

Predictably, then, both support for and opposition against "bilingual programs" have come from people holding contrary opinions. And it is important to point out that neither support nor opposition falls out clearly along ethnic lines, although there are some obvious trends.
CHAPTER FOUR
OPINIONS AND CONTROVERSY -- WHAT DO PEOPLE REALLY WANT?

As this brief history has shown, bilingual education in the Delta has been shaped under conditions of shifting priorities and institutional reorganization, and carried out within loosely defined program obligations. Teachers, students, parents, principals and school board members all express strong opinions about the subject, exerting pressures on the educational policy-makers in several directions at once. The following chapter outlines the major points of discussion.

In 1983, the LKSD administration decided that a survey of community members, school staff, teachers, students, and advisory school board members might help to clarify public opinions, and to determine where consensus might be reached. The survey was written by Yupik and non-Yupik staff of the bilingual/bicultural department, and early drafts included a number of open-ended questions. LKSD administrators, however, requested revisions to make the survey easy to tabulate by computer, and the final form consisted only of multiple-choice questions.

The "Needs Assessment" (1983a), as it was called, was administered by the staff of the bilingual department, who travelled to each LKSD village, and interviewed all junior
high school and high school students (1190 respondents), staff (135 Yupik associate teachers and aides plus 202 certificated teachers and principals), and about 10% of the community members (90 advisory school board members and 575 parents), a total of 2192 respondents. As noted earlier, virtually all of the certificated staff are non-Yupik. All other respondents, except for the occasional non-Yupik teacher's child attending school in a village, are Yupik.

Students were surveyed in the schools, in relatively large groups. The purpose of the survey was carefully explained, and then assessors read questions aloud, one at a time, in both Yupik and English. Students were given time to consider and answer each question before proceeding to the next. Teachers were also interviewed in the schools. Some filled in the survey during lulls in their classes, others gathered in the teacher's lounge, and almost all spent time after school reviewing their answers. Many wrote extensive comments on the back and approached the interviewers with verbal additions to their responses; the assessment was seen as an opportunity to express strongly-held convictions. Advisory school board members were either interviewed during board meetings, or individually at their homes. All parents were interviewed in their homes, often over leisurely cups of tea.

Although these variable settings may have affected some responses, they had the virtue of reaching a large number of
people in each village, including parents who feel that their opinions in such matters are not always reflected in "representative" structures such as the advisory school boards.

The assessment was tabulated at the University of Alaska, Anchorage, and a number of breakdowns were prepared. Each village school received a graph showing its own village's responses. In addition, the compilers prepared a summary report for all of the villages which grouped respondents as 1) Students, 2) Certified Staff, and 3) Other Important Adults. The third category unfortunately grouped together three smaller groups (parents, advisory school board members, and associate teachers and aides) in order to partially offset the unavoidably large discrepancies in the size of the groups sampled. This grouping, however, virtually lumped all Yupik adults together, obscuring any differences in response by people who worked in the school system, those who were designated to represent the public in school matters, and those who were not directly connected with the schools. In administering the survey, and reading through individual responses, it was apparent that, as suggested above, advisory school board members did not always reflect public opinion, and that aides and associate teachers showed interesting correspondences and contrasts with other school staff. These differences, however, are not reflected in the final tabulations.
The summary tabulation included ten questions of the original seventeen which were considered to be the most helpful for school policy planning. In addition to graphing district-wide trends, it showed responses broken down by "village clusters," groups of villages in the same geographic area, with Bethel, the comparatively large regional center, treated separately. Again, this breakdown was not as illustrative as it might have been, because some clusters included both villages where Yupik remains a strong first language, and those where English is the dominant language. The groups also did not correspond closely with recognized regional groups, which have both an historic and present-day reality for Yupik residents. Despite these many shortcomings, however, the survey is informative. Here are some of the significant responses.

Question 1 asks respondents "What do you want your school's bilingual program to do? a) Teach English as a Second Language  b) Teach the Yupik language  c) Teach both but more English than Yupik  d) Teach equal amounts of English and Yupik." The great majority of non-Yupik staff (64%) wanted more English than Yupik taught in the bilingual program. Another 12% wanted English as a Second Language. Less than 2% suggested more Yupik than English, and 16% wanted equal representation of the languages. Note that these responses apply only to the bilingual program, and not to the rest of the school day, in which subjects are taught in English.
Yupik respondents, including students (54%) and "other important adults" (62%), were more in favor of equal representation of the languages in the bilingual program. Other responses for these two groups included approximately 22% of each who agreed with the majority of certified staff, and 2-4% who wanted only English as a Second Language emphasized in the program.

Thus, there is substantial agreement that both languages should be taught, but more non-Yupiks want the emphasis to be on English, while more Yupiks want equal emphasis on the two languages. This is one question which showed clear differences by ethnic group, and not much variation from one village cluster to another. Responses to this question seemed independent from factors such as the language dominance of people in the village, or proximity to Bethel, the predominantly English-oriented regional center.

The next three questions specifically ask how much time each day students should spend studying English as a Second Language, Yupik, or Yupik as a Second Language. For each question, choices ranged from 0 - 5 hours. Since most of the villages in the study were strong Yupik language villages, there was very little interest in Yupik as a Second Language, for any of the groups. This concern showed up more clearly in graphs for individual villages which have experienced a decline in Yupik language use. Almost equal proportions of all groups (20 - 32%) wanted either 0 or 1 hour a day spent
studying ESL. For each group, some respondents also answered 2, 3, or 4 hours, and a few wanted the entire school day spent in ESL instruction. Most people in each group also wanted 0 or 1 hour spent in Yupik instruction, with a larger percentage of the responses in the 1 hour category (about 34% of the Yupik respondents and 52% of the non-Yupik staff). The remaining Yupik respondents wanted two or three hours a day, but only 8% of the non-Yupiks voted for the 2 hour option, and less than 2% voted for 3 hours.

Again, Yupiks were generally more interested in Yupik instruction than non-Yupiks. Many considered two or three hours a day of Yupik a desirable amount.

Another question asked respondents to predict "What do you think the children will do in the future?" Possible answers included. "remain in the village after graduation; go to college or trade school; go to college or trade school but return to a village; leave the village but stay in the area; or, leave the area completely." The question has some built-in ambiguity, as students may have answered what they themselves plan to do, while teachers or others responded in terms of what they thought the children in general were likely to do.

At any rate, the interesting result was that students thought they were likely to go to college or trade school (18%) or to go to school and then return to the village (36%). Only 16% expected to remain in the village after graduation. Other important adults were about equally divided among the
Certified staff, however, were much more likely to think that students would stay in the village (32%) and only 8% thought young people would continue schooling, while 20% expected them to go to school and return home.

What does it mean that students have higher educational goals for themselves than many of their teachers think they will realize? The schools emphasize and reward academic achievement; it is reasonable for students to think that they are being prepared for college, and to desire the advantages of higher education. Only a small percentage of students' education is aimed towards "lifeskills," which include checkbook balancing, tax management, understanding the operations of Native corporations, and other interfaces between the individual and various bureaucracies. An occasional cultural heritage class teaches about hunting, gathering and other skills associated with village life. Beyond these subjects, only bilingual education classes have the potential of being "culturally relevant." Thus, the schools appear to be preparing students for a future that the teachers do not always expect them to have.

The Certified Teachers' ambivalence about the future of their Yupik students is mirrored in diverging educational philosophies. Some would like to see a curriculum that is basically applicable to village life, while others feel that
the schools are there "to introduce students to Euro-American culture, whether that is interesting and relevant to the students or not." (Jacobson, 1984: 37). Steven Jacobson, a professor of Yupik language at the University of Alaska, strongly feels that the curriculum must strike a balance between these two extremes, recognizing the students' needs for relevance without limiting education to

lessons on subsistence living and Yup'ik traditions with a little English thrown in so children will be able to deal with the outside world when they have to. Yup'ik villages are part of the same world as everyone else is, and the interests, talents, and dreams of Yup'ik schoolchildren are as varied and individual as those of children everywhere else. Subjects such as pre-Revolutionary American history, Greek mythology, geometry, astronomy, poetry, and geography should be as interesting and eventually as relevant to a child in a small, remote Yup'ik village as to a child in a large city. (op.cit.)

In my experience, there is no danger that the curriculum will become too narrowly defined in the direction of cultural relevance. LKSD requirements are quite standard, as are most of the teachers' approaches to instruction.

Survey questions 9 and 10 ask "What do you want students to learn in Yupik classes?" and "What do you want students to learn in English as a Second Language classes?" Here, again, Yupik adults were more concerned with Yupik skills, including reading, writing, speaking, translating, traditional knowledge and skills, and Yupik identity, than their non-Yupik counterparts, although healthy percentages of all groups (40 - 74%) wanted all of these things taught. Non-Yupik adults were
more concerned with English skills, and certified teachers overwhelmingly endorsed "how to effectively communicate ideas" (88%), literacy (76-80%), and good speech (82%). Students were less enthusiastic about learning all of these skills, all responses averaging about 40% in favor. Yupik adults endorsed all areas, but showed a consistently less favorable response than the certified staff. And Yupik adults also gave proportionately more endorsement to "how to make a living outside of the village" and "how to read and write for college" than the other two groups. This was consistent with their expectations that students would go on to seek employment and higher education outside of the villages.

A similar pattern prevailed for the question of whether English or Yupik proficiency was more important in "assisting children to meet their life's goals." While 88% of Yupik adults and 76% of the students thought that both are equally important, only 56% of the Certified teachers agreed. All but two of the remaining certified teachers thought that English was more important. Certified teachers, then, were clearly divided over the issue.

The next question asked "Are Yupik language, culture, traditional skills and values important?" and "Where should they be taught?" Of the students, 92% answered that these were important. The other two groups were strongly in agreement (98% answered "yes"). As to where they should be taught, 88% of the students, 86% of the certified staff, and
96% of the other important adults thought they should be taught by both family and the school. The remainder of the teachers (14%) thought they should be taught by the family only; the remainder of the students (8%) thought they should be taught by the schools only.

This is a very interesting pattern of responses because it indicates that there are different expectations as to who should transmit Yupik traditions, and where. While most people clearly think that responsibility lies both with relatives and school teachers, a significant number of non-Yupik teachers would like to see the school strictly as the agent of Euro-American culture, enforcing the cultural separation between home and school. It is equally interesting to note that some students have come to expect the school to be the sole agent of enculturation, and do not see the home as a place for transmitting Yupik culture. Some of these may be students whose home life is disrupted by alcohol abuse and violence; for them, Yupik classes in school may provide some of the cultural continuity that is lacking at home.

Traditionally, the formal task of ensuring cultural continuity fell to the community's elders. Once boys reached the age of five they moved from their mothers' homes to the qasgiq, the communal building where adult men worked and firebathed, and where community religious ceremonies were held. Boys in the qasgiq were held to a strict code of
behavior; they were trained in personal discipline, and they spent many hours listening to older men relate moral teachings and stories which modelled correct and prudent behavior in various life situations, from courting to hunting. Girls were also instructed in appropriate skills and values by older female relatives in their households.

Today, elders have much less contact with youth. In an attempt to remedy this situation, formal opportunities for traditional teaching are now set up either in the context of school programs (bilingual education classes and cultural heritage activities) or at "elders' conferences," often co-sponsored and supported by the churches. At the first regional elders' conference held in 1984, participants discussed the difficulties of re-establishing the teaching relationship. (The following quotations are taken from the transcripts of that conference, as published in English translation [Alexie, 1985]). John Avakumoff (whose Yupik name is Capuksuaralek) voiced this concern: "We wondered, how were we to speak to these young people? Would they believe what we told them? We elders realized, too, that the young people were not sure how to ask questions of us."

While some elders berate the younger generation for not listening, and for abandoning valuable traditions, many take the blame upon themselves. In the words of Matthew Beans (Kumangulria), "I often hear it said that young people
are changing. It isn’t their fault... Basically, our young people are the way that we were. But, because we haven’t taught them, their values have not been developed as ours were. People say negative things about our younger generation. Actually, the fault is the elders’, we are not guiding as we should."

The elders, aware of the depth and quantity of Yup’ik traditional teachings, have mixed feelings about their relationship with the schools. Edward Wise (Maqarualek) says, "Things have changed today. The major cause of this change is education. School takes time away from traditional activities....In our villages, we should meet and plan for our elders to teach the young people....This way, we wouldn’t depend completely on the school." Evon Albrite (Cingarkaq) adds, "Once they start going to school, they seem to listen more to their teachers than to their parents." John Peter, (Cung’uq) thinks that increased participation in the schools may help: "The schools and those who have left and returned with western ideas have helped change our children. We elders are changing also. How are we to return to our ancestors’ way of life? Perhaps our way is through involvement in the schools. This way we can choose elders who are able to teach. We can return a little to our traditional ways." Nick Charles (Ayagina’ar) echoes this view: "I feel (our culture) should be
taught in the schools. Schools are the gathering places for the young people today...If there were people to teach them our values in school, it would be good. Even if the lessons were short....Whenever we set time for the young people to get together (outside of the schools), they don’t all come. I think that we could reach them in the schools."

Where traditional education was once an unquestioned part of daily life, it now constitutes a scheduling problem, competing with the established school system for time slots and status. Some people have suggested that the qasgiq be revitalized; one proposal for such a revival in the Inupiaq region of Alaska, by Edna Ahgeak MacLean of the University of Alaska (MacLean, 1985) calls for the establishment of the traditional community house as a separate Native educational system, in which only the Native language would be spoken. The school would then be responsible for its normal program of studies (in English) and for formal teaching of the Native language by means of grammar, orthography and conversational classes.

This model has not yet been actuated in any community. To date, elders have been brought into the schools to teach the children, instead. Since traditional teaching involves uninterrupted monologues and demonstrations of activity, it can easily conflict with the school’s rigid format. If an elder teaches during a regular class period, he/she is
interrupted when the bell rings to change classes. For this reason, elders are often involved in week-long cultural heritage programs where the time is not apportioned into periods. This format is more satisfying to everyone, but the total contact with traditional teachers, in either case, is relatively limited, and the school environment itself poses limitations on teaching. There is always a sense of juggling educational priorities, with traditional teaching as an important, but not crucial, part of the curriculum.

Seen in this context, Yupik responses to the Needs Assessment thus reflect a general feeling that opportunities for traditional education are limited both inside and outside of the school, and that the maintenance of cultural traits and values can not be taken for granted anymore.

The final question on the survey was whether or not courses in Yupik Language and Culture should be required for graduation. 80% of the Yupik adults and 62% of the students felt that they should be. The certified teachers were, again, divided: 52% in favor, and 48% against.

This makes the differences in priorities quite clear. When Yupik classes must compete against required courses, support diminishes among the non-Yupik staff. Yet a overwhelming majority of the Yupik teachers and community members see Yupik classes as equally important to algebra, United States history and other requirements. The students' response is more difficult to interpret. While a good majority
support the option, their response is not as strong as that of Yupik adults. Whether this merely reflects resistance to the idea of yet another course requirement, or whether students are beginning to adopt a viewpoint more closely approaching that of their non-Native teachers, is difficult to ascertain.

An overall analysis of the Needs Assessment suggests that, in the broadest sense, almost everyone agrees that Yupik culture and language belong in the schools. Most Yupiks think that Yupik courses are essential. Non-Yupiks disagree on just how important these courses are. And there is a considerable diversity of opinion as to the content and amount of time spent in such classes among all those who support the concept, Native and non-Native alike.

Those among the non-Native teachers who give less weight to Yupik culture and language classes than they do to English and English as a Second Language Programs generally argue that they are simply being realistic. They point out that English is the language of business, technology, and, increasingly, of worldwide communications. Yupik, on the other hand, represents only a small minority of speakers whose language will, they predict, inevitably decline and disappear under the prevailing socio-economic conditions. According to one teacher,

The future of the Yup'ik language is questionable. In twenty years the Yup'ik Eskimo language may be English. Educators of both languages must realize that the monetary system of the United States and the specific area of Bethel is based on the English language.
Yup'ik students must be better prepared to deal with that. Also, it is time for parents to begin taking responsibility for the language and culture of their own children [instead of relying on the schools]. As long as cultural values, beliefs and attitudes are taught in the home by parents, the children will surely have them.

In other words, money talks -- and it speaks English, not Yupik.

Native teachers and students are also concerned with their economic future, but all share the experience of living in a bilingual environment where each language represents an entree into a separate social world, each of which is important. Some see the possibility of preserving their first language and culture outside of the schools, but most feel strongly that the schools should give equal representation to Yupik. They experience cultural erosion as a personal issue, and fear the consequences of total loss. No one argues that such a loss is inevitable, and should be faced as such. Both inside and outside of the schools, they seek to balance two realms of experience.

Yupik bilingual ("first-language") instructors, in particular, give clear and consistent answers to the question of why they think their work is important. They list concept comprehension, Yupik language retention, and cultural identity over and over again as the reasons why "it is good to teach in Yup'ik." Quoted here in translation from Yugtun Elitnauristet Qanemciit: Personal Stories of Yup'ik Teachers from the Lower
Kuskokwim School District (1983), are the opinions of eight Yupik teachers.

Marie Hoover:

When they are taught in their language, concepts are quickly learned .... It's also good because it helps to retain their language. The children in some villages, where they are taught only in English, speak only in English. We don't want our children to do that ...

Maggie Shultz:

A person (who is) growing needs to respect his ancestors....if a parent does not take care of thinking what might happen to his children, that person will not be wise. Yup'ik people will lose their identity and only become aware of Western society.

Olga Stevens:

We teach in Yup'ik so our children will not lose the language. If we don't teach them in Yup'ik, they will be ignorant of our culture. A student will learn faster if taught in Yup'ik because he/she is able to understand the language....Before the PEP Program was developed, what the students learned was (at a) low (level). But it went up after (PEP) was started....

Fred Napoka:

(We teach in Yup'ik) because it would not be good if we lost our Yup'ik language. A child's learning will progress a lot faster when (he is) taught in Yup'ik. If they are taught in English they will learn things that are not a part of our culture. So we need to keep learning in Yup'ik if we do not want to lose our language.

Irene Beaver:

It's good ... in order not to lose our language. Also, because it is important that they become literate in Yup'ik so that they can help their parents by translating for them.
It's good to teach Yup'ik because we don't want to lose our ancestors' language and we don't know some of our ancestors' language. It also makes me happy that students in villages are learning a lot ... of things we did not learn.

We Yup'ik teachers teach Yup'ik so that our descendants don't lose our language and so that they will learn literacy. If a Yup'ik-speaking student is taught in his/her language, he/she will learn fast, because he/she is able to understand the teacher and listens well. Before this, they were never taught in Yup'ik. But to help them, Yup'ik teachers were introduced. When non-English speakers first start school, they don't understand English. Yup'ik teachers help those students advance in their studies. We also don't want them to lose our culture. If a child becomes literate in Yup'ik, he/she will not forget (our ways). He/she will also be able to read to parents, and be able to help them the best they can. We parents will not be with them forever, that is why we need to encourage them. It will be good if they learn about our culture.

If there is no bilingual program, the children may be ahead in English, but they are weak in Yup'ik.

In conjunction with these expressed opinions of Lower Kuskokwim District residents, the Needs Assessment gives a good picture of the issues at stake in bilingual education. On a village level, however, decisions are made by consensus, not by majority. This limits the use of statistical studies such as the Needs Assessment. Eric Madsen, in "Decisionmaking in a Rural Alaska Community" (Barnhardt, 1982) gives a highly accurate description of the consensus process in a Yup'ik village. Consensus is achieved by discussions that are not
bounded in time; community meetings may or may not result in decisions, but are occasions for people to hear each others' opinions, and express or modify their own. Non-Yupiks present at such meetings may assume that statements of the people present are definitive decisions when they are not. Generally, ideas are actually coalesced by being circulated. Over time, thoughts are passed around a village as people visit together: "as (an original idea) evolves and improves, and as more community members begin to talk about it and espouse it, just so does it become consensus (sic) or community norm." (ibid.: 109)

Elders and particularly experienced people, who may not be those designated as official spokespersons, are respected in the consensus process. This is another factor which contributes to school policies that do not necessarily reflect a village's majority opinion. An influential principal or teacher, or an elder who feels that his own education would have been furthered by early immersion in English, for example, may have a strong say in a school's bilingual program. Suetopka-Duerre cites two examples where Advisory School Board members in different villages were turned against bilingual education by teachers' opinions: one is quoted as saying that "some teacher told me that if the kids learn in Yup'ik first it could ruin the child's life." Because of the tradition of local autonomy and respect for regional variation, the regional school board does not infringe on the
rights of each local advisory school board in these matters. What is good for one village may not suit another, and each must be given latitude in decision-making.

While the Needs Assessment is helpful, therefore, it does not take into account the basis for local decision-making about bilingual issues. The question of what people really want in bilingual programs is therefore complicated by diffuse authority, cultural traditions, and the fact that no one really has the answers as to what will best achieve a variety of far-reaching goals. Among the Yupik people, for whom the programs are designed, however, one thing is obvious: Yupik language study is interwoven with issues of Yupik cultural change and identity.

Given the complexity of this interrelationship, and the diversity of opinions surrounding bilingual-bicultural education, bilingual programs must be designed with clear intentions, careful research, and built-in mechanisms for revision and innovation by students, community members, and school staff. Such an approach would be ethnographic, accurately reflecting contemporary culture and cultural concerns, and collaborative, representing community control and ownership of the program, with appropriate involvement by professionals. Part II of this thesis elaborates the concept of collaborative ethnography and details a case study of program design for the Lower Kuskokwim School District.
CHAPTER FIVE
ETHNOGRAPHY IN COLLABORATION: AN ANTHROPOLOGICAL APPROACH TO MATERIALS DEVELOPMENT

The discipline of cultural anthropology is heavily based on ethnographic research. While the concept of ethnography has expanded over the years to include not only the overall observation and description of an entire culture, but, for example, a detailed analysis of a single classroom (sometimes called a "microethnography"), the basic approach is recognizably constant.

An ethnographer tries to set aside, as far as possible, his own preconceptions and biases in order to discover the cultural knowledge which people have as members of a particular group, and to learn how this knowledge informs individual and group behavior. Ethnographic description and analysis tend to reveal multiple layers of meaning in the most "commonplace" behavior; what people take for granted about themselves, the ethnographer sees as meaningful in a cultural context. An ethnographer may discover numerous contexts, both spatial and temporal, which help to elucidate the behavior(s). Ideally, the ethnographer observes a variety of situations and environments, over a sufficient period of time, to be able to distinguish the ways in which behavior is representative of cultural patterns, from the
ways in which it may be an individual, perhaps anomalous, occurrence. An anthropological knowledge of his own culture, and the cultures of other people in the world, helps the ethnographer decide what questions are relevant to the task. This awareness of human behavior leads him to expect, first, that a given action or event has meaning, and second, that its meaning may vary both within and among cultures.

In addition to being an acute observer, with a fund of comparative information with which to cross-reference observations, an ethnographer approaches the interpretation of cultures with certain theoretical tools. These tools come from the tradition of anthropology, and often from related fields. Basic to ethnographic interpretation are models of the specific and general interrelatedness of social phenomena, the "systems" of meaning and behavior which characterize human societies; these both derive from and make possible cross-cultural comparisons. In the research process, these models are continually checked against the primary data obtained through fieldwork.

While the ethnographic method, with its constant questioning of assumptions and careful observations, has unassailable strengths, in practice it also has clear inadequacies. Traditionally, ethnographers have lived in some culture other than their own for one or more years, and then returned to a scholarly community to write the results
of their research, at some remove from the intimacy and ambiguity of their field experiences. In recent years, the problems associated with this approach have become more apparent, and the powerful figures of singular ethnographic authority are diminished under global conditions of more rapid and comparatively democratic information flow. Anthropologists are now sometimes indigenous to the societies they study, and all anthropologists know that their studies are likely to be read by some of the people whom they describe. The authority of ethnographers (especially non-native ones) to set aside their own prejudices and achieve "objectivity" is more often questioned, and the existence of contradictory descriptions of a single culture contribute to renewed debate over the accuracy of anthropological interpretations. Re-examination of classic ethnographies now suggests that historical and personal conditions shape an author's fieldwork and writing in ways that need to be understood by readers (c.f. Clifford and Marcus, 1986).

Contemporary anthropologists are thus challenged to write both credible and creditable ethnography: to draw on the strengths of their academic skills with full consciousness of their limitations, to rely on broadly-based sources of information rather than a few "key informants," to obtain full consent for research, and to anticipate, as far as possible, the consequences of their work.
Anthropologists have tried different ways to work towards a balanced interpretation of cultures: team fieldwork, where a group of professionals work together, may help to diffuse the authority of a single ethnographer; autobiographical information supplied by the ethnographer(s) may help to inform readers of potential biases; participation in and review of the research by members of the culture may help to ensure accuracy and applicability.

Forming a Collaboration

In designing a cultural program for a Yupik school system, collaboration was emphasized on several levels. The two primary materials developers shared a common background in anthropology and Yupik language studies, and brought other complementary qualities to the work: one is male, the other female; one more knowledgeable about technology and material culture, the other about non-material aspects of culture. During our years in the Yukon-Kuskokwim Delta, we had also developed friendships and professional relationships with experienced bilingual staff.

These relationships were at the heart of the project, and they differed significantly from the standard "researcher-informant" dyad. When I entered the scene described in the previous chapters, bilingual teachers, materials developers, administrators and community members were already hard at work improvising strategies and juggling priorities in order to educate students. I became
another juggler, one with an improvisational outlook that allowed me to catch some ball; that otherwise tended, with great regularity, to drop. The other jugglers, most of whom are native to the culture, caught the balls that were equally beyond my ability to intercept. Furthermore, our combined skills were greater than the sum of their parts.

My co-workers did not just give specific information about their culture, although they did share such knowledge freely, they also lent their judgement of what would and would not work in their classrooms and communities, interest their students, and be understood by the teachers. They decided whether or not my statements about Yupik culture, often based on a deeper historical and wider geographic perspective than they had, made sense in terms of their far superior individual and regionally specific experience. When they were not sure, they brought these questions home to ask in the village. We had both questions and possible answers for each other and for the potential students of the program. This collaboration centered on ethnographic questions without resulting in an ethnography; rather, it resulted in the description of methods for students and teachers to use in gathering and interpreting their own culture for personal reasons.

The core members of this group, who participated in program design and critically reviewed materials, were five Yupik first-language teachers. These were people from
villages representing the different geographical, linguistic, and cultural backgrounds found in the school district, who were well-respected in their communities, experienced in the classroom, and currently teaching high school bilingual classes.

The dialogue which we developed required (and heightened) an awareness of our own cultural and intercultural communication patterns. Collaboration demanded sensitivity to such questions as: How do we find out information from each other? What social and spatial arrangements encourage us to freely voice our concerns? How are our concerns commonly expressed? How do groups interact--how do such factors as our relative ages, sexes and language use (including both English and Yupik) influence the dialogue? How will we know when consensus is reached? A basic familiarity with such issues was critical in avoiding the one-sidedness and deceptive simplicity of asking questions and recording answers that is often characteristic of ethnographic inquiry.

As a group, the review committee met twice each school year for two days at a time. We also worked together at week-long annual bilingual workshops, and individually during visits to village schools. Correspondence and telephone calls kept us in communication at other times. This working group developed a strong sense of ownership of and advocacy for the program.
The staff of the bilingual department formed another corps of people with whom we consulted. As specific subjects were raised, experts in those areas were also drawn into the development and review process. Those experts included village elders, researchers for the subsistence division of the Alaska State Department of Fish and Game, linguists, student counselors, and other community members with specialized knowledge.

Evaluation and Revision

By this process, the teacher’s guide for each project was written in draft form, and then comprehensively reviewed. Games, readings, and other student materials were also produced in "dummy" form, subject to revision. After the committee members had made preliminary requests for revision, and developers had tested student materials in Bethel, a second draft was completed. Committee members then pilot-tested these materials in their village classrooms.

Both students and teachers also filled out evaluations specific to each project. The anonymous student evaluations focused on what students learned (both skills and ideas), whether or not they enjoyed a given project, what improvements could be made in the activities, and what personal skills they wanted to learn. Teachers were also asked whether they needed more, less, or different information than we had provided. We observed village classes as they used materials, occasionally taught classes
ourselves, and talked with students and teachers about their reactions. The settings and responses were varied enough to suggest that we received honest and representative viewpoints on the materials.

At subsequent committee meetings, we all discussed the evaluations, and the teachers exchanged ideas. Student projects and papers were brought to the Bethel meetings, where bilingual department staff could discuss the tangible products of the program. Artwork for games and texts was also reviewed at these meetings, with the staff graphic artist present to note or make changes.

A third revision was then completed, and preliminary copies distributed to all high school bilingual teachers. After these had been in use for a school year, the final version was written. The first materials for Level I were piloted in 1982; five years later, the Teacher’s Guide has gone to press.

Format

In the following chapters, each Level I project will be described in detail, so that this process of collaboration can be understood in context. Before reading these sections, it is helpful to understand the basic format of the program. In schools offering a four-year secondary program, Level I students are usually ninth-graders. However, many bilingual classes combine students from more than one grade. Developers sought to create a program that made appropriate
demands on the younger students, but which could also challenge older students. The project format was useful, in this regard, because of its built-in flexibility.

The seven Level I projects differ slightly in length, but are each designed to take approximately one month to complete. Teachers are encouraged, however, to abbreviate or extend projects, depending on student interest and involvement.

An extensive Teacher's Guide, along with materials to be used by the students, are the primary resources provided for the projects. The guide, written in English (by the teachers' request), includes several hundred pages of information, sample planning guides, teaching suggestions, lesson plans, and student reading selections.

Less experienced teachers may rely on the guide as a source of specific directions; teachers are, however, encouraged to use the materials as a point of departure, and to improvise and improve upon the suggested themes and activities. In addition to the teacher's manual, resources include books, records, games, and other materials created and/or assembled for the students. These, as well as the student hand-outs included in the Teacher's Guide, are

\[1\] Since, at this writing, the Teachers' Guide is being re-typeset for publication, its page length has not yet been finalized. Citations throughout this work also lack page references for this reason. Since the Guide is organized by projects, interested readers should have little difficulty in locating these references when the published version becomes available late in 1987.
printed in Yupik. Project activities are interspersed with weekly orthography lessons, drawn from the *Yupik Eskimo Orthography* (Miyaoka and Mather, 1979); student writings provide examples on which to base these lessons.

A limited number of Teacher's Guides were reproduced in typescript and distributed to teachers over the past three years, as project materials were developed and piloted. In addition to the first-year materials described in this work, three projects for Level II, which focuses on a Yupik perspective on health and survival, have also been completed as of this writing. These include a project on safe travel in small airplanes, which incorporates information on wilderness survival; a project dealing with alcoholism and drug abuse; and a project on medicinal and edible plants. Level II projects are interspersed with readings from *Cauyarnariuq*, a text describing traditional Yupik ceremonies (see Chapter 10).

**Choosing Cultural Priorities: Values and Techniques**

In order to both form an effective collaboration and to implement teaching materials, I drew on my understanding of the total context of Native education. A program which reflects local culture within the established school system invites comparison between the school's implicit perceptions of Yupik culture and its own role in the general transmission of culture, and Yupik perceptions of the same issues. My understanding of these perceptions, described
below, formed a basis for the program's philosophy.

Despite the many conflicting opinions about bilingual education, one message seems to be consistently voiced by the Yupik public: bilingual education should help students balance the demands of living in a changing, bicultural setting. The reinforcement of traditional values is most commonly expressed as the key to achieving social stability. This philosophy is repeated in virtually every context in which adults discuss home and school education. In elders' conferences, statements such as this one, by Anecia Hoover of the village of Kasigluk, are typical:

Parents must pass on advice to their children just as they heard it; passing on advice so their children will lead peaceful and safe lives .... Never stop telling a person what he should do from the time he is an infant until he grows up to become an adult and starts travelling. Always advise him. Tell him of the troubles he may face and what he should do that's right. This is how customs are preserved. (Ikayurilriit Unatet: 1980)

In this and other descriptions of appropriate socialization, "advice" and "teachings" refer specifically to the set of behavioral injunctions (prescriptions, or alerquutet and prohibitions, inerquutet) which comprised the formal body of teachings traditionally transmitted to children, youths and younger adults by older men and women. These teachings are expressed in terms of, and have the force of, moral injunctions: they define a clear code of right and wrong behavior which draws no lines between what Euro-American cultures distinguish as "practical" vs.
An overt emphasis on values education is characteristic of groups involved in revitalization movements, that is "deliberate, organized conscious efforts by members of a society to construct a more satisfying culture." (Anthony F.C. Wallace, quoted in Paulston, 1975: 386) Using Wallace's typology, Paulston (ibid., 387) maintains that there are inevitable conflicts between a "conservative" social orientation, which stresses technical education, including skills in the "official language" (in this case, English) to prepare students for future employment, and a "utopian" or "revolutionary" orientation, which stresses moral learning. Technical learning, which forms the basis for mainstream American curricula, is perceived as universally practical, and separable from ethics. Moral learning, does not, as I have suggested, exclude the transmission of technical knowledge, but it does frame all learning within a consciously expressed set of cultural values, which, taken together, confirm ethnic identity. Paulston suggests that the mother tongue, in this case Yupik, becomes "an aspect of moral learning, reaffirming the solidarity and cultural uniqueness of the ethnic group, underscoring the need to teach ... moral values ... in the language in which those values were originally transmitted" (loc. cit.).

In essence, the Yupik community expects bilingual
teachers to convey moral learning within a school system that expects them to convey primarily technical learning. This is true even for most Yupik language programs. Although, in the sense just described, a moral emphasis is implicit in first language teaching, in and of itself, a contradiction still remains. Within the "conservative" setting of the schools, culture and language are treated as separate entities, and both are taught as aspects of "technique."

This technical orientation is apparent in an implicit definition of culture, which is assumed to be reducible to its most tangible manifestations. Especially in regard to Arctic peoples, whose technological achievements have long been extolled by explorers, adventurers and researchers, this restrictive view is very common. Wendell Oswalt, for example, a well-established ethnographer for the Kuskokwim region, has questioned the viability of Yupik culture based partially on the observation that "when I visited Napaskiak in 1970, I found only 11 aboriginal artifact types had persisted out of a possible total of 400; thus, I find that the great strength of Eskimo material culture has become virtually extinct." (personal correspondence, 1985). A viable definition of culture that allows for conditions of change, including even some degree of language loss, is problematic: however, one cannot expect that any people living in twentieth century America are likely to reject
One effect is that a "checklist" definition of culture comes close to being prescriptive, rather than descriptive. Native people are themselves proud of their ancestors' technological accomplishments, and when this pride is reinforced by the admiration of Outsiders to the exclusion of the non-material aspects of culture there is a pervasive sense that Native culture is doomed. "Culture" is taken to be what was (and by implication ought to be) rather than what is. Oswalt thus refers to a "remnant culture" (op. cit.) on the Kuskokwim. A widespread static perception of culture, then, promotes the kind of historic stereotyping that alienates contemporary Native youth from what is perceived as a lost golden age of Yupik society.

In the schools, it is apparent that a material definition of Native culture has a number of related consequences. Patrick Dubbs, in "Cultural Definitions and Educational Programs" (Barnhardt, 1982) lists four: 1) students will be taught that their culture is merely a "fragmented collection of material products"; 2) students are led away from the disregarded beliefs, values and ideas of Native culture to accept instead those of the Euro-American culture which are explicitly and implicitly defined as important; 3) students will consequently lack a sense of identity; and 4) education takes place in a context that does not reflect Native learning styles or social
organization of activity. In short, "we have a paradox in which attempts to teach the local 'culture' are done in ways that are alien to local culture." (ibid.: 13). Lary Schafer ("Native Cultural Contexts and Formal Education", op. cit.) also points out that if "cultural activities" are only given form and meaning through their performance in a formal school context, then the validity and identity of Native culture becomes dependent on its connection with the non-Native culture: Schafer uses the idea of Native American "contributions to the Caucasian culture" as an example of the way this subordinate-superordinate relationship may be expressed in the schools.

The separation of language and "culture," which are actually integrated for members of the cultural group, is itself characteristic of Euro-American culture. The tendency to dichotomize is most obviously seen in the division of teaching into subjects, an arbitrary but conventional categorization of knowledge into, e.g., mathematics, history, geography, and language arts. It is also seen in the sorting of students and programs into funding categories, like "Indian Education," "Johnson O'Malley" and "Bilingual": defined activities which meet particular funding criteria, and can be pursued by eligible students in appropriate classes. When educators want to "bring culture into the classroom," they insert "chunks" of culture into what appear to be the correct slots: they teach
Yupik dancing in physical education or music classes, demonstrate traditional units of measurement in mathematics classes, or build dog sleds in "shop" class. Thus, the culture is both defined in material terms and taught as an aspect of "technique." This compartmentalization is seen as a way of making the entire curriculum "culturally appropriate" and therefore more accessible to the students. The Native language itself is treated as technique: the focus is on grammar, vocabulary, orthography and translation skills taught by drills and worksheets.²

While these activities seem laudable, in a situation where indigenous culture would otherwise receive no attention in the schools at all, they can, in fact, cause real problems. For one thing, education dealing with values and other non-tangible aspects of culture is neglected. This creates a sometimes undefined sense of dissatisfaction with the Native education and bilingual programs on the part of Yupik participants: something important is missing. For another thing, the dissection of culture promotes a sense of cultural inferiority, by implicitly suggesting that Yupik society has to "measure up" to non-Yupik standards. It is as if the school says, "Yupik culture is only valuable

²See also Barnhardt's comment that even assimilationist goals are inefficiently accomplished within a school system that does not take into account the cultural patterns of the students, while cultural pluralism can never be achieved by using "an institutional artifact of one society (i.e., the school) to promote the cultural traditions of another." (Barnhardt, undated: 6)
insofar as it fits into non-Yupik categories -- you must have music, mathematics and physical education just like we do." This type of ethnocentrism also frequently results in arguments like "What good is it to read and write a language without a literature?" and "Let's only teach those Yupik traditions which are applicable to modern life." Technique (useful learning) supercedes tradition (cultural values).

Such ethnocentric categorizations of Yupik culture have already resulted in considerable damage. Similarly rationalized judgements over the last century led to the eradication of important cultural institutions. Early missionaries to the Yukon-Kuskokwim Delta, for example, applied their own criteria to the determination of whether or not particular Yupik ceremonies should be suppressed. If they were "purely social," they were acceptable. If they were "religious" they had to be stopped. As the years passed, more and more ceremonies were discarded, because, in fact, the distinctions between social and religious were not so clear. Now, few Yupiks under the age of forty have even heard of the traditional ceremonies, which formed the backbone of an entire belief system. A similar danger is inherent in today's attempts at cultural relevance in the schools. Redefining one culture in terms of another can not result in culturally appropriate education.

The contrast in emphasis between the two cultures is,
again, obvious in Yupik statements about education, in which values are explicitly said to form the underpinnings of technical knowledge. According to Patrick Pavilla (Barnhardt, 1982: 5), "Native education must ... teach the values that have kept the Yup'ik traditions alive and sustained life in the Delta. It must foster in the students pride in themselves as members of a strong people and teach them the skills and the understanding of life that is essential to keep them strong." Life is sustained by values: a person knows what to do in a survival emergency, for example, because he listened to the elders' teachings. The advice itself gains value through its means of transmission.

Elsie Mather, after writing a book on Yupik ceremonies which required extensive interviews with elders, commented on this moral foundation to the educational process:

Usually [elders] will tell you a story that illustrates what they are teaching you. It is not their story. It was passed on to them. They claim no authority about what they tell you. More importantly, they are telling you what a great responsibility it is to be able to learn from others, to cherish that knowledge, and then to pass it on carefully .... Our traditions are very important to us. They carry something immortal. And to make them sound like they are coming from us is an insult to our culture and to our elders who make it clear that they themselves are only vehicles. (Mather, 1986: 14)

Rules and values are thus anchors in the Yupik human, spiritual and physical environment. Skills are perfected
within the matrix of explicit values and beliefs. This view of culture (consistent with many anthropological definitions, such as those of Goodenough [1981: 62]) allows for some change over time: particular activities or objects may be replaced, but there is a sense of continuity with the past if the bases for actions and the patterns of interaction are similar. Elders commonly reinforce this view of culture by drawing parallels between Biblical teachings and traditional Yupik "teachings" inerquyetet and alerquyetet; historical discontinuity is thus minimized by reinforcing the value structure.

As a result of their involvement with education for technique, Mather fears that young people may lose "the art of learning" by traditional means.

Our elders try to teach us through indirect means, through stories, for instance, but we regard these as mere fairy-tales. We categorize them, and say they don't apply to us.... We love to tear something apart and analyze it to death.... We forget that we human beings are spiritual beings and there is a part of us which is not explainable in mere words. (op. cit.)

This loss does not arise out of a conscious rejection of tradition. On the contrary, young men and women frequently express their belief that the elders' advice is worthy of respect. However, they have lost much of the context in which they might learn and apply it, and are understandably confused by the contradictory emphasis of the schools. They are in school all day, rather than pursuing
subsistence activities or spending time in their relatives' homes. They know that their aspirations, too, are different from those of their elders. In short, they do not know how traditional values relate to their lives, although they would like to learn more about the past and feel more comfortable in the present. They sense a disruption in the flow of culture, and often do not think of contemporary life as genuinely Yupik; at the same time, they identify themselves as distinct from members of Euro-American culture. When they are exposed to how much they do not know about Yupik tradition, they express both fascination and feelings of inadequacy. To simply teach them an inventory of traditional values increases their sense of isolation from an idealized golden age of Yupik culture.

In sum, "cultural relevance" is an essentially contested concept in the interethnic dialogue which creates Native educational policy. Contrary to appearances, in other words, cultural relevance does not exist as one abstract ideal, but rather as a number of negotiable ideals. While there is substantial agreement among all parties that educational programs should variously reflect, accommodate, or include local culture, there are basic conflicts over what (and who) defines that culture, particularly as it changes. Those who use the concept also tend to modify it slightly in response to each new perception of current cultural needs. This variability tends to mask the fact
that, taken as a whole. Yupik viewpoints share some
important similarities that differ from non-Yupik
viewpoints, also taken as a whole. These generally competing
definitions may remain unresolved after an apparent
consensus "to make curricula culturally appropriate" is
reached; later, ill-defined public dissatisfactions are once
again expressed. In the center of this tug of war are the
students, wondering who they really are.
"Cultural eclecticism"

How, then, can a meaningful educational program build
on the idea that multiculturalism is the norm, "a condition
that already exists but is largely ignored" (Barnhardt,
undated. 8)? Students already act in accordance with values
that originated in one or another of the cultures which
interact in the Delta, and their own actions, beliefs, and
social environment create a unique contemporary culture. In
designing a high school program, developers thus sought a
way to give students a consciousness of their own roles and
choices within a framework of ongoing cultural change. To
this end, the program provides an anthropological
perspective on culture change, stressing the idea that each
person is a tradition-bearer, and that cultures change in
patterned and comprehensible ways. Neither assimilationist
nor pluralist in philosophy, this approach most closely
resembles Barnhardt's goal of "cultural eclecticism," which
emphasizes "an evolutionary form of cultural diversity to be
attained through the informed choices and actions of individuals well grounded in the dynamics of human and cultural interaction processes." (op. cit.)

Cultural eclecticism presumes that cultural values, traits and ideas are constantly rejected, preserved and/or replaced by individuals (and groups). Normally, change takes place through both conscious and unconscious actions and decisions. Increased consciousness of the potential consequences of individual and group behavior can lead to greater social stability, because the locus of power shifts away from external forces, such as the goals of the dominant society, to those of the people who interact with each other. If the main goal of bilingual education is access to "the best of two worlds," people need to decide for themselves what those worlds are, and what constitutes the "best" of each (rather than allowing the schools to decide for them). This requires a sophisticated educational plan which allows students to determine what options are available to them, and teaches them how to make informed choices. Such a plan might help students reconcile the consequences of overt and covert indoctrination in the values of more than one culture.

These theories of culture and of effective multicultural education formed the basis for the goals and objectives of the High School Language and Culture Program.
The Use of Project-Based Education to Meet Eclectic Goals

Initially, Hensel and I drafted a proposal for a four year, one hour-a-day program with goals in three areas: cultural enrichment, Yupik language maintenance, and personal fulfillment. The hour-a-day time frame represented the maximum option for high school bilingual education, based on district policy and actual village schedules. Within these broad goals, the following objectives were specified (Morrow and Hensel, 1987, in press): Cultural Enrichment

1. Understanding of Yupik cultural history, to provide both objective knowledge and sense of individual role in the ongoing historical process;

2. Exposure to other cultures with similar histories and concerns, such as those of Inuit in Canada and Greenland;

3. Knowledge of current political, economic and social factors which shape Yupik culture;

4. Recognition of unique adaptive strategies devised by Yupik people over time to meet changing situations;

5. Development of cross-cultural skills.

Yupik Language Maintenance

1. Ability to read and write standard Yupik orthography;

2. Understanding of basic Yupik grammar;

3. Development of written organizational skills;

4. Development of speaking confidence, organization and fluency in traditional and non-traditional speech settings
5. Exposure to language variety: dialect differences, levels of formality, written vs. spoken language, and natural language flow;

6. Expansion of Yupik vocabulary to include expressive older forms and meaningful new ones;

7. Development of basic translation and interpretation skills.

**Personal Fulfillment**

1. Development of critical thinking and decision-making abilities;

2. Deepening of awareness and understanding of one's role as a contemporary Yupik;

3. Ability to deal creatively and adaptively with change, while retaining a strong sense of ethnic identification and emotional stability.

In order to accomplish these objectives, it was clear that the program would need to encourage students to take an active part in community life, becoming cognizant of their actions as agents of both tradition and change. Instead of being centered solely around "subjects," education would have to emphasize "the procedures associated with the acquisition and utilization of knowledge ... (and) social processes." (ibid.: 21)

Out of many possible pedagogical choices, a "project"
approach was judged to be the best for this program. Research suggests that project-based education, which blends "the academic functions of the school with the cultural patterns of the community" (ibid.: 24, 60) has excellent potential for offering flexibility in a multicultural setting.³

Projects involve experiential learning in and/or out of the classroom, and give students considerable choice in determining the nature and extent of their participation. The project format can incorporate any combination of skills and knowledge.

In addition, by posing problems of real concern to the community, in a context that is shaped by the local culture, projects can be of service to people in the community, as well as preparing students for adult participation in society. Instead of objectifying and analyzing their culture, students can learn within it. In this way, the school supports the local culture by giving students a realistic perception of the educational process occurring outside of its walls. At the same time, the bilingual teacher provides a flexible framework for understanding and using the knowledge obtained from the community. In this

³Barnhardt describes how such an approach was used successfully in Nigeria as long ago as 1934 by Albert Helser (ibid.: 25-8). Susan Phillips (1983: 133) also recommends a "group-project" approach as a means of allowing Native American students to organize their classroom interactions through culturally preferred communication patterns, c.f. the following discussion.
process, community members may be deeply involved in determining both the structure and the content of learning, thus ensuring appropriateness of and support for the school, as well.

Finally, a program taught by Native teachers and centered in community activities is desirable for yet another reason: nonverbal communication is structured by culturally-learned patterns. Along with values and beliefs, communicative patterns are "invisible" aspects of culture (Phillips, 1983: 12), in comparison to material traits. Because nonverbal communicative behavior is learned earlier in life than language, and is less susceptible to conscious control, it is particularly difficult for members of different cultures to make consistent, comfortable adjustments to each others' styles; this is a major cause of miscommunication in minority classrooms with majority teachers. These patterns also appear to be culturally conservative: "they are very slow to change among people who are socially segregated and do not have regular contact or identify with people who display nonverbal patterns that are different from their own." (ibid.: 131) This is certainly true for Yupik students, and interactive style undoubtedly forms an important basis for their sense of cultural identity. When teachers, students and participating community members share common patterns of interaction, communication is smoother, and the patterns themselves are
reinforced rather than devalued.

Developers initially sketched seven projects which centered around social and historical topics that were predicted to interest high school bilingual students, and through which the above objectives might be realized. The topics included: the use of Yupik language in the media and the general question of Yupik language survival; the historic relationships between technological and social change, and the possible consequences of current technological innovation; changes and continuities in the subsistence resource base of each village and of the region as a whole; changing kinship relationships; and spiritual and ceremonial life.

The following five chapters describe Level I projects, the cultural considerations which were incorporated into their design, the collaborative process which they represent, and the responses, to date, on their use. Chapter 6 describes two projects focusing on issues of language use and survival, *Yupik on the Air* and *Yupik All Around Us*. The two projects described in Chapter 7 center on theme of technology and change: *Changing Tools, Changing Lives*, and *Make a Village Museum*. In Chapter 8, the theme of the project is *Subsistence*, and the current resource base of each village. Chapter 9 describes a project about *Kinship*, and Chapter 10, the final project on beliefs and *Ceremonies*. 
Defining Language Issues

While the Yupik language continues to have a good chance of surviving into the next century, its ultimate survival, judged in the context of other Alaskan Native languages, and local pressures towards the use of English, is by no means assured. Linguist Michael Krauss, of the University of Alaska's Alaska Native Language Center, has vigorously campaigned to raise public consciousness of the threat of Native language extinction, contributing to a generally heightened interest in preserving Native languages. In spite of universal desires among Yupik people to maintain their language, however, individuals often feel as if the issue were out of their control, a consequence of forces upon which they can have little impact. These may be seen as more removed social forces -- e.g., the pervasive use of English in official contexts -- or more immediate forces within the family. That is, from day to day, language maintenance requires conscientious individual efforts to use Yupik in contexts and relationships where English has become habitual. When other members of an extended family, for example, address a child in English, it becomes discouraging for one member to conscientiously use Yupik, especially if the child becomes accustomed to responding in English, as often
happens.

As a symbol for, and instance of, the roles of individual and community in general cultural preservation, language preservation was a pivotal issue in the design of the high school program as a whole.

Translating these large issues into projects required two simultaneous movements: 1) identification of activities which required language use in significant contexts and 2) recognition that the curriculum was in itself a set of culturally-influential acts, which had to be carefully planned in order to result in intended rather than unintended consequences. The latter was a central concern throughout the program; in relation to language, it meant that students should be encouraged to use Yupik in culturally-appropriate ways. To do otherwise would be to contribute to the erosion, or at least the obscuring, of the very system of communication which they were expected to utilize. Careful consideration of implicit cultural assumptions was required before students could be asked to engage in such commonly accepted academic activities as interviewing, public speaking, writing compositions, and so on.

Initially, developers had to adopt a stance in relation to broad issues such as to which student language population the program would be addressed, and how, as an overall policy, Yupik would be used in the program. Fluent or nearly fluent Yupik speakers make up the majority of the district's
population, while students who speak Yupik as a second
language constitute a minority (four of the twenty-one
district sites are considered primarily English-dominant,
although levels of fluency do vary even in Yupik-dominant
sites). The program was therefore addressed to the fluent
majority, with the rationale that prevention or arrest of
language loss in this group would be a less overwhelming task
than restoring Yupik language use in areas where it had
already seriously declined. A restorative program could then
be designed as a separate, second phase. By concentrating on
a defined student population, developers hoped to create a
strong program that did not try to meet too many divergent
needs at once (this had been one flaw in the earlier
Developmental Yupik Language Program). This was a difficult
decision in the light of clear needs for a good Yupik as a
Second Language Program in predominantly English-speaking
communities like Bethel, but it was a justifiable one.

Since the intended participants in the program speak
Yupik and are at least partially literate, a decision was
also made to teach the program completely in the Native
language and to have all materials to be given to the
students written in Yupik. As a language-teaching technique,
this allowed for positive immersion in Yupik with a high
interest-level encouraged through projects. In other words,
language skills are developed for specific communicative
contexts, rather than as isolated analytical skills: to
quote the Teachers' Guide for the program, "the prospect of 'learning orthography' is much less engaging than the prospect of writing a script for a Yupik radio broadcast. Yet script-writing involves spelling, and gives the instructor an opportunity to assist students with orthographic difficulties." (Morrcw and Hensel, 1987, in press) This marked a departure from other Yupik language programs, which have often been taught partially in English.

One rationale is that there has been little to motivate students to build fluency in Yupik, because media, government, schools and other aspects of the public domain are so heavily weighted in favor of English. We hypothesized that students will be most interested in improving their Yupik if they discover that the language does indeed give them the only possible access to much valuable and interesting conversation. One learns a language in order to talk with people; one talks with people because there are important things to hear and to say. If there is no obvious communicative loss in speaking only English, then there is no reason to maintain a Native language. Yupik must open doors which people want to enter.

In a time when classroom language instruction methods nationwide are turning away from grammar and drills to more "natural" methods (c.f., the works of Stephen Krashen), this program is able to maximize the most natural language learning environment of all -- a healthy speech community.
One goal of the projects then, was to expose students to the richness of speech and information available only to Yupik speakers.

An elaborate and complex Yupik oral tradition surrounds the schools, but in the past it has been introduced to students as a source of information about particular cultural subjects, reducible to its content and amenable to extreme summary and simple translation. Neither speech style nor subtlety of content has been preserved.

Early uses of oral literature in the schools date to the 1970's, when Ann Vick, a proponent of the well-known Foxfire series, visited Bethel Regional High School and helped to launch an English journalism class based on the Foxfire model. The class was taught by monolingual English speakers, and its underlying purpose was to increase English skills. The resulting publication series, Kalikaq Yugnek ("The People's/Yupiks Paper"), ran from 1974-7, and was an innovative educational effort which spawned some similar magazines in village schools (such as Nunapitchuk's "Tundra Marsh"). The enterprise helped to validate Native culture for the students, but the writing reflected principles of English composition, and did not make students aware of differences in the organization and presentation of thoughts in the Native language. In 1980-1 the original tape recordings gathered for Kalikaq Yugnek were retranscribed, translated and edited by L.K.S.D.'s bilingual department. The result was
a sourcebook printed in both languages, Yupik Lore/Yuut Qanemciit (Tennant, 1981). This publication took a step towards recognizing the importance of conveying oral tradition in the Native language, but it still presented the narratives in summarized form using English rhetorical conventions. It was, again, a case of casting one tradition in the idiom of another.

In the early 1980's, two efforts combined to produce written versions of Yupik narrative that more closely resemble oral presentation. Elsie Mather, a native speaker of Yupik with a background in linguistics and education, and I, working with other staff of the Yupik Language Center of Kuskokwim Community College, were then in the process of collecting and transcribing a corpus of tapes collected over the years by various individuals and agencies in the Bethel area. Linguist Anthony Woodbury, now of the University of Texas at Austin, was in Bethel en route to the village of Chevak to pursue doctoral research on the Cup'ik dialect of Central Yupik. Woodbury had a strong interest in rhetorical structure, and suggested that transcription/translation methods in the tradition of Dell Hymes and Dennis Tedlock might be adapted to Yupik narratives. The resulting method proved to be relatively comfortable for transcribers to use; it also served to reveal much about the structure of the narratives. Woodbury's subsequent publications (1981-6), provide a detailed analysis of a number of Yupik and Cup'ik
oral texts. This research has led to a better understanding of the need for development of a Native language literature which preserves cultural patterns of presentation and organization.

Since the Yupik language does not have a long tradition of literacy, the potential for developing appropriate written forms still exists. Two methods were used to encourage this development. Written materials for the program were either presented using the format of oral presentation, as when narratives were transcribed for reading selections, or they were authored by a Native writer sensitive to the differences in English and Yupik rhetorical styles. A major undertaking was the research and writing of a full-length textbook in Yupik by Elsie Mather. This text, about the traditional ceremonial cycle, incorporated information from published English sources and oral Yupik sources along with Mather's summaries and interpretations. The organization of the book as a whole clearly reflects the author's Yupik cultural background, as does its emphasis on minimal editing of the oral sources. Mather also chose to preserve the distinct dialectical and stylistic features of people's speech, including a certain amount of characteristic repetition and parallelism. These examples present readers with an alternative to the English-influenced materials which are otherwise available. 1
Second, students themselves produce a considerable amount of writing in the course of completing each project. Along with their teachers and classmates, they begin to develop their own written styles. Although student papers are inevitably influenced by English paragraphing and punctuation, they do reflect Yupik style and overall organization. Each class becomes an arbiter of "correct" usage; no particular conventions are imposed on writing in the curriculum itself. In the future, student papers may be compiled as writing samples, so that teachers and materials developers can eventually recognize common compositional features. These can then form the basis for a more explicit understanding of writing styles.

Many of the students' writings result from interviews with people in the community which take place outdoors, or in homes, the natural contexts of speech and daily activity. Students interview in pairs, so that they can take notes, make tape recordings, and draw on each others' memories in order to bring the information they gather back to the class and to incorporate it into the project at hand. A cultural value on attentive listening encourages them to try to absorb and accurately represent this information in writing.

Readers are referred to Woodbury's writings for discussion of these features. Note, however, that students are presented with the reading selections and a key of conventions used in the transcriptions; they do not analyze narratives themselves, nor are they told how linguists do so. Speaker competence in itself enables them to easily interpret the materials.
Students also develop oral language skills by listening and repeating what they hear: community members provide many speech models (whereas a classroom teacher provides only one). Outside of the classroom, students also pick up a wide range of vocabulary items relating to various subjects, and are exposed to a variety of speech styles.

This type of language reinforcement seems to be very successful. Each class that piloted projects returned evaluation forms completed individually by students and teachers. At the end of the pilot period, evaluations unanimously indicated that skills in speaking, reading and writing Yupik all improved as a result of project activities. Typical student self-evaluation comments included the following: "I learned some meanings of words. I learned how to pronounce words. I learned how to read a lot faster. I learned how to write words correctly .... I really enjoyed doing (the project) and hope we do another one soon"; "I improved on understanding Yupik because we did the project in Yupik"; "Interviews were fun and it was good to talk to the elders and young people." The motivation for language development thus grows out of interest in completing the projects. Once interest in reading, writing and speaking is piqued, students find grammar, orthography and translation skills more useful. This is consistent with Yupik learning styles, which tend to move from specific to general, rather than general to specific.
In general, the goal of community-based projects is to whet students' appetite for participation in the life around them by offering a glimpse of its richness. Furthermore, projects are optimistic in that they require participants to do something about or within particular situations. The participants are seen as people faced with choices about their languages, customs, technology, and values, rather than victims of a losing battle for cultural survival.

In order to carry out this philosophy in relation to issues of language maintenance, it was not only necessary to pervade the curriculum with a sense of the vitality of Yupik language use, but also to develop some activities which would focus explicitly and concretely on issues of language change and loss. For this reason, we chose to introduce the program with two projects specifically designed to increase students' awareness of the significance of their own actions in maintaining Yupik.

Yupik on the Air

The first of these language-centered projects, Yupik on the Air, was designed to immediately involve students in issues of public language use through a favorite medium of teenagers, the radio. Currently, Bethel broadcasts one Public and one commercial radio station to the surrounding villages. Public television programming also originates in Bethel, while commercial stations are available by satellite transmission. Consumers receive the gamut of Outside
programs, from Mozart and Masterpiece Theater to MTV and the Disney Channel. While locally-produced programming from KYUK, Bethel’s listener-supported station, is often in Yupik, all other programs received by the villages are in English. Media broadcasts have powerful appeal and the television or radio is on constantly in many village homes; where adults speak little or no English, the television is often left on without sound. While often cited by educators as useful tools for increasing English competence and/or agents which erode Native language competence, public education about the potential effects of the media is minimal or nonexistent. In a number of village schools, students have access to video cameras, and have used them to record sports events and student activities. Original student productions are also sometimes encouraged.

The purpose of Yupik on the Air is to suggest the possibility of public choice in determining the language(s) in which media are broadcast, as well as the content of programs.

Yupik on the Air is simple and direct: it gives students an opportunity to create and broadcast their own radio shows in Yupik, using a variety of self-chosen formats. It was chosen as the first project partly because of its potential appeal, and partly because of its high visibility. By creating broadcasts for each village, students can (literally) announce to both the school and the community
that the high school bilingual program is up to something new. **Yupik on the Air** also quickly empowers students; they take control over a medium with which they normally interact passively. In the process, they learn about fundamentals of interviewing and editing, the differences between commercially-sponsored advertising and public service announcements, and the use of drama and sound effects to increase the emotional impact of the media. These activities have the potential of increasing students' awareness as media consumers, and perhaps encouraging some to become media producers.

For this project, students choose to broadcast their programs within the school, to the immediate village vicinity by Citizen's Band (C.B.) radio, and/or to the entire Delta on Bethel's public radio station. Most commonly, C.B. radio is used. In the recent past, communities often relied on citizens' band radio networks to pass information, keep track of children visiting in relatives' homes, and communicate with hunters and fishers in their boats. With the recent installation of telephones in many village homes, C.B. use has declined, but most people still find their radios useful. The C.B. in village Alaska does not carry connotations of "trucker culture" as it does in the Lower 48; it merely provides a convenient means of local broadcasting.

In order to facilitate productions, the Teachers' Guide provides information on broadcasting
conventions, interview and note-taking techniques, script-writing and editing, and oral interpretation. A glossary of Yupik equivalents for common broadcast terminology (such as "fade-out" and "program signature") is included to suggest the idea that English terms need not be adopted when non-traditional technologies are used.

Students are encouraged to compose and play their own music, as well. Commercial recordings of popular Inuit singers and music groups from Canada and Greenland introduce students to locally-produced media in other Eskimo languages, and are included to inspire them to produce their own music. While the Inuit Circumpolar Conference has brought pan-Arctic issues to the attention of an increasing number of rural Alaskans, information about life in Canada and Greenland is virtually non-existent in the majority of villages. This is the first exposure most students receive to contemporary Inuit cultures in other countries. Teachers and students usually borrow the Inuit tapes and records to play for their friends outside of the bilingual education class, indicating a particular interest in this part of the project.

Teachers are also given a list of possibilities for program content. Suggestions range from simple readings of available Yupik writings to the adaptation of traditional stories into radio plays. Classes are encouraged to broadcast local news items, interviews with village residents or visitors, and traditional and non-traditional safety tips.
Cultural Considerations in Designing Yupik on the Air

In designing *Yupik on the Air*, a number of cultural considerations had to be taken into account. The project requires verbal interaction and the adaptation of oral material to written forms in unfamiliar contexts, such as interviewing, script-writing and editing, and performance before an unseen audience. In initial discussions of the project design, Yupik advisory committee members expressed unfamiliarity and some discomfort with conducting interviews. The committee decided that interviews were appropriate and useful learning experiences, but felt that clear guidelines were necessary in order to make them a success. One source for the unease was that youth are not expected to ply adults with questions. In general, it is up to older people to choose the opportunity and subject matter of their instruction or youth. Elders speak, and youth listen. The appropriate attitude of youth in the presence of adults is to be takaryugluni, respectful and self-effacing. A direct line of questioning is considered ill-mannered in any verbal interchange between Yupik youth and adults, or even between adults, for that matter:

... the primary flow of information in Yup’ik culture does not seem to be based on questions and answers. Not only do most questions not call forth information in the form of meaningful answers, they sometimes have the effect of ending the conversation. People who are publicly inquisitive are considered nosy, and it is usually impolite to put someone on the spot with a direct question. He may be hesitant to refuse a request, even if he recognizes that circumstances may arise to prevent
him from complying with it. In general, people prefer to allude to what is desired, rather than asking directly. This view of questions and answers seems to be both fundamental and widespread in Eskimo cultures. (Hensel et al., 1984: 5/18)

In order to make interviews more feasible and appropriate, the teachers and developers together came up with a series of suggestions for allowing students to approach adults with particular questions in mind. First, in the class, students discuss topics of interest and people who are likely to be knowledgeable about those topics. Then, they choose partners for conducting the interviews, and preferences for people to interview. Students are encouraged to interview relatives in kinship categories that allow the most freedom of approach, such as grandparents (maternal and paternal). Interviewing partners also tend to be those who share informal friendships, such as cross-cousins. Teachers then approach interviewees to obtain permission for the students to conduct the interviews. The teacher also mentions the subject of the intended interview, so that the potential interviewee can prepare what he/she wants to say in advance.

One potential problem with arranging interviews, and indeed with all aspects of community involvement in school programs, is the question of payment. The school formally recognizes its regular classroom teachers by paying them. In times of budget sufficiency, community resource people have also been offered honoraria for teaching in the schools. In
In the past, Alaskan Indian Education and bilingual programs have been very well-funded, and payment of resource people has become commonplace. More recently, declining oil revenues have led to severe state budget limitations, and this practice has often been curtailed. In other cases, the policy has been dependent upon the philosophy of a particular principal, and a change in administration has changed the policy. In yet other villages, elders have always given their assistance voluntarily. Understandably, this inconsistency led some community elders to feel unfairly treated; they reasoned that if their services were valued, they would be paid automatically, as are other teachers. School officials' claims of budget shortfalls may appear to be lame excuses for parental exploitation. Now, within a single village, there may be some elders who expect payment, and others who take it granted that their contributions are voluntary. For a program such as this one, which frequently relies on community support, the issue of payment is a potential thorn. The bilingual teacher has no control over his/her principal's policies in these matters, but the community may find it easier to express dissatisfaction to a teacher, who is a teacher, than to the principal, who is not. As a result, a teacher may bear the brunt of an elder's displeasure, and the school may lose the benefit of that elder's teaching. The loss of approaching potential community resource people may be a delicate matter. While circumstances differ
From person to person and village to village, high school teachers have had the most success by explaining the nature of the program as well as possible, and relying on an accumulation of community support over time. The high viability of the program, which returns many services to the community, helps to encourage cooperation and to build on widespread support of the idea that youth need to be in more contact with knowledgeable elders. Teachers also frequently rely on their own close kin as classroom resource people, in such case the payment issue is generally not raised. In most cases, the teachers have been able to enlist the aid they need for Yupik on the Air, and other projects.

Once these issues have been resolved, students practice interviewing each other in the classroom, using the tape recorder and taking notes in Yupik. In the Teachers' Guide to this project, a sample interview is described. In this two students have decided to interview a fictional Sam about a decline in recent years' catches of whitefish. Beans has approved of the interview in advance. The students go to his home and take some time to have tea, or enjoy the activity in the Beans home. Since Mr. Beans knows the purpose of the visit, he will give the students an opening, perhaps by simply beginning to talk about the subject about which he knows they are interested. A typical, but hypothetical, situation, Beans may tell stories which relate to whitefishing, or which
more abstractly illustrate traits of archetypically
successful hunters and fishers. The students may be expected
to draw their own conclusions as to why the whitefish have
declined, by implication from the stories. But then they face
a dilemma. They have two hours of interesting tape to
include in a fifteen minute program. It is suggested that,
before leaving, students tell Mr. Beans what they understand
him to have "answered". At this point, he can correct any
misunderstandings so that they are less likely to leave
misinformed, or bewildered. They must also indicate that
their program will not include all that he has said.
Otherwise, when he hears the abbreviated broadcast, he may
conclude that the students simply disregarded much of what he
said. The process of reconciling the students' and elder's
expectations of the interchange is akin to a problem in
intercultural communications, for the students' expectations
are framed partially by the foreign medium of the interview,
while the elder's are likely to be based solely on the
sociolinguistics of verbal instruction of youth. In fact,
both sets of expectations are met: the students hear the
ideas presented in a relatively traditional context, and they
can represent some of these ideas in another medium. The
teacher must make it clear that the interview is not
reducible to its edited version; they are two different
presentations of information. This is the type of activity
that can increase the students' awareness of cultural
differences in conveying, receiving, and processing information. The *Teachers’ Guide* assists them by describing how one might use portions of Mr. Bean’s interview in a broadcast, providing a sample script for the hypothesized situation.

This simple example underlines the importance of considering cultural patterns and preferences in constructing appropriate educational materials. To simply instruct students to interview someone about a relevant topic, such as fishing, is to overlook the cultural assumptions behind the concept of “interviewing” itself. Other potentially problematic aspects of the *Yupik on the Air* project included public speaking and the process of adapting oral narratives for broadcast.

Public speaking is avoided by some students because of the traditional cultural value on remaining silent or soft-spoken in large groups, particularly for youth and women. One’s good reputation, it is taught, should grow through the estimation of others, which quietly accumulates over time, rather than from one’s own efforts to promote notoriety. Others, however, enjoy imitating and sometimes poking good-natured fun at the disc jockeys and announcers that they hear. With local broadcasting from Bethel’s radio stations, too, there are now role models of Yupik men and women reading news and hosting call-in shows. The *Yupik on the Air* project allows students to choose the nature of their participation.
in the broadcasts: they may try writing, editing, playing
music, creating sound effects and other aspects of production
which do not require public speaking. Students who are
reluctant to speak on the air may enjoy making tape
recordings for in-class use. The would-be disc jockeys can
then do the actual broadcasts.

Playwriting was the final area which required
particularly conscientious treatment. In addition to telling
traditional stories in their original forms, students are
encouraged to adapt tales into a play format. This is done
to promote literacy skills, to allow several people to
participate in one performance, and to heighten enjoyment.
It also gives students a chance to make a detailed
examination of a single story, which increases awareness and
appreciation of narrative style, vocabulary, dramatic
phrasing, and other aspects of the storyteller's art. By
transforming one genre into another, they may also become
more conscious of the choices -- and costs -- involved in
such a process.

As an example, the Teachers' Guide shows the
step-by-step adaptation of one traditional Yupik tale into a
play which was written for broadcast in English over Alaska
Public Radio. The first step shows the original Yupik
transcription of the story, using conventions which preserve
as many features as possible of the oral performance. The
story is then shown in English translation, using a parallel
format. Then, the playscript, showing the dramatization of characters and use of a narrator, is included. The chosen story contains a high proportion of dialogue, and a number of human and animal characters, which makes it particularly suitable for adaptation. The script indicates the use of sound effects, as well. Finally, a cassette tape of the actual broadcast performance is included.

Suggestions are also given for writing original plays. This required a discussion of suitable play material and its elaboration:

In general, a situation will make an interesting starting point for a play if it presents a significant conflict or dilemma. This might be a decision that a character must make, a dangerous or comic situation that must be resolved, a disagreement between two characters, or a conflict between a character and the rules of the society he lives in. (Morrow and Hensel, in press, 1987)

Examples of several situations are given and then plot and character development is briefly sketched. As an exercise, students think of possible resolutions to the situations. Each of the sample plots involves familiar characters in likely situations: a boy who wants to go to college, but whose parents want him to stay in the village because he is their youngest son; two girls who have been drinking and have gotten lost snowmobiling in poor weather; rival dogmushers who have entered a major race. Obviously, these situations have been chosen because of their potential for provoking thought and discussion, as well as their
ability to inspire students to find a play topic of their own.

Evaluation of Yupik on the Air

Yupik on the Air has been a popular introduction to the project-based curriculum. As one student evaluated this project, "It was fun and it was kind of hard." As the first project to be piloted, Yupik on the Air has also benefited from its novelty value. Several students liked it "because we didn't do these kinds of things before." They encouraged future development: "we should have many other things for Yup'ik class"; "I hope we do it again"; "I really enjoyed doing (the project) and hope we do another one soon." The potential areas of cultural mismatch seem to have been dealt with adequately, judging both from students' responses and from the fact that teachers note a positive reception to their classes' broadcasts by the villages at large. One teacher specifically mentioned that the village audience appreciated hearing local news items. Most students indicated that they especially enjoyed conducting interviews and editing them for broadcast, a good sign that the cultural adaptation of this process was acceptable.

In at least one case, this project was expanded, by a creative teacher and his class, to the production of comic television shows. These have been "broadcast" within the school where they were made, and have been taken to bilingual teacher training conferences for wider exposure. The video
productions, which include parodies of television news and weather broadcasts, illustrate a high degree of media consciousness on the part of the students who wrote and dramatized them.

This project must also be understood as an introduction to *Yupik All Around Us*, which focuses more specifically on present and future use of the Yupik language and the relationship of language loss to the imposition of non-indigenous institutions.

**Yupik All Around Us**

In contrast to *Yupik on the Air*, this project takes a more consciously analytical approach to the question of language loss and preservation. Students are encouraged to observe their own use of Yupik and English, and that of others in the village. This is accomplished by recording language data in logs, and comparing observations with others in the class. Each student is asked to observe ten different speech situations in at least four different settings. Their logs then note time of day, which languages were heard, the language abilities of those who were observed (monolingual speakers of Yupik or English, or bilingual speakers), the location and topic of conversation, examples of English words inserted in primarily Yupik discourse and vice versa, and any comments they might have about usage. A sample language log has been completed and included in the *Teachers' Guide*.

In-class analysis of the language logs involves comparing
all of the students’ data and examining situations in which English was used by bilingual speakers. They are asked to consider whether these situations have anything in common (e.g., the presence of a monolingual English speaker, the setting or subject matter of the discussion, the use of English by others in the background, etc.). Then they are asked to suggest factors that might have encouraged speakers to use Yupik in those situations. The question of speakers’ consciousness or unconsciousness of their choice of language is also raised. After this exercise, students fill out and analyze a second language log in a similar manner.

In addition to considering speakers’ motivations, students also suggest ways that situations and settings could be structured to promote greater use of the Native language. The availability of interpreters, hire of Native speakers in media production, and posting of bilingual public notices are given as sample solutions to particular cases. Students then use individual and/or class projects to expand the use of Yupik in their village. They may undertake to post Yupik language signs around the village, write portions of their book or student newspaper in Yupik, tutor monolingual English speakers in Yupik, or pursue other projects of their own.

The third part of Yupik All Around Us focuses on the notion of language change. The Teachers’ Guide provides a non-technical discussion of processes of
language change: borrowing, coinages, grammatical change, and shifts in pronunciation. After this introduction, students vote on whether they think a number of Yupik lexical items and grammatical constructions are "correct" or "incorrect." Older and newer forms are considered side by side. These items have been elicited from linguist Steven Jacobson, author of the *Yup'ik Eskimo Dictionary* (1982) and instructor of Yupik at the University of Alaska. They represent changing forms that he has observed in his students' speech, such as the loss of the dual form (Yupik has singular, dual and plural forms) in some constructions. The students' vote prompts a discussion of which changes they consider to be normal in the evolution of their language, and which appear to them to be signs of deterioration.

Next, students explore factors which have contributed to the decline of other Alaskan Native languages. The responsibility of passing Yupik to future generations of children in an unbroken chain is illustrated by a chart (adapted from Krauss, 1980) showing the projected extinction of a Native language by 2055 if the youngest speaker of that language is fifteen (the average age of students in the class) in 1985. Teachers emphasize that, while school support of the language is important, only continued usage by speakers of all ages can guarantee the language's future.

Classes then use a map showing the current distribution of "Native Languages and Peoples of Alaska" (Alaska Native
Language Center, 1982) to discover links between the historic intrusion of non-Native interests in particular Native areas and the relative health of each respective Native language today. On the map, students circle areas affected by four factors: the Russian fur trade, commercial whaling, mineral extraction, and commercial fishing. It becomes quickly apparent that there is a direct, village-by-village correlation between economic exploitation and a decline in Native language use. The more circles surround a given area, the less the language is spoken today; conversely, areas of lowest commercial interest are those with the highest proportion of Native language speakers. Once students discover this correlation, they are encouraged to discuss reasons why Alaskan languages may have been adversely affected by contact. To facilitate discussion, a number of factors are listed in the Teachers' Guide, including the effects of disease (population reduction and redistribution as a result of epidemics, removal of youths to tuberculosis sanitariums where they were separated from other speakers of their language), schooling and missionization, use of English as a common trade language, and force (the murder and enslavement of Aleuts by Russian fur traders, and the relocation of Aleuts during World War II are paramount examples). This sobering exercise is followed by the teacher's brief discussion of contact situations elsewhere in the world. The students are told that multilingual societies
exist elsewhere, and it is suggested that the loss of their own language is not inevitable.

At this point, the teacher describes efforts by other Inuit peoples to preserve and strengthen their languages. The situation in Greenland is particularly encouraging, for Kalallissut, the Greenlandic Eskimo language, is widely spoken and there is a long tradition of popular Native language literacy in that country. Denmark's tolerant language policies contributed to the current state of language preservation, and a vigorous campaign on the part of Greenland's Home Rule government reinforces it. Books written in Greenlandic, including original fiction, translated works (including popular novels such as Exodus) and school texts are distributed to Yupik classes for students to peruse. Although Yupik and Kalallissut are mutually unintelligible, students recognize cognates and often notice that two different orthographies are used in the works they examine. This raises questions of orthographic unity in relation to language survival, a pertinent issue for Yupik, where church and standard orthographies differ.

The Inuit Circumpolar Conference's commitment to the promotion of Inuit language use in Alaska, Canada, Greenland and the U.S.S.R. is also discussed. One of the I.C.C.'s ongoing tasks is the development and promotion of a common Inuit orthography. While Yuk speakers can not benefit directly from the use of such an orthography, since their
language is too divergent from Inupiaq, their own language
issues may also find a potential forum in the I.C.C.

As a final activity for *Yupik All Around Us*, students
make their own plans for helping to perpetuate Yupik, on any
level they choose. The *Teachers' Guide* suggests that
students share their ideas with the class, and discuss ways
that they might put plans into action.

Cultural Considerations in Designing *Yupik All Around Us*

*Yupik All Around Us* was a problematic project; it was
difficult to design activities that would be stimulating to
students while at the same time raising awareness of language
use. As a result, the project tends to be more analytical
than most of those in Level I. The language logs, for
example, involve the unfamiliar process of collecting and
analyzing social scientific data. Generalizations based on
the map of "Native People's and Languages of Alaska" also
require such an orientation. While a clearer description of
the purpose and expected results of each activity might be
helpful -- the teachers found the language logs difficult to
explain because they are overly complicated and abbreviated
in style, for example -- the main problem lies in the
expectation that students will generalize behavior from the
limited data they collect.

While all human beings extrapolate information from the
specific to the general, there are noticeable cultural
differences in the application of the logical processes
involved. Ronald Scollon, in "Human Knowledge and the Institution's Knowledge," describes a particular reluctance to generalize which he has observed in his Native Alaskan students:

In long discussions with Alaskan Native students about principles of observation and generalization in courses designed to teach these concepts we have found a strong resistance to generalizations about behavior which will attribute to unknown persons the characteristics or motives of known causes. Students in accounting for behavior rely heavily on personal, human knowledge of circumstances which they take prima facie as sufficient explanation of behavior. (Scollon, 1981: 9)

Scollon attributes this predilection to the existence of two distinct levels of logical typing, which he relates, respectively, to the formal schooling of institutional knowledge, and to informally learned personal knowledge:

Analytical categories, like grammatical structures, are of only two classes of use: as after-the-fact descriptions of what happened in particular instances, or as real time but unconsciously used bases for inferences about the behavior of other individuals. In the first use they are of a reality that is distinctly removed from the moment-to-moment reality of individuals. They are of a different logical type. In the second use, these situations are at the very best an approximation of behavior that holds good only during the current instance, 'until further notice'. (loc.cit.)

Scollon thinks that a "literate mode" of interaction biases formal schooling towards non-personal analysis of behavior and the compartmentalization of knowledge. Students
raised in Alaskan villages, on the other hand, tend to rely more on informally learned knowledge rooted in a history of face-to-face interaction. This personal, or "human" knowledge, results in "integrative" interpretations of behavior which Alaskan Native students do not logically apply to groups. On the contrary, the behavioral generalizations made by others are often perceived as attempts at negative stereotyping.

Since many negatively stereotypical generalizations of Alaskan Natives are propagated, this is a reasonable concern. Susan Phillips, writing about people from the Warm Springs Indian Reservation in Oregon, notes reactions to generalizations which closely mirror those I have sometimes heard voiced by Yupik people:

Some Indian adults expressed discomfort with the emphasis on cultural differences between Anglos and Indians stressed by other Warm Springs adults. The experience of most tribal members was that all of the ways in which they were perceived as different by Anglos were stigmatized, so that 'different' had negative connotations. There was also a very humanistic view held by some Warm Springs adults that only by stressing the similarities between Anglos and Indians would it be possible to get along with them, and improve relationships between the two groups. (Phillips, 1983: 17)

The common Yupik preferences for reliance on "human" knowledge and avoidance of statements which may be negatively construed, is strongly tied to other cultural preferences. In particular, there is a strong ethic that personal boundaries are not to be violated. While group
responsibility is highly reinforced, individual freedom of choice is also respected; to some extent, generalized statements predicting behavior violate others' freedom. Christian ethics -- "Judge not lest ye be judged" -- are also cited to bolster this preference.

Reinforcing this sense of respect is a reluctance to make pronouncements which may prove to be wrong, thus setting an individual up as a false authority. In Yupik culture, the knowledge which comes with age and experience has always formed a firm foundation of truth, and it is considered boastful for younger people to make general pronouncements with certainty. Even respected elders speak with humility, each deferring to others who may have additional information; it is their collective authority, repeating what they have heard from their predecessors, that carries weight. No individual voice can claim that authority.

Furthermore, given the uncertainty of the future, all predictions are expressed indirectly or in qualified form. It is common for individuals to declare even their own intentions by indirect rather than direct statements, while, in contrast, non-Yupiks casually assert their future intentions. When directly queried about the motivations or anticipated actions of others, the most frequent Yupik response is an uncomfortable or noncommittal "I don't know" (naamel) or shoulder shrug. While another person's future intentions may be obvious (e.g., when someone is about to go
hunting, he packs his rifle and other gear), they are usually not an appropriate topic of discussion.

Thus, while Scollon points out that a certain mode of logic makes a priori generalizations of behavior impossible, other cultural norms may also contribute to discourage such generalizations. Behavioral generalizations which move from observed individuals to unknown individuals violate Yupik principles of individual integrity, collective authority, and reluctance to predict an unpredictable future. Although there are situations in which generalizations are comfortably made, they are expressed as personal observations with attributable sources, rather than analytically verifiable truths, e.g., "I've noticed that people from upriver do such-and-such differently than we do," or "I've heard my father say that people used to see more ghosts than they do now."

In Yupik culture classes, for example, teachers agree quite comfortably to generalizations that are true from their experience, such as "Yupik people teach respect for elders" but not those that require suppositions about people's personal predilections, such as "Yupik people don't like spicy food." The latter statement would be amended: "We don't usually eat spicy foods, but some people might learn to like them."

As a result, when educational activities require them to deduce general behavioral principles, students may, first of all, not understand what is expected, and may also prefer to
avoid drawing broad conclusions from limited data. In the case of Yupik All Around Us, language logs are therefore most useful as a way of making students more conscious of their own observable speech habits and those of others around them. They are less appropriate as predictive tools. By the same token, the Alaskan Native language map is useful to show historical language loss in relation to various Outside influences, but not to force the conclusion that currently spoken languages will fall to the same fate, given similar conditions. While students clearly understand that this is a potential scenario, they are aware that unknown and unknowable variables may equally prove to be critical in determining the future of their language.

Another design consideration in Yupik All Around Us related to the issue of language change and loss. This is a potentially emotional subject, for older people are likely to perceive any language changes as "bad," and younger people are expected to defer to their elders' opinions. In this unit, the students are expected to focus their own perceptions and judgements of language change. Teachers are asked to refrain from making prescriptive statements about language, although most students will have been exposed to adults and elders who deplore various contemporary usages. In this sense, the project departs slightly from community norms in an effort to give young people a broader personal perspective on language change and loss. Designers made this
choice in consideration of the fact that all languages accommodate change to meet evolving communicative needs; if they become inadequate for expression of everyday topics of conversation, they risk extinction. The question of "good" vs. "bad" changes, however, is one that should be decided by the speakers (of all ages) themselves.

As discussed in Chapter 4, the project-based curriculum is partially founded on the idea that bicultural students cannot become culturally well-grounded by simply adhering to the monocultural values of their elders. They need to know what these values are, but they must also understand that values develop in particular sociohistorical contexts, contexts which are related to, but in some respects different from, the circumstances in which they live. This premise often required developers to tread carefully, since in some respects it contradicts prevailing Yupik opinions about the way their children should be raised; i.e., according to traditional values. Our contention is that children already live with the consequences of changing and intersecting value systems, and that only conscious awareness of those systems can help them reconcile potential personal and social conflicts.

Evaluating Yupik All Around Us

Because *Yupik All Around Us* is less "active" than *Yupik on the Air*, review committee members suggested that additional activities might be needed to increase student
interest. These suggestions were eventually included in the Teachers' Guide. One involved recording children's conversations with other children, adults, and elders in Yupik and comparing them to similar conversations in which Yupik children speak only English. The comparison is then used to raise questions such as: What can a child learn in Yupik that he/she can not learn in English? How do a child's family relationships change if he/she can only speak to grandparents in limited English or through an interpreter? Could this be a cause of cultural change? Another suggestion was the use of audio or teleconferences, now commonly-used educational resources, to familiarize students with the language situation in other villages: dialect differences; differences in phrases and expressions used by younger and older speakers; and noticeable changes in language use that can be traced to various influences, e.g., the introduction of cable television. A third suggestion was to arrange correspondence between pen-pals in North Alaska, Canada and Greenland to share information and opinions about traditions, history and language issues.

Setting a Tone

Yupik on the Air and Yupik All Around Us set the tone for the remainder of the curriculum in several important ways. First, they suggest that language is a critical component of culture, and, on another level, a critical component of the microcosm of culture which is generated in
the bilingual classroom. Second, they suggest that
dividual choices and actions collectively combine to
influence and/or create social issues. Third, they suggest
that access to a vital culture is mediated through language.
While subsequent projects focus overtly on other issues,
Native language maintenance is fundamental to each.
CHAPTER SEVEN
TECHNOLOGY AND CHANGE, TWO PROJECTS

Technological change is the most obvious form of cultural change, for its evidence often stands in visible contrast to traditional ways. As noted in chapters one and five, technology, particularly in the Arctic, may seem to overshadow other aspects of life; so much so, that it is often mistakenly assumed to be synonymous with culture itself. Because the difficulty of understanding the role of technology in cultural change is complicated by these facts, it became particularly important to raise issues of technology and change early in the language and culture program.

Technological change, from a non-anthropological perspective, is often seen as a deceptively simple process. On the one extreme, a newly adopted technology is either thought to replace an existing technology or to add to an existing inventory of tools, in either case causing no attendant social changes. The cultural model is like a pegboard, where one peg may be exchanged for another of a different shape or color without rearranging the total pattern. On the other extreme, where technology stands for culture itself, new introductions equate with wholesale cultural change, perceived variously as loss and/or progress.
From an anthropological perspective, technological change is more complex. Because of the interrelatedness of cultural acts, a technological innovation must always be socially accommodated. Nothing changes in isolation. This means that a technological change is always potentially significant. Technological changes may result in immediate and dramatic social changes. More often, however, changes are (also) secondary, simultaneous, diffused, and difficult to predict, or, after they have occurred, difficult to trace back to an original cause. For people in the position of choosing whether or not to adopt a new technology, or how to adjust to a new technological presence, this is a more useful perspective than either of the more simplistic ones described above. The problem becomes one of recognizing cultural patterns and human adaptations to earlier changes, in order to make more informed decisions about contemporary and future changes.

We designed two projects through which students might explore these processes of change. The first begins with the very prototype of technological change, from bone and stone to metal tools, and suggests the complicated pattern of social changes that resulted from this apparently simple transformation. Later, students consider recent and contemporary technological changes, as well. The second requires each student to learn a traditional technology and then place that technology in its cultural context by
creating a museum display explaining its use, manufacture, and relation to other cultural patterns, and its contemporary equivalents. In both cases, these themes are interwoven with other educational concerns relating to language and literacy, historicity, community interaction, and a culturally-appropriate stance concerning technology and change.

Changing Tools, Changing Lives

In order to introduce the concept of technological and social change throughout Yupik history, students are given a problem: to make a usable tool out of a limited inventory of raw materials. For the first day of the project, each class is asked to make skin scrapers using only rocks and animal longbones. Since hand-made skin scrapers are still in widespread use, students already have a mental model of a workable shape, and quickly learn that the bone can be broken and shaped by the rock into a crude tool. They test the efficiency of their tools on a raw hide. Near the end of that class, students look at photographs of early Yupik bone scrapers, and discuss what social options and limitations might have been imposed by the use of such tools. In the following days, students progressively increase their inventory of materials by including slate, wood, twine (to simulate sinew), glue (to simulate adhesives based on animal products), and finally metal. At the end of each day, they examine photographs of scrapers
made of analogous materials, and discuss social changes that might have been correlated with these material innovations. They are encouraged to speculate about secondary effects as well as primary ones; e.g., changes in settlement patterns or seasonal migration due to the availability of resources in relation to harvest techniques; changes in hunting partnerships, trade relationships, prospective marriage partners, etc.

The tool-making activity leads naturally to an interest in prehistoric and historic technology. In order to give students a source of information about Yupik life during the early contact period, the project draws on the book *Inua: Spirit World of the Bering Sea Eskimo* (Fitzhugh and Kaplan, 1982), based on the Edward Nelson collection from the Smithsonian Institute. This is the only English-language text used in the high school program; however, it is such a fine reference that its use seemed justifiable, and Yupik language skills are integrated into the reading assignments. Taking photographs from *Inua* as a point of departure, students first inventory as many raw materials used at the turn of the century as they can identify. Then each student reads a different portion of the book, concentrating on explaining the design, manufacture and use of artifacts, in Yupik, to the rest of the class. A Yupik glossary in the *Teachers' Guide* provides a vocabulary reference. Students are also asked to show photographs
From Inua to village elders; experience indicates that this usually elicits detailed comments about the artifacts.

After reading Inua, students write stories which capture their perceptions of some aspect of nineteenth-century Yupik life, in the experience of an imaginary teenager. The writing assignment encourages them to think about what their lives might have been like a century ago. To this end, they are also encouraged to include accurate details of the physical setting and social concerns of the characters. Writing the stories involves researching some aspect of life which particularly interests each student, such as male or female socialization, marriage, survival in different situations, or interregional warfare. In addition to the use of written references, students rely on information from people in their community to add realism to their stories.

A story is developed in the Teachers' Guide as an example. In this case, the story features a young married woman who has recently moved into her husband's mother's home. She is pregnant and anxious to please her mother-in-law, who has strict expectations that she will observe pregnancy injunctions and other values appropriate to her role as a daughter-in-law. Details of the woman's chores, her personal aspirations, and her relationships with affinal vs. sanguinal kin are included.

Student stories become the basis for a discussion about
changes and continuities in basic human needs and cultural values. Students are asked to think of situations in which technology has changed, but the values underlying human interactions have remained the same; the example provided is that of the seal hunter who may harvest and distribute his catch according to ancient customs, although he uses a radically different technology in the hunt.

This discussion, in turn, prepares classes to consider recent and contemporary cultural patterns in relation to technological change. The functional replacement of dogteams by snowmobiles is the first example to be considered. When this subject is raised, students initially tend to suggest primary changes brought about by the use of snowmachines. These include such observations as: "People can travel farther and faster and pull heavier loads"; "People need to learn about machine repair and maintenance instead of dog breeding and handling"; and "You can’t survive by eating your snowmachine if you get lost."

The Teachers' Guide includes a summary of The Snowmobile Revolution (Pelto, 1973) as an indication of the kinds of secondary, far-reaching social changes that may also result from a technological innovation. This book describes the impact of mechanized herding on the lives of Finnish Sami (Lapps), tracing several chains of consequence in their society and economy. In terms of technological and social change, obvious parallels exist between the Sami
situation and that of the Yupik people. This case study is also particularly apt since Sami herders were recruited by the U.S. government to introduce reindeer management to the Yupik Eskimos in 1901; this was an ultimately unsuccessful attempt to produce fundamental social change through technological manipulation: "To take a barbarian people on the verge of starvation and lift them up to a comfortable self-support and civilization is certainly a work of national importance." (Sheldon Jackson, 1895, in Lenz, 1985: 52). Although reindeer herding was eventually discontinued, Sami intermarried and raised descendants who still live in the region, and students have some interest in learning about Sami culture on its own soil.

As the teacher points out what happened in the Sami case, students are asked to consider similar types of change related to the rapid spread of snowmachines in their own villages. These may include, for example, changes in "peoples' attitudes, family relationships, land use, status (that is, who is richer, more influential and more respected in a village these days...), and economic dependence (that is, what happens when people are more dependent on a mode of travel invented and sold by Outsiders, rather than one which uses locally available resources?)" (Morrow and Hensel, 1987, in press)

Since this is a change that has occurred within recent
memory, students can ask adults in their communities about their own experiences. It is suggested that classes invite three or four men and women in their late thirties or early forties to discuss their observations with students. These guests were in their teens at the time of transition. Teachers prepare the guests in advance by explaining the types of information in which students may be interested. Students prepare by drawing up a list of questions for the guests. Instructors urge students to come up with their own questions, but the Teachers' Guide supplies some thought-provoking suggestions if they have difficulty getting started. Suggested questions include the following:

1. Did the change to snowmachines affect where, how, or what people hunt, fish or gather? If so, how did these changes affect other parts of their lives?
2. Did people stop hunting/fishing as much for certain animals, or use fewer parts of the animals they caught, once they no longer needed so much dog food?
3. Has the increased speed of travel changed how often people go visiting, who they visit, and far they go? If so, how has this changed the kinds of relationships people form (for example, more marriages with people from distant villages, extended trading networks, more friends and strangers gathering together for events such as church rallies)? Think about the consequences of seeing people (or marrying people) from more distant areas. Do some new customs get introduced? Are new words from other dialects used/better understood? Do new ideas travel with people? Does news/gossip travel faster?
4. How have women's lives changed since men hunt on snowmachines? Do they have different worries because of the new risks men face? Do they have more or less work to do? Do they get out more
themselves?
5. How have teenagers' lives changed, now that they can go where they want (quickly) and be away from the village? How do they spend their days differently from teenagers before snowmachines became popular? Do they need to earn more cash? Do they learn about different things? Do they think about the status of having a new, fast-model machine?
6. What different types of things do you learn about animals and the land when you hunt or travel by snowmachine rather than dog team? (Hensel and Morrow, in press: 1987)

After the guests have contributed their ideas, each student is asked to illustrate or write about one change that has taken place as a result of the shift from dog traction to snowmachines. Alternatively, a student may choose to consider any other change that is currently in progress, such as the introduction of cable television, telephones, or all-terrain vehicles. Their essays and illustrations are shared with the rest of the class and the school. A final discussion about what students have learned about the relationship between technology and cultural change throughout Yupik history ends this project. Cultural considerations in designing CHANGING TOOLS.

CHANGING LIVES

Changing Tools, Changing Lives was less problematic than many of the other projects because the content lent itself easily to the project format. The initial tool-making activity was chosen because it was expected to have tremendous appeal, as well as educational potential. A
dramatic, hands-on, cooperative experience which led
naturally into other activities, tool-making typified some
of the best features of the project approach. As predicted
(see Evaluation, below), it has served as an excellent
introduction to the topic of technology and social change,
and a model for other projects. The merits of opening each
project with a hands-on group activity prompted us to
design games to introduce each of the last three projects
of Level 1, and a craft activity for the project

As an alternative to the "traditional material inventory"
view of culture, Changing Tools, Changing Lives was also
intended to convey the idea that change is normal, and that
people have always had to deal with its consequences, both
expected and unexpected. A correlate to this was the
development of a sense of history that was not simply
divided into pre-contact and post-contact periods, the
generally-accepted divisions. The tool-making activity was
thus also designed to dispel the idea that Yupik culture
was static in "the old days." Nelson's collection, too,
students are reminded, represents a particular time period:
"it would have been somewhat different if he had visited
the area ten years earlier, or ten years later. In the
same way, if you purchased a boat, motor, snowmachine, sled
and truck in 1963, 1973, and 1983, your collections would
be different." (ibid.) A century ago, there was some
incipient missionization, an increasing use of guns and metal, the early appearance of traders and basic European trade goods, and a few miners investigating the Bering Sea area. Thus, when students read *Inua*, or write about life as a late-nineteenth-century teenager, they need to be reminded that any account of past life represents a particular "snapshot." This may be particularly confusing when elders or other adults tell students about local history; the commonly-used formulaic phrase ak’a tamaani ("a long time ago") may refer to both comparatively recent times (e.g., 1930) and comparatively ancient ones.

Consequently, students are forewarned that they might have to deduce the time period in question by the descriptions of material goods and tools in the stories they hear. Traditional narratives also convey a sense of the past as ongoing presence -- mythos as history -- that differs from the fictive use of the ethnographic present to describe the past.

The use of the *Inua* book posed other potential problems because of its English reading level. A computer check, suggested by other members of the bilingual department staff at L.K.S.D., placed the grammar and vocabulary at a high secondary or early post-secondary level. Developers, however, thought this obstacle was partially mitigated by the familiarity of the subject matter. Many words which the computer program counted as rare, such as "beluga
whale" and "subsistence," are common English vocabulary items in the Yupik-speaking area. The book also includes Yupik vocabulary for many of the artifacts pictured, and developers compiled an extensive glossary for other items which the authors did not include. The archaic vocabulary, in itself, aroused student and teacher interest. In addition, the book is so well-illustrated that it was decided that students could rely on photographs and captions to provide the bulk of the information they needed.

Teaching students how to write original stories involved a consideration of the implications of literacy, and the question of developing culturally-appropriate narrative style and structure. It has been well-argued (Scollon and Scollon, 1981; Heath, 1983) that literacy in the essayist-text form, the form most valued in educational institutions, presupposes a culturally-specific set of discourse patterns which are predicated on a particular mainstream worldview. Scollon and Scollon (ibid.) suggest that when literacy is enculturated in the formal school setting, ethnic identity is threatened, for a change in discourse patterns results in fundamental cultural change. The question is, then, whether it is possible to develop less destructive forms of literacy, which might both validate and reflect Native identities. If the problem lies less in literacy per se than in a particular mode of
In this program, we sought to avoid prejudicing students' culturally-acquired notions of temporal flow, backgroundering and foregrounding, and the explicit or implicit development of plot and character. This approach was consistent with an hypothesis that culturally-appropriate writing styles may eventually emerge as students write, as they read the writings of other students, and as they become conscious of the inherent potentials and limitations of expressing thoughts on paper. In other words, since speakers share linguistic competence, including the knowledge of appropriate grammatical and rhetorical structures in speech, it is hypothesized that such speech conventions may be gradually adapted to a written format. Because of a longterm exposure to English writing, some conventions of paragraphing and punctuation have already become standard. Although English standards have already influenced their Yupik compositions to some extent, however, students' English writings also show the clear influence of Yupik rhetorical organization. While English teachers seek to "correct" these Yupik influences, Yupik teachers can recognize in them a potential framework for a literature that more accurately reflects Yupik presentations of thought.

Given students' current level of literacy, teachers tend to be primarily concerned with correcting
orthography rather than looking at overall organization. This may be all for the best: the less restrictive teachers are about organization at this point, the more room there may be to develop new styles; this is because consciously-imposed conventions tend to be derived from existing English models, in the absence of Yupik ones. Students and teachers may have a better chance of escaping rhetorical translationism, as it were, by relying on their intuitive judgements of what "sounds good" in the writings.

Nonetheless, since creative writing in Yupik is an unfamiliar enterprise, teachers needed some guidance to get students started. Developers decided to discuss story-writing in terms of plot, character, setting and the use of detail, without dictating how these should be expressed or developed in the students' stories. The students' first task is thus to choose a situation on which they would like to base a story. Then, they are encouraged to think about (and perhaps write down) details of the background and setting of the situation. It is also suggested that they explore their characters' attitudes about themselves, their situation and other characters. They are then told to develop the situation into a story. The students are left to decide what makes an interesting story, which details need to be incorporated into it, and how they will order their presentations. While this might not be the ideal solution, we hoped to err on the side of too little rather
than too much prescription.

In designing Changing Tools, Changing Lives, a final concern was to respect cultural attitudes about the question of accepting, rejecting or adapting to innovations which affect contemporary Yupik life. The project does not consider what one might choose to do if a proposed change posed a serious threat to the integrity of the culture. In line with earlier indications of a reluctance to predict behavior and to speculate about the future, review committee members rejected the idea that this project might end with a consideration of a hypothetical technological change, such as the development of roads between Bethel and surrounding communities, and its impact on the villages. It made little sense to discuss changes unless they had actually been proposed. It was agreed that a consideration of the unpredicted effects of previous innovations could help prepare young people to make careful decisions in the future; in the project, however, this is only suggested by implication. Thirty- to forty-year-old community resource people, for example, are chosen for the discussion of the consequences of the introduction of snowmachines instead of elders because they were in their teens (the students' age now), during the transition. Their initial and retrospective reactions to the change, it is suggested, will sensitize students to changes that are currently in progress, and remind them that it is not only elders who
Evaluation of CHANGING TOOLS, CHANGING LIVES

Of all the activities developed for the secondary Yupik program, tool-making has proven to be the most popular. Students are almost universally pleased to spend a week experimenting with rocks, bones and slate. Several classes went on to make slate-bladed semilunar knives (uluat), harpoon heads and points, and other traditional tools. In the one class which became quickly bored and frustrated with their lack of progress, the teacher turned the disinterest to advantage by prompting consideration of the hardships of prehistoric life; students ended up writing their stories on this subject rather than the one suggested in the Teachers' Guide.

An unanticipated difficulty in one class was that female students did not want male students to read their stories. This is not surprising in a culture where females are socialized to limit their verbal participation in public, mixed-gender groups. In this case, the (female) teacher solved the problem by reading everyone's papers aloud, anonymously. In later teacher-training sessions, other teachers indicated that they frequently divide their classes into small same-sex groups for activities in which students might feel inhibited.

Student and teacher evaluations expressed overall enthusiasm about the project. Judging from their comments,
students apparently grasped the concept of connections between technology and social change, e.g., "I learned tools that were used in the old days and how they got married and how snow-goes changed our lives," "I learned how Yupik culture has changed as people used different tools." There was particular interest in learning about the customs and technology of earlier times, including vocabulary that is now used only infrequently.

**Make a Village Museum**

The fourth project of the series continues the theme of technology and social change, and gives students an opportunity to learn more about particular technologies which may interest them. Make a Village Museum is actually introduced a month in advance, before Changing Tools, Changing Lives, in order to give students time to complete individual craft projects.

The projects are initiated and pursued outside of class, under the tutelage of adults and elders in the community. This enables students to learn in a more traditional setting and by more traditional means than the school can provide; instead of an elder demonstrating a particular skill to an entire class, students can choose to follow their own interests and to be instructed on a one-to-one basis. Learning is then structured by the sequence typical of informal learning situations, where Yupik children and youth indicate their interest in some activity which is
being pursued by an adult, and (if it is an appropriate activity for that child) the adult offers instruction. 

(Harrison, 1981)

It is suggested that students begin with a relatively modest project, so that they can complete it, or at least learn the basic processes involved, in about six weeks. Subsistence gear (e.g., net mesh, fishtraps, snowshoe babiche), tools (curved men’s and semilunar women’s knives, skin scrapers, net guages), fur clothing, ivory jewelry and sculpture, traditional toys (dolls, “Eskimo yo-yo’s”\(^1\), storyknives \(^2\)) utensils and containers (grass baskets, wooden ladles, snuffboxes), ceremonial objects (drums, dance fans), and scale models (of e.g., a kayak) are all possible choices.

Adults who are well-known to be skilled in some of these crafts, made for use and/or sale, live in every Lower Kuskokwim village. Students are asked to learn what they can about gathering and preparing materials, as well as constructing items; ultimately, they will try to show

\(^1\) An "Eskimo yo-yo" is a toy consisting of two objects attached to strings of slightly different lengths. The player twirls the strings so that the objects circle in opposite directions. Miniature mukluks, small stuffed fur animals such as birds or seals, and ptarmigan feet are common yo-yo attachments.

\(^2\) Storyknives, which resemble ivory scrapes once used for small mammal and bird skins (Fitzhugh and Kaplan, 1982: 131) are used by girls to illustrate stories etched in mud. "Fancy" storyknives are carved of ivory or wood and decorated with incised lines.
The students' experiences, and items they make, become the basis for a village museum, constructed in the following project. Where *Changing Tools, Changing Lives* gives a panoramic view of Yupik technological change, this project focuses on specific changes and continuities in items of daily use, and attendant changes in social customs and values. Since not all students are familiar with the concept of an historical museum (although there is a regional museum located in Bethel), the teacher first describes its nature and purpose. The *Teachers' Guide* explains that museums teach about historic and contemporary life through the display and educational use of objects made and/or used by particular groups of people:

Museum collections preserve old things that might otherwise deteriorate or be lost. They also preserve everyday items that we might otherwise throw away. For example, we do not usually think that the rifles, toothbrushes, and sewing needles that we use are very interesting. But in thirty years, they may tell our children quite a bit about the way we used to live. (Morrow and Hensel, in press, 1987)

The *Guide* also stresses that the more is known about an object, including beliefs and practices associated with its use and manufacture, the more an artifact can reveal about cultural patterns. Implicitly, the more one knows about cultural patterns, the better one can understand the relationship between technology and social
In order to help students define the kind of information that might bring objects to life, the teacher is encouraged to bring a "mystery object" into class and then have students generate a list of relevant questions that they would like to have answered. Then, they contribute suggestions for research to find the answers.

Based on their interests and the type of display they would like to make, students begin to collect objects for the museum, research their questions about those artifacts by consulting books and people in the village, and write down the results of their research. Artifacts may range from archeological specimens found by villagers to imported items (such as rubberized hip-waders) which have functionally replaced their handmade equivalents (tall, waterproof fishskin or sealskin boots). Locally-produced films which demonstrate various Yupik technologies, as well as one which features sequences shot at the Smithsonian Institute during a recent exhibit of Bering Sea Eskimo artifacts, are also shown throughout this project to increase students' knowledge and awareness of what can be learned through material culture.

The class then discusses various approaches that might be used to display the artifacts. Three possible approaches are detailed in the Teachers' Guide, but students are free to choose others: a thematic approach
(e.g., comparative clothing styles, dance and music); a process approach (e.g., displaying raw materials and objects in progressive stages of manufacture); and an approach which focuses on the work of an individual (e.g., variation and continuity in one person’s designs).

During one week of the project, students demonstrate and explain the crafts that they have been making outside of class, and discuss how they might include these items in the village museum. Several days are also spent constructing displays and writing labels and other information for the exhibits. Students are encouraged to learn enough about all of the displays to act as docents for visitors, or to record guided tours on cassette. As always, oral and written communication is in Yupik. During the final part of the project, the museum is opened to the school and the village. Visitors are invited to supplement the information students have gathered, and to demonstrate techniques in more detail. If people are receptive to the idea, students may make a more permanent display in the school or village.

Designing Make A Village Museum

Make A Village Museum was designed, among other things, to shift the common emphasis on material culture from a static model to a dynamic one. Many non-Natives, frequently village teachers, collect and display Yupik handicrafts on their walls, where they appear as admirable examples of
local skill, but removed from their cultural context. Schools may also feature showcases of artifacts, minimally labelled. For most students, this is the familiar image of Yupik culture on display. This decontextualization contributes to the sense of culture as a "collection," as described in Chapter Four. The museum project suggests, instead, that objects are products of cultural processes. They provide but one of many possible points of connection with a complex of beliefs, attitudes, methods and techniques.

The project serves to educate not only the students and other villagers, but also the non-Yupik school staff. When we train teachers for this project, a "mystery object" is often chosen from the non-Yupik culture. In one training session, a shoehorn, which initially excited almost no interest among the non-Native teachers, quickly led to an animated discussion about health faddism (the prevalence of running shoes makes shoehorns largely obsolete), the economy (synthetically-made shoes from the Orient have replaced many Italian and South American leather imports), style (informal dressing is now acceptable in previously formal contexts) and so on. Teachers were curious to discover that while only two of the twenty present currently owned shoehorns, all had owned them fifteen years ago. The name of the object itself suggested its early manufacture from horn, which prompted
another discussion. In short, it was not difficult to convey the idea that, through almost any given artifact, there is the potential for exploring larger cultural issues.

By apprenticing themselves to craftspeople in the village, students do even more; they actually participate in the cultural processes related to familiar objects. They form or reinforce active relationships with older people, whose communicative and instructional styles differ from those of teachers in the schools. These apprenticeships also provide an impetus for them to learn skills that may now be passed on to relatively few youth. Again, one implicit message is that there is much to be gained in the community that requires a good knowledge of Yupik and the ability to interact in culturally-approved ways.

In addition to their apprenticeships, students leave the classroom to collect and research artifacts. Heirlooms, photographs and archeological finds are often brought out of shoeboxes, where they have been out of sight for years. Returned temporarily to circulation, these objects offer the students and community a focus for the discussion of continuity and change. In addition, this activity may lead to dialogue about pot-hunting and archeological excavation, since communities have often experienced one or both. In some cases there is resentment
at the removal of artifacts to private collections and "Outside" museums. This project helps to promote a sense of ownership of material culture, as well as an understanding of what might be gained and/or lost from its preservation in local and distant museums. Since students also display their own handiwork, including their imperfect and incomplete attempts, they are reminded that they too, are culture-bearers.

In terms of specific cultural considerations, this project was relatively straightforward. Designers anticipated a positive response, on the whole. By this time in the program, students had experience conducting interviews; interviewing was also expected to be relatively comfortable because of the inherently interesting focus on particular objects. As with the photographs from Inua, experience suggests that artifacts usually elicit a wealth of commentary.

As in the previous project, developers were concerned about the question of imposing a non-Yupik cultural logic on the organization of writing, and in this case, of the displays as a whole. For the museums, organization was dictated by the need to make displays visually effective. The Guide suggested that labels be short, simple, quickly informative and large enough to be seen at a viewer's distance. More detailed information might be supplied on or near displays, but it still needed
to be succinct enough to be easily accessible to viewers. In the Teachers' Guide, examples of labels, additional information sheets and exhibits variously suggest a temporal format (e.g., step-by-step presentation of basket making, beginning with raw materials and progressing to finished object; juxtaposition of older and newer forms of transportation) or a format based on the answers to a series of related questions (information organized by topics expanded to whatever degree students think necessary). It is also suggested, however, that students might want to include performances (e.g., live or recorded music, dance, demonstrations, or other relevant activities). None of the proposed formats were tailored to particularly Yupik concepts of visual organization, but the Yupik review committee found them to be logical and also sufficiently varied to suggest that they should freely use their own ideas and those of the students.

For the purposes of teacher training, we constructed a display which showed the manufacture of skin scrapers and compared scraper styles and materials, past and present. The sample display incorporated scrapers made by students for Changing Tools. Changing Lives. For teaching purposes, one bilingual instructor also loaned exhibits constructed by his class. These featured the construction and use of individual artifacts, including harpoons and harpoon points, fishtraps, and ice-fishing
paraphernalia. Students had made examples of each item, and drawn schematic diagrams of the objects in use.

Opening the museum to the public posed some potential communication problems, which had to be considered in the design. Students in the bilingual classes, and many other students in the school, are literate in the standard orthography. The majority of the adult population, however, is not. While students could sharpen their literacy skills by labelling and explaining museum displays, non-literate visitors would be unable to read them. Consequently, designers suggested that students guide visitors through the exhibits; this had the added advantage of familiarizing students with displays made by others in their class, as well as those they had made. It was anticipated, however, that the use of this method would create another problem: students would be intimidated by the prospect of guiding elders through their museum, since normal roles (where elders instruct youth) would be reversed. Two solutions were proposed. One was that students or teachers might record information about the displays, which visitors could play back on a cassette recorder as they viewed the museum. This would give students oral practice and reinforce learning, but it would be a depersonalizing solution. The other possibility was for students to be guided through the exhibits by the visitors, preserving the adults’ teaching roles and adding to the available information. In
combination, the two methods offered a reasonable compromise.

Evaluation of Make A Village Museum

This project has been evaluated by observation of student displays and by teachers' comments. The student displays have been impressive: students have learned to make a variety of items, including openweave baskets (issratet), harpoons, knives, an ivory fish lure and jigging stick, semilunar knives, skin scrapers, traditional games, including a dart game and target, fur slippers, hats, mittens, and mosaic parka trim. Some teachers have scheduled this project to occur shortly after a Cultural Heritage Week during which students have had a concentrated period of school time in which to work on traditional craft projects. At least one school has continued to display student exhibits on a longterm basis. Students' enthusiasm for making the display items has been obvious; it is more difficult to assess whether or not other goals of the project, such as increased understanding of processes of cultural change, have been met.

Teachers, however, have also expressed their satisfaction. In the 1986 training workshop, six different teachers listed the village museum project among the things they "liked best" about the high school curriculum. In addition to generally positive comments, teachers particularly valued the involvement of community resource
people and the idea of students making the museum materials themselves.

Learning for Later

Often, the evaluations of these projects refer to activities such as tool-making and craft-learning as ends in themselves, rather than in relation to the broad cultural concerns with which they are intertwined. Indeed, such activities are valuable in and of themselves. Their initial impact, however, does not preclude later recognition of their larger implications, as well. Just as traditional Yupik learning required repeated exposure to the advice and experiences of elders long before these precepts began to apply to one's own life, so these projects may come to mind years later when their relevance is more immediate.

In this dialogue between anthropology and education, an anthropological perspective on enculturation suggests that the school creates an artificial confine for the testing and evaluation of cultural programs. If many of the effects of childhood education are only evident in adults, then we do not learn as much as we need to by testing children. Culturally-appropriate education presupposes a reliance on methods of teaching that are time-tested (i.e., proven effective over generations) and tested by time (i.e., that become effective in later life).
Inextricably bound to questions of land use and ownership, and in resistance to competitive economic pressures, subsistence rights are a major preoccupation of Delta residents. Today, hunting is watched almost as vigilantly as prey; subsistence activities are researched, regulated, challenged and defended on local, statewide and national fronts. Sudden changes in harvest limitations and other restrictions, the fear of land loss after 1991 under the provisions of ANCSA, and threatened depletion of resources by commercial harvesters promote a widespread sense of anxiety about the future of subsistence.

Despite Yupik testimony at public hearings in which the non-economic dimensions of subsistence are weighed as importantly as the economic ones, subsistence is still narrowly treated as an economic issue for the purpose of designing legislation. Insofar as subsistence can be upheld as economic necessity, this is its most expedient and effective defense in the legislative arena. Also legally defensible are arguments of "customary and traditional" use of particular resources in certain geographical areas. Economic diversification may eventually threaten the basis for the first argument, while superficial changes in
tradition threaten the second.

Because of this increasingly narrow focus on the legal aspects of subsistence, other perspectives on subsistence are easily overwhelmed. Paradoxically, then, the more subsistence becomes a focus of public debate, the less emphasis there is on the full historical and current bases for subsistence. As an object of analysis and argument, subsistence becomes an intellectual problem, divorced from daily experience. This is particularly true as school and extra-curricular activities absorb more of the time that would otherwise be spent in activities directly and indirectly related to subsistence.

For the high school program, we designed a project centering around historical and contemporary dimensions of subsistence. In the Pitengnagsaraq project, subsistence is portrayed as a system that broadly interrelates physical survival, technical capability, and cultural values of generosity, cooperation, and spiritual harmony. The economic aspects of subsistence are also seen as interrelated with each other; some resources are relatively interchangeable, others, for a variety of reasons, are not. This perspective is intended to counter the common economic assessment of individual resources, each of which becomes an isolated and negotiable item. Subsistence is also placed in cross-cultural perspective.

Pitengnagsaraq: Project Description

Pitengnagsaraq (literally, "catching or acquiring
things") is designed to increase students' basic understanding of the historic Yupik subsistence cycle and of the contemporary resource base of their own villages. Major research for this project centered on the development of a board game to replicate subsistence activities in the Yukon-Kuskokwim Delta prior to the introduction of firearms and motorized vehicles. The game demonstrates the subtle interrelationship of factors which influenced the success of Yupik hunter-gatherers. These include weather conditions, personal judgement, knowledge of availability of resources in particular seasons and locations, storage potential of foods, reciprocal human relationships and distribution of resources, human behavior which might favorably or unfavorably influence the supernatural, and the need for non-food resources. The resulting model, although necessarily schematic, represents the system fairly accurately. In the following section, the design of the board game will be discussed at length.

Teachers briefly introduce students to the game by explaining that their Yupik ancestors migrated seasonally to harvest resources in small family groups, returning to semipermanent communities during the winter ceremonial season, which involved reciprocal hosting and gift distributions to large numbers of guests. Since many Yupik villagers still move seasonally to fish camps to harvest salmon, and some move temporarily to other seasonal camps (for e.g., muskrats, migratory birds, and berries) the
migrational pattern is somewhat familiar. Subsistence hunting and fishing continue to dominate the Central Yupik economy, in addition to commercial fishing and other sources of cash income. Less familiar to students today is the idea of trading relationships and the reliance on a network of extended and fictive kin for support during long-distance travel. Students are also unaware of the exigencies of life completely on the land, with the anticipation of a sharp decline in resources during the long winters; supplementary cash income, year-round availability of storebought foods, and more options for long term food preservation have alleviated the historic fear of starvation.

After the teacher supplies this minimal background, students play the Pitengnaagsaraq board game several times over the course of a week. All those who survive a full year are "winners," and students quickly discover that sharing and cooperation promote a higher survival rate than does an ethic of individual competition. Thus, subsistence economics are related to fundamental Yupik cultural values. In fact, the game presumes some shared cultural knowledge among the players, such as which foods are most desirable, and how hosting relationships are conceived.

These simple observations open a discussion of subsistence as a system, a concept which is sometimes difficult for students to grasp. The Teachers' Guide gives the example of a hunter planning a spring seal hunt,
considering the weather and ice conditions, whether he had the means to preserve and use the meat and skins, the condition of his tools and weapons, and his means of transportation.

If any one of these factors was a problem, he might not be able to go hunting. In other words, subsistence involved many decisions which were related to each other. If one thing went wrong, it could affect everything else. Because of this, subsistence is said to be a system. In a system, all of the parts work together; in other words, you can not understand what subsistence is just by learning how people catch animals, without thinking of the other things involved.

Parts of a system may change over time. For example, the type of transportation used to hunt seals has changed..., and so it may be possible to hunt in somewhat more marginal weather conditions.... The idea is that a change in one part of the system (the transportation used) can cause changes in other parts of the system (the type of weather in which one can hunt). This idea will come up frequently in the class because it is helpful to think of connections among many of the ways people think and behave. It helps us to understand our complicated lives. (Morrow and Hensel, in press: 1987)

Classes then consider resource dependence in the context of subsistence as a system. The definition of subsistence, commonly discussed as if it were a unique feature of rural Alaskan societies, is expanded to include other cultural groups who depend primarily on locally grown, harvested and/or hand-manufactured products. A basic distinction is drawn between villages and cities worldwide, in terms of relative reliance on the cash economy. Television and other mass media often leave rural Alaskans with the mistaken
impression that the rest of the world is urban; this prevents people from recognizing affinities with other rural populations. The Pitengmaqsarag materials give students an elementary understanding of worldwide economic interdependence; students reflect, for instance, that Yupik villagers sell salmon to urban Japanese, and use some of the money they earn to buy coffee raised by Central American Indians. At the same time, Yupik Eskimos still rely primarily on their own, direct use of the land to provide basic sustenance, as do the Central American villagers, in contrast to the residents of Tokyo.

To determine the extent to which this is true, students list all of the resources which they consider important. They include resources harvested for food, clothing, heating, housing, medicine, trade, decorative and ceremonial 1 use.

This information is charted along with students' opinions about the quantity of each resource used, and its relative cultural importance. It is apparent, through this exercise, that most historically-important resources continue to be used in the 1980's. The exercise also shows that each village depends on a large number of local resources, that

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1 Resources gathered for decorative and ceremonial use would include, for example, caribou neck fur and snowy owl feathers used for making dance fans, which have evolved from traditional finger masks (c.f. Ray, 1981:139), and minerals used for dyes. Materials such as these are still meaningful and/or are considered particularly appropriate in the construction and decoration of clothing, masks and other carvings, and dance paraphernalia.
each resource may have multiple uses, and that some resources (such as those mentioned in footnote #7) are valued apart from practical necessity. Students also consider possible substitutes for each resource they list, in order to gauge its relative cultural value. For example, while vegetable oils are commonly purchased for cooking, they would not be considered as a replacement for seal oil, which has strongly positive cultural associations in addition to its distinctive and desirable flavor and important concentrations of fat-soluble vitamins. On the other hand, if Northern pike were unavailable in the diet, other fish could be readily substituted. The point of this exercise is not to assign a definite value to each item on their list, but to encourage a recognition that people may consider certain resources more or less essential, for a variety of reasons.

After completing their chart, students review the list and check the resources which are used in large quantities, have high cultural value, and cannot easily be replaced by a substitute. Then, they make another chart which summarizes how, when and where each is harvested. Two of the resources on this list -- particularly if they are those about which students have little knowledge -- are chosen for further investigation. To study these two in more detail, students map relevant hunting, fishing, and plant-gathering sites or areas on United States Geological Survey maps.

Preparations for the mapping activity involve deciding
who to interview, and what seasons and harvest technologies to consider: "For instance, in winter, whitefish are caught in nets under the ice. After break-up, whitefish nets are set in open water. To get complete information about whitefish net sites, students would have to ask about both kinds of fishing, and then mark each type on the map with a different color pen, or a different symbol." (ibid.) Next, students determine whether site maps or area maps will give a more accurate picture of subsistence land/water use for the resources in question. It is suggested that site maps are useful for showing activities that are pursued year after year in a particular location (e.g., pinpointing set nets or fish weirs). Area maps are suitable for showing activities like seal hunting, in which large sections of the coastline are searched. Sample questions which would result in one or the other type of map are included. In terms of selecting people to interview, students must consider age and sex of people who usually harvest particular resources, the time period under consideration (e.g., muskrat hunting over the past five years) and how many respondents would provide a representative sample. For seal-hunting, it might be sufficient to interview one hunter from each family group, since hunters from a given village tend to cover the same general area. On the other hand, more people would need to be interviewed to map all sites where individuals set fishtraps. The class also chooses a consistent set of
questions and symbols for their maps.

As in preparation for previous interviews, the teachers contact prospective interviewees to obtain permission and to advise them of the nature and purpose of the students' inquiries. In groups of two or three, students then take questions and maps to the homes of people to be interviewed. They record the data they are given on the map, and note Yupik placenames and other related information, as well. After all interviews are complete, students compile the data onto composite maps, showing the entire village's pattern of land and water use, in relation to the two resources under discussion.

Classes interested in supplementing this project have used the materials in other ways, to teach map-reading and orienteering. One teacher taught his students to identify landmarks by cutting silhouettes out of construction paper and connecting them to their respective locations on the map. He commented that at least one student found this useful when he became disoriented while travelling by snowmachine -- he looked for landmarks, and recognized a silhouette familiar from class.

The project ends with class discussion of the village's resource base and its historical and contemporary importance. Designing Pitengnaqsaraq

The idea of a game was suggested by the complexity of the data involved, and the desire to give students the sense
of actually participating in an historic cultural system: the game requires them to make choices as hunter-gatherers, taking into account the parameters of technology, beliefs, and environment.

While a simulation game was a novel idea, it fit naturally in the existing context of games and play. Traditional Yupik children's games included ball play, string figures and knife stories, and games of coordination (such as kapuckaq, which is similar to mumblety-peg). Highly competitive games of strength and endurance, such as wrestling, and games of skill, with darts and targets, were popular among men and boys in the qasgiq. Such games tested the composure of those defeated, as well as the skills of the winner. In the Russian period, checkers (piaskat, from the Russian 'peshka,' pawn) and playing cards (kaaltaat, from 'karta,' playing card) were introduced and became popular pastimes. The "Lapp game," a non-competitive bat-and-ball game, was introduced by Lapp reindeer herders after the turn of the century, and other games, such as tug-of-war, were taught by missionaries and schoolteachers throughout the past century.

Currently, board games such as Monopoly, Clue, and Scrabble are played in most homes, card games are ubiquitous where not prohibited by the local church, and bingo, in Bethel and the Catholic villages, is a passionate form of recreation. In the schools, word games and board games are
standard educational devices. Bilingual teachers and material developers have devised simple Yupik games for teaching letter recognition, color vocabulary, and other elementary concepts for over twenty years.

In designing a subsistence board game, we were interested in both the cultural content of the game itself, and the way in which the game would be played. As a model of the historic subsistence system, the game is faithful to basic Yupik conceptions of the human and natural worlds. A simple comparison between Pitengnaqsaraq and Monopoly serves to illustrate the contrast between the two socioeconomic models represented. Monopoly suggests an economy based on shortage: players are in competition for limited goods. A winning strategist engineers the ruin of other players. Land is plotted in squares, to be owned (bought, sold, and mortgaged), and trespassers must pay to cross another's property. The fun in Monopoly comes from winning at the expense of everyone else.

In Pitengnaqsaraq, there is no absolute shortage of goods. Location and season determine the relative availability of resources; an individual may run out of food, but not because the food supply, in a large sense, is depleted. Players are not in competition with each other; their goal is to survive, singly and collectively. Travel is not restricted by land ownership, but by customary range, available transportation, season, and weather conditions. The
fun in playing *Pitengnaqsaraq* is in combining luck, skill, and cooperation to get enough to eat, and preferably, to share. There is no advantage in amassing a monopoly of food, since generosity is socially rewarded, a reversal of fortune may turn surplus into shortage, and both storage problems and social custom (requiring utilization of one season’s harvest before the same resource comes into season again) limit potential hoarding. As will be discussed in more detail later, the game is also entertaining because it often juxtaposes a player’s actual social statuses with the fictive status achieved during the game.

Designing the *Pitengnaqsaraq* board game posed a creative challenge, requiring both research accuracy and imagination. The game board consists of a map of the Yukon-Kuskokwim Delta and Bristol Bay region, extending north to St. Michael and south to Togiak. This range was chosen to include all of the Lower Kuskokwim School District and surrounding areas once connected by trade and travel. The map, entirely in Yupik, is marked with contemporary village sites for ease of orientation, although new population centers have been settled and old ones abandoned over time. The tempo al setting of the game is intentionally not specified, referring only to an historic period “before the introduction of firearms and mechanized transportation”; designers did not wish to make the game more difficult by using older maps with unfamiliar placenames. Other factors provided more than
All over the 20" x 30" map are symbols indicating the presence of twenty-two different resources. (FIGURE 2) These include berries; greens; caribou; moose; bear; Arctic hare; fur-bearers; eggs; migratory birds; whitefish; pike; herring; tomcod; blackfish; chinook, chum, coho and sockeye salmon; seals; beluga whales; and miscellaneous fish. Some of these categories, such as "fur-bearers" and "seals," are composite, including a number of related species, in order to avoid cluttering the map with so many symbols that it would be unreadable. Composite categories also represent resources which share similar habitats; students all know that berries of many species, for example, are broadly distributed, and berry symbols shown here and there on the map are sufficient to suggest their availability everywhere on the tundra. Each resource symbol consists of a colored circle containing a black silhouette of the appropriate resource. The full-color production allows each symbol to be a different color, and the artist used related colors to distinguish ocean and riverine resources (in shades of blue, purple, and green) from land resources (shades of yellow, orange and brown).

Symbols are situated so that any player within three inches of a resource can be considered to be within harvesting range. This also reduces visual clutter (in other words, one seal symbol could be placed within range of each coastal site to indicate that the bulk of the coastline was
FIGURE 2: The Pitengnaqsaraq ("subsistence") game board is a map of the historic range of trading and resource exploitation for Yupik Eskimos who lived within what is now the Lower Kuskokwim School District. Within small circles are pictured harvestable species present in specific areas: key to resources and explanation of throws of the dice are in the bottom left corner of the board. The deck of Raven chance cards are shown just above the dice.
traveled for seal-hunting).

Corresponding to each of the resources shown on the map are fifteen or thirty cards (depending on the relative quantity of each resource harvested; i.e., thirty of each variety of salmon, but only fifteen bears), illustrated appropriately. (FIGURE 3) Each card represents a two-week supply of the resource pictured, and the play is correspondingly divided into two-week periods (twenty-six player turns cover one year of subsistence hunting). In addition, there are kayak cards for transportation between break-up and freeze-up, and dog team cards for winter transportation. Finally, there are Raven cards, representing sudden changes of fortune (e.g., attack by enemy warriors; ostracism for commission of a crime; or arbitrary instructions to move to another part of the region). Named after the trickster-creator of oral tradition, Raven cards serve to introduce an additional element of chance and to force players to hunt in unfamiliar ecosystems relatively far from their home villages.

The weather for each two weeks of play -- that is, one turn for all players -- is determined by spinners which show common conditions experienced in fall-winter and spring-summer seasons, respectively. Thus, the cold weather spinner may land on sun, wind, snow, blizzard or rain, since the winter climate is characterized by both extreme cold and sudden warm, wet periods. The warm weather spinner shows
FIGURE 3: Resource calendar (center), fall/winter and spring/summer weather spinners (top left and right), transportation cards (top center), and decks of resource cards for the Pitengnacsaraq game.
sun, wind, rain and storm. Hunting and food preservation possibilities are specified for each weather condition; e.g., in windy summer weather, no ocean hunting or travel is possible, but land/river travel and hunting, and fish drying, are possible. In reality, hunters make finer distinctions in relating land, ice, and water conditions to subsistence pursuits, but this simplified representation serves to demonstrate the relationship.

A calendar was designed to show the relative distribution of each of the twenty-two resources throughout the year. This determination was made in consultation with both Yupik hunters and fish and game managers, and proved to be one of the most difficult aspects of designing the game. The distribution had to show the seasonal increase and decrease of individual resources accurately enough so that most players could amass enough food to survive the winter, while a statistically small proportion might come close to starvation. Furthermore, the calendar had to indicate that certain resources were available at one location earlier or later than another, following the movements of migratory game and anadramous fish. The two-week time frame was chosen to reflect the rapid rise and fall of resources such as salmon and birds; it was also realistic in terms of the possible duration of weather fronts. On the calendar, break-up and freeze-up, conditions which make travel dangerous and provide important time-frames for moving to and from home villages,
are also marked. In reality, game and weather fluctuations are more variable, but the calendar depicts an average, or at least a recognizably accurate, year. Finally, the calendar indicates the necessity of having warm clothing made by a certain point in the winter, and returning to the village in time for the ceremonial season. Hunters who fail to return home by winter are considered lost and must drop out of the game.

The last design feature was the use of dice to add chance variability to a hunter-gatherer's luck. Each throw of the die corresponds to an event which may limit or increase the player's resource supply. For example, a player breaks his leg and cannot harvest food for one turn; he acquires puppies and then has additional dogs to feed, as well as better prospects for long-distance travel; a player hosts a traditional feast and must distribute resources to other players (as was traditional, guests may request any of the host's possessions, including his kayak or dog team); his kayak sinks; his food spoils; or he has unusual good luck and is able to harvest twice the usual limit of a resource available at that time and place (still limited, however, by weather conditions).

In play, there is a person responsible for spinning the weather spinner and moving the calendar ahead two weeks after each round of play, and a player who acts as "banker" (food-keeper) for the resource cards. At the start of play, each
player receives a kayak and a dog team card, two fish cards, and one other card of his/her choice. In other words, a player starts out with six weeks' supply of food to feed himself, his family and his dogs; he is also furnished with transportation so that he can go hunting. Each player chooses a home village, and puts a playing piece there at the start of the game. At his turn, a player must assess resources available in his location at the given season, taking into account the restrictions imposed by current weather conditions. He may choose to hunt one available resource within his immediate vicinity, and/or move within a set radius to a different location in order to attempt to harvest resources which the calendar indicates will be available in upcoming weeks. In any case, he is also limited by the throw of the dice. At each turn, he must also surrender one food card (two if he has an extra dog team) to the banker, symbolizing the food he and his family and dogs have consumed over that two-week period.

Players may trade or share resources at their turns. A player can live without food for one turn, and then may survive another turn by eating his dogs. This deprives him of travel and therefore hunting capability during the winter, however, and is a last resort. Without food at this point, the player "starves" and must drop out of the game. Various other exigencies are covered by the rules, as well. If a kayak sinks or is given away at a ceremony, the player may
"build a new one" by skipping one turn to construct the frame and giving two seal or one walrus card to the banker to represent the skin covering. The banker then returns a kayak card to the player. Dogs can be replaced by trade, or by the acquisition of puppies with an appropriate roll of the dice. To make new winter clothing, each player annually surrenders a fur-bearer card or two seal, caribou or bird cards to the banker, representing the use of traditional parka materials. When a Raven card is drawn (this is also regulated by a particular throw of the dice), the player must move to the area indicated on the card and make a living in new territory. Another rule stipulates that food cannot be kept for more than one year. In addition to the problem of spoilage, it was believed that new game would only come to people who made complete use of their previous catch (it is still customary to try to finish the past year’s supplies before each new resource comes into season).

In addition to verifying the accuracy of the data, the most difficult part of designing the game was balancing the interplay of such a large number of variables. Trial and error proved to be the best means of creating the necessary balance. Designers played a draft version of the game with a large number of volunteers over a period of weeks to check both accuracy and statistical factors. Care was taken to include players of different ages who knew the resources of representative geographical areas. Their suggestions
resulted in revised drafts, which were played again and again until consensus was reached.

The vocabulary, too, had to be cleared with speakers of several dialects; it was often difficult to find cover terms for game that have specific designations in particular areas. Terminology for seals, for example, shows dialectical variation, and it is also rare to hear seals referred to collectively, rather than by individual species. The term eventually chosen, puget (literally, "those who pop up") was acceptable and universally intelligible, though relatively low-frequency. Visual clues provided by the artwork on the game also prevented possible linguistic confusion. The artist worked from accurate illustrations of species, sometimes needing to incorporate ethnographic detail (the herring card, for example, shows braids of dried herring, twined with grass). In the development phase, her illustrations also required occasional revision. The final product is visually appealing and very readable, despite the density of information presented.

Evaluation of Pitenganqsaraq

Educationally, the game has met with even more success than we had hoped. It is (literally) a graphic illustration of subsistence as an interdependent system, and students respond immediately to its "play" value. In addition to using it in the high school program for which it was designed, teachers have found the game to be a good activity
for days when students seem bored or when schedules have been disrupted by other activities. Since the game is complex and outcomes are variable, it bears considerable repetition. Teachers have found it to be an aid to students with less fluency in Yupik, as well; the repetition of play and the association of pictures with words make it a good vehicle for reinforcing vocabulary and improving literacy skills.

By supplementing the Yupik rulebook with a set of English rules, we have also taught the game to non-Yupik speakers. In the process, these players learn some Yupik as well as coming to appreciate the subtleties of subsistence economics.

Contrasting the way Yupik players interact during the game with the way non-Yupik players interact, it is apparent how the game brings social values into play. While the idea of a non-competitive game is easily accepted by Yupik players, who are used to an ethic of social cooperation and sharing, particularly in regard to food, non-Yupik players are usually nonplussed by this feature. Yupik players who have accumulated resource cards are quick to give away up to half of their food to players who are close to starvation. They are often careful to give such players whatever foods they would like to have, as well. Non-Yupik players are more apt to offer one or two cards to tide the less fortunate person over to better times, and give a few more cards to the same person, if he is still in need, later in the game. Similarly, when a card calls for a player to receive gifts
from others, Yupik players have no hesitation to ask for a valued resource, such as a kayak, even if this leaves the giver bereft. This is an implicit part of gift-giving, and to act as if gifts are not offered to one freely insults the giver. Non-Yupik players, in contrast, assume that the giver would prefer not to part with valued items, and are strongly hesitant to take someone’s last card, because they assume that this behavior would be socially reprehensible.

The game also juxtaposes the actual social status of players with their fictive status in the game. Thus, a teen-aged girl who becomes a highly successful hunter (nukalpiaq) in the game, may generously give cards to her starving teacher (who is actually a successful hunter). Such role reversals make all of the players laugh, while the two who have reversed roles may act all the more gracious towards each other. Pitengnaqsaraq thus becomes a tool for discussing and sometimes comparing values. It allows people to see how the values which they bring to the game influence the game itself.

In addition to its use in the curriculum, the game has also been widely purchased for use outside of the Lower Kuskokwim School District. Other Alaskan school districts have expressed interest in adapting the model to portray the subsistence systems of other Native groups, both contemporary and historic. In Canada, Pitengnaqsaraq has been adapted for use by the Labrador East Integrated School District, with
appropriate cultural modifications.

Its only obvious shortcomings were the expense of production, and the fact that it can take several hours to move through a full year's cycle with five or six players. This was probably unavoidable, given the game's intricacy. It may take several class periods to complete a game.

Another successful aspect of this project has been the use of maps. Men who are members of the National Guard learn map-reading, but others are often unaware of the availability of United States Geological Survey maps. A detailed knowledge of local geography is prerequisite for safe travel and successful hunting, and adult men are skilled orienteers. People tied to the land have a strong interest in maps. With the maps as a focus, people are eager to tell the students about travel hazards, landmarks, and placenames, in addition to hunting and trapping sites or areas. In fact, hunters have considered placenames and their associated lore one of the most important aspects of map use to teach students. As a result of this project, a number of village adults have purchased U.S.G.S. maps for their personal use, a good indication that the student projects have had positive repercussions for the villages.

One concern with the mapping project was the ethical use of information students recorded. A detailed mapping of harvest sites has the potential for either harming or helping subsistence users, depending on who sees and interprets it,
and depending also on the relative accuracy of the data. To those unfamiliar with cultural patterns of land use, unmarked and therefore apparently "unused" land and waterways may become a target for commercial exploitation. A mining company, for example, might seize on an area of low subsistence use as a justifiable location for a dredging operation. On the other hand, harvest maps can be valuable for protecting subsistence, because they can verify "customary and traditional use," on which legal rights are based. The Subsistence Division of the Alaska State Department of Fish and Game, for instance, uses similar maps and interviews to document harvest data which influence legislative decisions affecting subsistence, commercial and recreational interests. Over a period of years, as consecutive classes map a variety of resources, the schools may come to possess a significant data base about local resources. The Teachers' Guide suggests that student maps be carefully safeguarded and used only at the discretion of the village residents.

An Anthropological Perspective on Subsistence Education

In short, the Pitengr aqbaraq project offers a view of subsistence which is expanded to include synchronic and diachronic dimensions. Historical continuity in the variety and use of resources is revealed, and subsistence is seen not only as an economic system, but also as a social one. The following project, Ilat, adds to the total context of social
relations by exploring a similarly expanded view of kinship.
Ilat, "Relatives"

While in many cases traditional expectations of kinship continue to be enforced, a knowledge of kinship terminology and the obligations and privileges of particular relationships is often scanty for young Yupik Eskimos. A young person is often told to behave appropriately with a particular individual because he/she is "some kind of relative," and may grow up with a limited knowledge of the kinship system. While it has probably always been true that older members of the society have had the most extended knowledge of family relationships, this information, in many cases, is not being passed on as it once was. The influence of English kinship terminology, for one thing, has blurred some distinctions for today's youth. This has led bilingual teachers to concentrate on teaching Yupik terms, in and of themselves.

The Ilat project was intended to go beyond kinship terminology to a consideration of the relationships which the terms represent. Our goal was to give students an opportunity to explore changing kinship roles, provide historical background for some surviving customs related to kinship, and consider kinship as an enduring principle of Yupik social organization. The question, then, was how to highlight...
relationships?

In this case, we began by devising a game in which players would match kin to appropriate activities and obligations. The game was designed to create discussion about contemporary kinship by allowing players to test the limits of the system. At his turn, each player tries to rid himself of cards by drawing a match, while other players discuss the acceptability of that match. Consensus determines whether or not answers are correct. It is in the player's interest to interpret kinship rules liberally; his opponents are likely to be more conservative. The game, then, is simply a device to stimulate an animated discussion of kinship roles.

Specifically, the game consists of two decks of cards (FIGURE 4). On the first deck, the "relative name cards," are written kinship terms (c.f. FIGURES 5 and 6), including the following: amauq (maternal or paternal great grandparent, either sex), maurluq (maternal or paternal grandmother), apa'urluq (maternal or paternal grandfather), cakiq [angun] (maternal or paternal father-in-law), cakiq [arnaq] (maternal or paternal mother-in-law), ataata (father's brother), anaana (mother's sister), angak (mother's brother), acak (father's sister), aana (mother), aata (father), anngaq (older brother or older male parallel cousin), alqaq (older sister or older female parallel cousin), uyuraq (younger sibling or younger parallel cousin), nayagaq (younger sister of male), ilunagaq (female cross-cousin of male cross-cousin of
FIGURE 4: Yupik kinship card game, Ilat. Vertically-arrayed cards (left) show kinship terms. Horizontally-arrayed cards (right) describe activities which involve various kin. See accompanying text for translations.
YUP'IK KINSHIP TERMS
(from point of view of female)

1. Brother and sister terms are used for parallel cousins (children of one's anaana or ataata).
2. The terms nengauk, ukurraq, nurraaq, and an'garaq apply to cousins and children of both younger and older siblings.

FIGURE 5: Yupik kinship chart shown from viewpoint of a female. Taken from Yup'ik Eskimo Dictionary (Jacobson, 1984: 671)
YUP'IK KINSHIP TERMS
(from point of view of male)

1. Brother and sister terms are used for parallel cousins (children of one's anaana or ataata).
2. The terms nengauk, ukurreq, uruq, and qangiar(aq) apply to spouses and children of both younger and older siblings.

FIGURE 6: Yupik kinship chart shown from viewpoint of a male. Taken from Yup'ik Eskimo Dictionary (Jacobson, 1984: 672)
male), nuliacunngaq/uicunngaq (respectively, female cross
cousin of male and male cross-cousin of female), ui
(husband), nuliaq (wife), panik (daughter), qetunraq (son),
tutgar/iluperaq (respectively, grandchild and great-
grandchild, -grandniece, or -grandnephew), nengauk/ukurraq
(respectively, sister’s husband, son-in-law, aunt’s husband
and brother’s wife, or daughter-in-law) and atciutma ilai
(relatives of my namesake). Blank cards are also included so
that teachers may add kin categories, or change terms to
agree with local dialect variations. One goal of the game is
simply to teach kinship terms to students who may not know
them.

On the second deck are written activities which involve
more than one person, including the following, which are
listed here in translation, with the answers suggested in the
rules 1 in brackets:

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1Caution should be used in interpreting this data for
ethnographic purposes, for several reasons. One is that the
game is designed for use by people who live with their Yupik
kin and understand that the answers are qualified by certain
parameters; e.g., common sexual divisions of labor. Also, the
suggested answers represent a limited number of informants,
and are provided to give players a basis for discussion
rather than comprising a definitive set of responses. Again,
one needs to be culturally Yupik to know which sets of
response are more flexible, and which are less so. In short,
the game was designed to collect kinship data by members of
the culture for use within the culture, and not to present
data for anthropologists. This important point holds true
for other materials developed for the program, as well: the
ethnographic information presented in this thesis is intended
to illustrate examples, and is somewhat incidental to the
larger issue of applying anthropological theory to language
and culture education.
1. Someone to be my dancing partner (for non-traditional dancing, e.g., polka) [nuliaq; ui; nuliacungaq; uicungaq; maurluq and apa'urluq (Yukon source)]
2. Someone to care for me in my old age [panik; qetunraq; tutgar; iluperaq]
3. Someone from whom I could borrow money [aana; aata; alqaq; anngaq; nayagaq; uyuraq; nuliaq; ui]
4. Someone to teach me how to make a cloth parka cover [aana; maurluq; amauq; anaana; acak; alqaq]
5. Someone to help me build a house [aata; anngaq; uyurraq; cakiq (angun)]
6. Someone at whose house I can eat [all relatives except nuliaq/ui (with whom one already lives); uicungaq; nuliacungaq; nengauk; ukurraq]
7. Someone I can tease in a friendly way [ilungaq; iluraq; nuliacungaq; uicungaq]
8. Someone with whom I pick berries [aana; maurluq; anaana; acak; alqaq; uyuraq; ilungaq (in addition, one male relative might commonly accompany berry-pickers)]
9. Someone who would babysit my children [aana; anaana; acak; alqaq; nayagaq; uyuraq]
10. Someone with whom I might steambathe [aana; maurluq; apa'urluq; nuliaq; ui; iluraq; ilungaq; panik; tutgar]
11. Someone for whom I might fetch water supplies [aana; aata; maurluq; apa'urluq; nuliaq; amauq; anaana; ataata; acak; angak; nuliaq]
12. Someone to whom I might give fish/food [aana; aata; maurluq; apa’urluq; amauq; anaana; ataata; acak; angak; alqaq; anngaq; nayagaq; uyuraq; aciutma ilai; cakiq (male or female)]

13. Someone with whom I might go fishing [anngaq; uyuraq; iluraq; qetunraq; tutgar; iluperaq]

14. Someone who would make me a new parka when I married my husband [cakiq (female)]

15. Someone for whom I might make skin boots (“mukluks“) [apa’urluq; ui; panik; qetunraq; nenauk; ukurraq; tutgar]

16. Someone who might make me skin boots [aana; maurluq; anaana; nuliaq; alqaq; ukurraq; aciutma ilai; cakiq (female)]

17. Someone who might teach me how to hunt [aata; apa’urluq; ataata; angak; anngaq]

18. Someone who might go hunting with me [aata; apa’urluq; ataata; angaq; anngaq; uyuraq; iluraq; qetunraq; tutgar]

19. Someone who might tell me traditional tales [aana; aata; maurluq; apa’urluq; amauq; anaana; ataata; acak; angak; cakiq (male - Yukon source)]

20. Someone with whom I am respectful/feel intimidated [aata; cakiq (male and female)]

21. Someone whose bed I might share [maurluq; nuliaq; ui; tutgar]

22. Someone with whom I might cut fish for drying [aana; maurluq; amauq; anaana; acak; alqaq; uyuraq; ilungaq]
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23. Someone from whom I might adopt a child [alqaq; annqaq; nayagaq; uyuraq; panik; qetunraq]

24. Someone to whom I might give a child for adoption [aana; alqaq; annqaq; nayagaq; uyuraq; cakiq (female)]

To play the game, each player draws a description card and matches it with as many appropriate relative cards as s/he has in his/her hand. Players must all agree with the matches, which should represent the relatives most likely to fit the given descriptions: the primary value of the game is in the attempt to reach this consensus. While the rulebook suggests answers, these are based on the opinions of those who tested the game during development, and are not intended to be totally prescriptive. Players rely on their own agreement, on the teacher's judgement, and on the opinions of village elders in order to determine appropriate matches for their own village. In the process, changes and points of contention in the kinship system become obvious.

In observations of students and adults who have played Ilat, for example, there have been discussions of women who sometimes go hunting, and men who now take more responsibility for child-care. Such roles may vary from family to family within one village. At the same time, continuities are also apparent, such as the continuing importance of cross-cousin joking relationships, and in-law avoidance.

The game may be expanded by having players arrange
relatives in order from those most likely to fit each
description to those least likely to do so, in order to bring
out cultural preferences for specific roles. The
complementary exercise, i.e., determining which relatives are
most inappropriate for certain tasks or activities, is also
suggested. Thus, a man might prefer to approach his wife to
borrow money before he would approach his father, although
both are possible choices; and it would be much less likely
that he would approach his father-in-law, with whom he would
normally have a relationship of respect and avoidance.

The next activity in the project is for classes to make
kinship charts from both male and female perspectives, in
order to learn terminology beyond the degree used in the
game. The Teachers' Guide shows standard anthropological
symbols for this purpose, but individual teachers have used
other methods, in addition, such as placing "ego" in the
center of a page, connected by arrows to matched reciprocal
terms (e.g., the woman I call aana, "mother", calls me panik,
"daughter"). Whenever students do not know a term, the
question is noted and researched at home, and the answer
added to the charts on the following day. After two or three
days, students go on to make individual kinship charts, using
the Yupik names of their relatives in place of general terms.
These charts are kept for later discussions of naming in
relation to the kinship system.

Since one way to learn about kinship is to contemplate
the loss of kin, the project includes a discussion about orphans. The "orphan" child living alone with a grandmother is a stock character in Yupik oral tradition. In fact, a single term, maurluqallriik, refers to these two together. Usually isolated from, and mistreated by, other children, the orphan may dress poorly and have little to eat. Supernatural elements, however, always appear in orphan stories; often the grandmother possesses magic powers, and the grandchild meets supernatural beings who threaten or aid him/her. Frequently, the child overcomes all social obstacles in the course of the story, and becomes an admired and respected adult. A lengthy story of this type is used as a reading selection for the Ilat project. The story juxtaposes an orphan boy's mistreatment by a beautiful (and marriageable) but selfish girl, with the model kindness and generosity of the village's greatest hunter. An evil shaman who wants to marry the grandmother poses another threat to the pair, and there is also famine in the village. The grandchild is approached by an ermine, who becomes their supernatural benefactor, bringing the child food to share with the village (the grateful child especially favors the kind hunter), and also bringing news that his missing grandfather is not dead. As the child repeatedly brings in food for the village, the old shaman -- jealous because of his own failure to avert the famine -- seeks to discover his secret. Eventually, the grandfather returns, the rude beauty is forced to marry the
bad old shaman, who has lost his powers, and after a
terrifying supernatural ordeal the grandson wins a beautiful
wife from a nearby village.

Among other things, the story clearly illustrates the
dangers of life without a supportive network of kin, for the
child would normally have been fed and clothed by relatives,
even if supplies were low. He and his grandmother are
particularly vulnerable without a hunter in the family.
Especially during a famine, an orphan would have had a hard
life, because as food decreased, the network of community
sharing would be progressively restricted to close kin. The
tale is highly moralistic, however, in that the kind hunter
is rewarded for his generosity, while the selfish beauty and
scheming shaman get their just deserts. This, and similar
stories, thus give the students a basis for imagining life
with few kin, and considering how social values and social
networks, past and present, interrelate.

To follow the reading and discussion, it is suggested
that students consider traditional social mechanisms for
dealing with marriage, divorce, adoption and/or death. The
teacher then raises the question of whether, and if so, how,
American "laws and Christian practices have changed the ways
that relatives act or help each other at these times."

The project then goes on to a consideration of naming, as
it intersects with the consanguineal and affinal kinship
system. As in the past, infants are given the Yupik name of
someone who has died -- often, but not always, a recently-deceased relative. The child then continues the kinship relationships of the deceased, and is called by the appropriate terms (e.g., if the child is named after his/her maternal grandfather, the mother will call him/her "father," and the maternal grandmother will call him/her "husband"). People often remark on the gestures and habits of a young child which are reminiscent of the previous person who bore that name. A person may acquire additional names, even as an adult, and a name may be traceable to a long-dead person who was not a consanguineal relation.

In addition to being addressed as kin by one’s namesake’s relations, a person continues a special relationship with these people. As a child, she may receive gifts from them, such as the traditionally complete set of "head to toe" clothing, and frequent invitations to meals. In pre-Christian times, the living cared for their dead kin by giving such gifts to the namesakes of the deceased, for a direct connection was believed to exist between the two. During elaborate memorial ceremonies, and at some other occasions, gifts which were given to the living namesake were believed to pass directly to the dead. While several living people might bear the name of one who had died, there was an especially close identity between a very young namesake and the deceased. If the dead person returned to the land of the living, as happened in some traditional stories, this young
namesake invariably died. These two thus led parallel existences on different planes -- the living world and the afterworld -- but could not co-exist among the living. (Morrow, 1984: 127-131)

The most common naming relationship continues to follow alternate generations, e.g., a grandchild is named after a recently deceased grandparent (and even if the child has another Yupik name, she may receive the grandparent's name at his death). This cycling of names meshes with the tradition of alternate generation solidarity, for a widowed grandparent had a new "spouse" in the child named after his/her deceased partner. The grandmother-grandson relationship was particularly interdependent, for as the grandson became a capable hunter and provider, he supported her in her old age, at the same time as he perpetuated some essence of his grandfather. He also supported her husband in death, acting as the conduit of food, clothing and water to the other world. The importance of the grandmother-grandchild pair in oral tradition is consistent with this system, which doubly reinforces kinship through naming.

Namesake relations also continue to be important for travelers, and they were, even more so, in the past. When two Yupik people meet, they try to find their common ancestry. A relationship through shared names is assumed to indicate kinship, as surely as a relationship through some mutually known individual; i.e., two people with the same
name were ultimately named after the same person, albeit in the distant past. Any demonstrated relationship like this may form the basis for hospitality to a visiting stranger. Regional groups, which traditionally intermarried, formed political allegiances, and hosted each other during ceremonies, also shared pools of common names. Thus, along with dialect and dress, one's name identified a regional origin and, when encountered in a distant village, often marked past migration from that original area.

While today's customs are still tied to a generalized belief in the continuation of namesouls, few young people are aware of the historical significance of the gifts they now give and receive. The Ilat materials suggest that students consider experiences they have had with people who share their Yupik name, and look for commonalities in the ways that they have been treated by relatives of their namesakes. They are also briefly introduced to the idea that all Inuit people have extended categories of kin, and that a wide distribution of relatives would be advantageous in the Arctic, where it can be difficult for small groups of people to travel and survive without the support of others. While this strictly functionalist interpretation does not explain the structural complexity of the system, still it makes good sense in terms of students' personal experience of kinship as a way to organize human relationships, and seems appropriate for the ninth-grade level.
The final activity in the I'au project is to describe some social activity in terms of the relationships of the people involved. Two alternative writing topics are suggested. The first asks students to write a short history of some part of their family, detailing how they came to live in their village, where their seasonal camps were, and which relatives shared these camps. To investigate these questions, students need to consult older relatives. The second suggestion is to write about a contemporary ceremonial occasion (such as a seal party, uqiquq, a coastal ritual in which women celebrate their sons' first harvests or their husbands' first seals of the season by distributing meat, blubber and gifts [c.f. Riordan: 1983]) and to describe "Who helped prepare and serve the food, provided and distributed the gifts, and who did not? How were these people related to each other? Who did not attend? (Look for patterns like 'My mother's sisters helped, but my mother's brother's wives came as guests')" By sharing their writings, students are encouraged to observe general kinship patterns.

Designing and Evaluating Ilat

Because kinship systems are generally conservative, they are ideal for revealing clues to earlier social patterns, and potentially interesting to members of a changing traditional culture. We came up with the idea of a card game as a way to not only stimulate discussion on appropriate and inappropriate kin roles, but also to demonstrate that kinship
is systemic: the way one woman relates to her female cross-
cousin is similar to the way others do. In order to make the
game manageable for students of this level, the kin chosen
were within a familiar degree of relationship, extending
vertically from great-grandparents down to great-
grandchildren, and laterally to first cousins. This range
represents a probable median of students' knowledge of
kinship relationships; in each class, there are some students
who do not know some of these terms, and others who know them
all. The terms selected were also a result of responses to
the "description cards". In order to highlight categorical
patterns of behavior, of which students are often not
consciously aware, most of the cards describe common social
activities which have endured through time: hunting, fishing,
berry-picking, steam-bathing, commensality, adoption,
teasing, etc. These activities are ones in which students
themselves would normally participate, or which they would
frequently observe.

In designing the game, a preliminary list of questions
was given to Yupik respondents. Developers used a kinship
chart to ask which relatives would be likely to fit those
descriptions. If two questions elicited an overly redundant
set of answers, one was eliminated. Similarly, kinship terms
which did not appear among the answers were not included.
Thus, the decision was made not to include the term for the
wives of mother's brother and father's sister (acuraq),
although these women would be mothers to ego's cross-cousins, who are pivotal relations. As in-married females, these women seemed less involved in the activities described. Interestingly, the questions also failed to elicit terms for the children of siblings (an'garaq and nurr'aq for females and usruq and qangiar for males). A more comprehensive game would have included questions to elicit these infrequent responses, and might also have incorporated more activities to show the interaction of kin in strictly modern situations, such as "Someone with whom I like to play videogames." For the purposes of introduction, however, the game was limited in the ways just described.

When students play Ilat, their age and sex at a particular turn may need to be specified, depending on the description card they choose. For example, a female steam-bathes with different relatives than does a male; a younger person usually packs water for an elder; the majority of berry-pickers are female. If these role factors need to be specified, a player chooses an age and sex which would allow him to play the most cards, after he has read the description card.

In itself, this option allows players the possibility of challenging traditional or stereotypical roles, often resulting in lively debate; e.g., "You can't be a woman -- women don't build houses!" may elicit "I helped my husband build our house!" with a long discussion of exactly
what she did and whether or not her behavior was unusual, the conversation punctuated with good-natured teasing, laughter and polite indignation on the part of various male and female layers. These discussions make the game a very good indicator of how much role flexibility is tolerated; the interplay between conservatism and change becomes clear. Depending on the particular players and the degree to which an assertion challenges accepted roles, the final consensus may be either, "You do that, but most people don't so we won't accept the answer," or "I guess some people do that -- okay, we'll accept it."

When matches are deemed correct, the player discards to the bottom of the pile of relative name cards. Incorrect matches are penalized by drawing an additional relative name. The winner is the first player to correctly match all of the cards in his/her hand. Because the game therefore rewards a maximal interpretation of kinship "rules," students do have a tendency to argue the limits of proper behavior. This can obscure some common patterns, but it also has the advantage, again, of delineating the limits of the system and the degree to which individual and family variation is tolerated. The game is made even more interesting when players come from different regional groups; within a classroom this may not occur, but at teacher training sessions, it has promoted lively debate about regional variations in kinship patterns.

While the game serves as an introduction to kinship as a
social system, making kinship charts expands students' knowledge of terminology. Classes are encouraged to extend the charts to as great a degree as possible. In contrast to many college anthropology students, Yupik high school students show an enthusiastic interest in studying kinship. One pleasure is that they sometimes discover that they are related to each other, and to their teachers, in ways that they did not previously know.

Nonetheless, personal kinship charts can also make students uneasy. Some students may be sensitive about allusions to family divorces, adoptions, remarriages or births to a single mother. While many of these normal human circumstances were not traditionally considered shameful, church policies and the particular details of a given family history can make them embarrassing. Occurrences of spouse exchange in past generations might be particularly unsettling for students, since this practice is the source of such negative Eskimo stereotypes. However, although spouse exchange was historically reported among Yupik Eskimos, and terminology exists for half-siblings of such unions, it is not attested in recent memory and has not been raised, at least to date, during class discussion.

Traditional avoidance of Yupik names may also be respected by some older people; in this case, discretion was also advised. In general, the teachers know their students' families, and they are warned to consider possible
embarassments before they occur. Students are given the option of charting only part of their families, or making personal charts which are not shared with classmates. One teacher who anticipated difficulties chose to use her own family as an example and not ask students to make individual charts. In most cases, however, the charts were an acceptable and interesting way to show patterns of relationship, including those of students in a class, both through kinship and name-sharing.

The review committee also advised caution in discussing orphans. While the Teachers' Guide carefully skirts discussion of the lot of contemporary orphans, or living adults who were orphaned, the very topic appears to be sensitive. With one exception, teachers have agreed that it should be handled with care. (The exception, who vociferously denied that there was any reason for discretion, was himself an orphan; and his objection was effectively overruled by another teacher, who was his elder) One indication of the marginal status of orphans in the past is that, during ceremonies where items were set aside for support of the needy, elders were the first to choose among the gifts, while orphans were last, and had to accept what they were given. (ibid.: 133)

Orphans clearly touch a guilty nerve. In a society which has always affirmed food-sharing with anyone and everyone, sharing is actually fairly structured. Generally, this was
probably not a problem; even orphans received a share, even if it was the last one. In the worst of conditions, however, the radius of distribution had to shrink, much to peoples' regret. This may have happened more frequently in the past century than it did in earlier historic times. Terrible epidemics which orphaned large numbers of children loom large in relatively recent memory, and missionary reports are full of accounts of children who were taken from hopeless circumstances into church protection. While the missionaries made much of the barbarism of apparent abandonment, such choices must have been exceedingly painful to those who made them. Certainly, that is the reaction these stories elicit today, and a reason for our caution in approaching the subject.

In addition to our concerns about the subject matter, we had to make a number of decisions about the format and presentation of the story we chose. The orphan story included as a reading assignment was taken from a body of narratives transcribed between 1979-81 when I worked with the Yupik Eskimo Language Center of the Kuskokwim Community College. The transcription made at that time was rough and incomplete, so Elsie Mather retranscribed it from the original tape. It was so lengthy that the transcriber elected to use a paragraph format, which is much denser than the line-and-verse format; even so, the story ran to about forty typed pages and still looked somewhat formidable as a ninth-grade
reading assignment. Fortunately, although the first third of the story is enough to describe the orphan grandson’s plight, the exciting plot lures students to read the entire story anyway. The reading selection did pose one difficulty, however: students whose dialect differs from that of the storyteller may not understand some vocabulary. While this has not been an obstacle to understanding the story as a whole, it would be helpful, at some future date, to have readers from all representative dialects mark unfamiliar lexical items for inclusion in a glossary. Students have been able to infer meaning from context, in most cases, and have expressed relatively little frustration.

The last activity of the project, writing about an activity organized by kinship, has been the least successful, at least in terms of its stated purpose. Students at this level are still grappling with spelling and word choice, and their writings, in general, reflect this preoccupation at the expense of content. Too, the idea of describing social events in terms of the relationships of their participants is an unfamiliar one. While the Ilat game and kinship charts helped to abstract the notion of kinship to some extent, it is obviously more difficult to see the implicit operation of kinship in complicated interactions, such as a community-wide feast. In retrospect, the assignment was overly ambitious, although not, in any obvious way, culturally inappropriate. As a consequence, student descriptions of e.g., a seal party,
have tended to focus on what gifts are distributed (and not who distributed and received them) and how much fun the guests have, which is, in fact, their greatest experiential significance. As writing practice, and for the few students who grasp its larger intent, the assignment is still worthwhile.

By introducing kinship in the context of ceremonial events, the assignment also serves as an effective introduction to the last project of the year, Ceremonies.
CHAPTER TEN

CEREMONIES: APPROACHING A SENSITIVE SUBJECT

While ethnographic collaboration is important in research and development of all cultural education materials, it is particularly critical in relation to highly-sensitive subjects. In considering a project dealing with religious tradition, questions of ethnic identity and ambiguity in cross-cultural relationships were very much on the surface.

Christianity has long been a binding force in Yupik communities, and earlier ceremonial traditions have been effectively suppressed for half a century. Shamanistic feats, however, are well-remembered and frequently recounted with overtones of awe, fear, admiration and/or condemnation. However early missionaries tried to debunk such feats as mere trickery, both clergy and congregations continue to recognize the power of the earlier spiritual traditions. Individuals (and different sects) choose to reconcile these traditions in a number of ways: by pointing out parallels between Christian and early Yupik moral precepts; by differentiating between "good" and "bad" shamans; or by renouncing all pre-Christian beliefs as inherently evil.

Given the unease surrounding the subject, and the multiplicity of attitudes expressed, this was the most difficult area to consider in the program.
It is thus impossible to describe Ceremonies without explaining the social factors that determined its design. At the outset, readers must understand two important points. First, the traditional ceremonial round formed the foundation for, and the major expression of, pre-Christian Yupik religious beliefs. Second, while ceremonies were practiced within the memory of some living Yupik Eskimos, they are rarely discussed. Unlike subsistence technology, a relatively neutral subject with clear contemporary applications, pre-contact religion is a subject of contention.

For many years, the prevailing attitude of the clergy was (and in some cases still is) that shamanism and masked ceremonies were a form of devil worship, at worst, and unenlightened paganism, at best. Only fragments of the ceremonial tradition survived the missionaries' rigorous campaigns. Traditional Yupik dancing, which was a feature of virtually all pre-contact ceremonies, is enjoyed in communities where it is permitted by the church but some denominations continue to forbid it. Mask-making, an elaborate ceremonial art in the historic era, has become a purely decorative art, where it is practiced at all. Masked dancing has been considered antireligious. These church policies have been supported by Yupik congregations; active suppression by missionaries was largely replaced by local social control, as people converted to Christianity.
Recently, the climate has begun to change in some quarters, partly as a result of the new political revitalization movement, which promotes pride in all Native traditions. Officials of the Catholic Church, which continued to permit traditional dancing for entertainment purposes, have recently endorsed the idea of incorporating some "meaningful traditions" into the religious setting. There is now little fear that the faithful Catholic population will completely revert to earlier practices, and such innovations are certain to be framed by orthodox interpretations. The Russian Orthodox (Greek Catholic) Church, the first Christian denomination to missionize Yupik Eskimos, has also had a policy of allowing traditional dancing. In recent years, some representatives of this church have taken care to publicize its enlightened policies, emphasizing that early Russian Orthodox missionaries were tolerant of local cultural expressions. The third major church of the region, the Moravian Church, has historically been the most conservative in this respect, with a prohibition against all forms of dancing. Although most church members continue to oppose dance and the very mention of pre-Christian religion, some clergy now openly regret this policy in relation to Yupik dancing and have participated in public discussions of shamanism. Moravians are now eager audiences, if not participants, at traditional dance performances. After fifty years, Bethel, the regional center of Moravianism, saw its first performances
by masked dancers, with an explanation of associated spiritual meanings, just a few years ago.

Consequently, it is starting to be possible to discuss the subject of traditional ceremonies, if it is done diplomatically and in approved circumstances. An extensive development process was therefore necessary in order to make the Ceremonies project acceptable. Work on this project occurred simultaneously with the development of the entire ninth grade program, and centered around the research, writing, design and publication of a textbook, entitled Cauyarnariuq ("It is time for drumming"), which describes seven ceremonies that comprised the traditional yearly round. This work is revolutionary in the field of Native language/culture education: it is the first full-length original book written in any Alaskan Native language. In addition, it represents a major research project on a long-suppressed subject.

The existence of a talented Yupik writer, Elsie Mather, with a unique sensibility and sensitivity to the subject, was one of the prerequisites that made this publication possible. Mather's own religious affiliation is Moravian, and as a result of her research for this program, she was even invited to teach a course on traditional ceremonies to Yupik Moravian seminarians, with the understanding that such knowledge would help clergy see the origin of some contemporary customs and values. Although not all seminarians understood her teaching
in this light (as illustrated by her anecdote about one student who wanted an explicit idea of which current customs are pagan, so that he could discourage them), still, the atmosphere surrounding these subjects has clearly relaxed noticeably over the last decade.

While this relaxation made it possible for us to consider broaching the subject of traditional religion in the schools, we were still concerned about treading on thin ice. On the other hand, an understanding of the traditional belief system is critical to any non-token effort to promote "cultural heritage." How could young people, for example, reconcile an ethic of deep respect for their ancestors with the common suggestion that these ancestors were essentially duped by devil-worshipping shamans? We brought this dilemma before the high school materials review committee, which included members of all three religious groups, and asked for their advice. The unanimous opinion was that students should have the chance to learn about the ceremonial cycle, particularly since the opportunity to gather original information about it is fast disappearing. The group decided that if there were objections to teaching the subject, each village could make its own decisions on the matter. With this endorsement, research began.

Originally, Elsie Mather was contracted only to research and write a short description of each major ceremony celebrated by Yup'ik people in the past. Mather, a Native
speaker of Yupik with extensive experience in educational materials development, had a strong interest in comparative religion and was enthusiastic about the job. Over the next three years, we formed a close and productive collaboration. My anthropological background was useful in introducing Mather to the historic literature on ceremonialism, including works of Edward Nelson (1899), John H. Kilbuck (an early Moravian missionary whose unpublished journals and manuscripts from c. 1885-1910 contain good descriptions of ceremonial activities), E. W. Hawkes (1913), L. Zagoskin (1842-4), H.M.W. Edmonds (1890-1), and M. Lantis (1946-7). Her cultural and linguistic background often allowed her to make sense of otherwise obscure allusions in this literature; my background proved useful in sifting probable misconceptions from these writings, and suggesting interpretive hypotheses. Our discussions based on this reading yielded a list of questions to ask interviewees, and a basic research design. Mather then conducted extensive interviews with ten people from villages covering a wide regional distribution, including the Kuskokwim River, the Yukon River, the Bering Sea coast, Kashunak (near present-day Chevak) and Nunivak Island. Interview tapes and notes were brought back to Bethel where we discussed the content. It became obvious that there was more than enough material for a full-length book, and the Bilingual/Bicultural Department was willing to support its development.

Over the following two years, as Mather completed the
text, Hensel and I selected appropriate historic photographs and illustrations, guided the development of study questions and glossaries to accompany each chapter, and collaborated with a graphic artist on design features. Throughout this preparation for publication, Mather was regularly consulted for approval. Drafts of the manuscript were circulated among review committee members and others (including a Yupik-speaking anthropologist, and a literate elder) for comment. An historic first, the Alaska Historical Commission granted money for this Native-language publication, accepting an English summary of its contents and reviews by a Yupik linguist and an anthropologist, in lieu of providing its own reviewers.

Since no non-Yupik speaking publisher could possibly typeset a two hundred page text in Yupik -- even such minor questions as where to hyphenate words would require constant long-distance consultation -- materials developers also typed and proofread the text locally. The camera-ready manuscript was then sent out of state for printing, and was finally ready for distribution in 1985. These details of the mechanics of funding and production are mentioned because they are not trivial aspects of completing such a project; many fine efforts to produce small minority-language works fail in the process of production.

Writing Without Authorship

During interviews, Mather found elders more than willing to discuss remembered details of religious practices. She
credits this openness to the fact that she is Yupik, that the interviewees approved of gathering information for the use of Yupik students, and that she had an unusual fund of information about the ceremonies compared to others of her age. Because she had read first-hand accounts, and applied her own knowledge of Yupik culture and beliefs, she was able to ask meaningful and productive questions. Since the level of specificity of Yupik responses tends to be directly related to the specificity of questions asked, this was an important factor in her success. Only if the questioner has a general understanding of a subject is it considered sensible to give a detailed response (c.f., Hensel et al., 1984: 5/21); in Mather's words,

It was important for them to see me demonstrate a little bit of knowledge about what I was asking them. It is often useless to go to an elder and say, 'Here, tell me all you know about such and such.' That approach is insulting to them, and it shows our stupidity. bore, it puts them in a difficult situation. They know they can teach us best by building on our experiences....And when the elders teach, they have great expectations of us. They expect the learner to become not only knowledgeable, but to grow as a firm, upright human being -- a responsible tradition bearer and eventually a teacher himself of timeless, carefully thought out ways of behavior. (Mather, 1986: 13)

This suggests another reason why information about ceremonialism has not been passed to young Yupik Eskimos as a matter of course: they have no fund of experience on which their elders can build. It also helps to explain why non-
Yupik ethnographers (e.g. Osvald, 1964) long ago declared that it was impossible to gather anything but fragmentary information. The memories exist, but there is no good reason to share them with those who will never become tradition-bearers, and whose motives must be suspect, since experience indicates that all Outsiders view Native beliefs as superstition.

My role as an anthropologist was, therefore, to act as consultant, offering possible interpretations of ritual, and supplying corroborative details from ethnographic experience and from literature on other circumpolar cultures. Mather was the judge of which, and how much, interpretation to include in the final manuscript. As a materials developer, I also read and edited drafts, and suggested how the material might be presented, but Mather’s sense of organization dominates.

The text (FIGURE 7) consists largely of verbatim accounts of ceremonial participation, and traditional stories which explain the origin of ritual practices. Transcriptions, although in paragraph format, retain much of the repetition and flavor of oral presentation. Distinct dialectical features of interviewees’ accounts are also preserved, as Mather focuses on the customs of each geographical area in turn. Historical eye-witness accounts from a non-Native perspective were also translated from English into Yupik for inclusion in the text. For each ceremony, Mather provides an introduction describing its general features and underlying
FIGURE 7: *Cauyarnariuq* ("It is time for drumming"), by Elsie Mather, is the first full-length original book written in Yupik; it was created for the "Ceremonies" project. Pictured are the cover, showing a model of a *gassig* in which a ceremony (probably the Messenger Feast) is taking place, and a sample page of text showing a shaman's tambourine drum.
principles, and a conclusion suggesting broad interpretations and related contemporary beliefs and customs. On the whole, interpretation is intentionally superficial, in order to respect the integrity of her sources (for interpretation is, by nature, reductionist) and her readers (who should not be told what to think).

Mather is uncomfortable with the title of author, for such broad authority is not appropriately vested in any individual, she sees herself rather as a conduit for the cumulative oral authority of others. Thus, it is not just the language of the book which reflects her culture, but its entire conception. In the process of writing, and even more in retrospect, Mather has become increasingly concerned with the implications of literacy: she considers it a "necessary monster" with which Native people have to come to terms (1986: 15). Cauyarnariuq is a cautious experiment in integrating oral and written tradition on one level, while on another asserting their inalienable difference. By continually expressing its debt to oral sources, and the book faces readers away from the text and towards to community, thus softening its own image and muting its authority. It becomes a statement not of what is, but of what is said, and it never claims to be complete.

Within the Yupik Language and Culture Program, we have tried to temper the currently feverish attempts to document Native traditions before they disappear (a tendency which derives from classic ethnographic tradition) with a
recognition that listening to and telling stories are fundamental to keeping tradition meaningful. If the schools can validate the primacy of oral learning, then they can simultaneously nurture innovative forms of literacy, rather than using the oral mode merely as a steppingstone to the literate one. Bilingual programs should be ideally suited to such deep-level cultural validation. Bilingual students would then be able to experiment with forms of documentation that allow them, for example, to be writers without becoming authors.

The Decision Not to Translate

Due to the sensitivity of the subject, and to restrict its use to Yupik people alone, the decision was made not to translate the text into English for at least five years. After the book has been in circulation for that length of time, it will be possible to gauge public opinion on whether or not a translation is desirable. Until then, only literate Yupik people can read the book, an appropriate reminder of the privileged access of speakers to their own heritage. One argument for publishing an English translation is that non-speaking and/or non-literate Yupik people have expressed interest in reading Cauyarnariuq, as have other Alaskan Natives. Professional anthropological interest in the material is, of course, also high. For this reason, I have published an English-language summary and interpretation of Mather’s research (Morrow, 1984).
The argument against full translation is that propagation of the information among researchers may draw unwanted attention to the area, and, in non-academic hands, may lead to renewed controversy over a subject that has been kept relatively quiet. One is reminded of "what the informant said to Franz Boas in 1920," a Keresan "poem" included in Jerome Rothenberg's collection of Native American poetry, *Shaking the Pumpkin* (1972: 3): "...the corn people have a song too/ it is very good/ I refuse to tell it."

To some extent, however, publication is publication, and not translating the book only delays the inevitable distribution of the data. There is no doubt that the publication of *Cauyarnariuq* has been the single most significant contribution of the Language and Culture Program to Yupik education; it is also a major contribution to Inuit ethnography.

**Introducing Students to the Subject of Traditional Religion**

The *Ceremonies* project is designed to introduce this text, which is used as a sourcebook for all four years of high school, to ninth-grade students. The first task of the project was to introduce the idea that pre-Christian beliefs constituted a religious system. In an area where "religion" is synonymous with "Christianity," this notion had to be approached carefully. After lengthy consideration, we decided to approach the subject through a consideration of symbols and their meanings. A game was developed to introduce class:er to
common traditional design elements and to stimulate speculation about their significance, since historic carvings and artifacts were highly decorated. This is the way the Teacher’s Guide explains the project:

In the unit called Changing Tools, Changing Lives, students looked at traditional tools and equipment. Most of these were carved, engraved, painted, or in some other way decorated. We can recognize these designs as being traditionally Yup’ik. (If we mixed up African carvings with traditional Yup’ik carvings, we would have no trouble telling them apart.) We can also be sure that most, if not all, of these designs originally had meaning for the Yup’ik people who made them. We still know the meaning of some designs, although the meanings of others have been lost....

As students begin to look at Yup’ik designs more carefully, they may realize that the designs can teach us something about peoples’ beliefs. Although Yup’iks before Christianity was introduced had no word like "religion" to describe what they believed, they did have what we can call a religion. In other words, they shared beliefs about the way the world was made, about the right and wrong ways for people to live, about what happens to people after they die, and so on. Just as Christians go to church, use designs with special meanings (such as the Cross and the Lamb), and have ceremonies and holidays which express their beliefs, so the Yup’iks of the past had designs, teachings, and ceremonies which were part of their religion....

In geography classes, students may learn about the world’s "major religions," such as Judaism, Hinduism, Islam, and Buddhism. But smaller groups of people, like the Yup’iks, also have (or had) their own beliefs, even if they converted to a major religion at some point in their history.

To understand what was important to Yup’iks in the past, we need to know what they believed. Also, some old beliefs still exist today. If students learn where these customs came from, they may begin to understand why they are still practiced today. Yup’ik beliefs and practices all used to fit together, just as Christian ideas and practices have reasons behind them and all fit together.
After this introduction, students play the game, called Yupiit Qaraliit, "Yupik Designs" (FIGURE 8). This game is similar to Bingo (which, in many villages, is played passionately) or Lotto, each player receiving an 8-1/2" x 11" board on which are printed a random selection of nine out of twelve traditional design elements. During the game, these are matched with sixty-four illustrations on cards taken from a central pack. The drawings are all accurate representations of historic artifacts, many from the Edward Nelson collection at the Smithsonian Institution. On the boards, each pictured artifact has one dominant motif, which is written above it. Motifs are those which art historians and archaeologists (c.f., Himmelheber, 1953; Ray, 1967, 1969, 1981; Fitzhugh and Kaplan, 1982) have identified as characteristic, and which are widespread on Yupik masks, tools, wooden bowls, combs, labrets and other decorated objects; some, like the skeletal motif and lifeline, are known to be ancient and widespread in circumpolar tradition. The Yupik terms used for these motifs are translations of descriptive English terms, as we were unable to elicit a Yupik typology of design elements. Motifs pictured include: toothy mouths, net motif, joint markings, sets of four, skeletal motif, snow goggles, yua (spirit, literally "its person," which often appears as a small human face on a mask or animal representation), lifeline (internal organs seen through a transparent body), attached limbs, circle-and-dot or "fish-eye," pierced (often thumbless) hand,
FIGURE 8: A "Lotto"-type matching game, Yupiit Qaraliit ("Yupik designs"), which introduces the "Ceremonies" project. The eight individual playing boards (top) illustrate design motifs: card A, from left to right, top to bottom, reads "toothy mouth," "net motif," "joint markings," "number four," "skeletal motif," "snow goggles," "yua," "lifeline (internal organs)," and "attached limbs." Arrayed below are some of the 65 cards showing designs which match one or more motifs on the player's board.
and matched smiling (male) and frowning (female) faces. As each player draws a card from the deck, he/she studies the illustrated artifact for these design elements, and matches it to any appropriate motif on his/her board. In general, many recognizable motifs appear in each drawing, and players may have a choice as to which they will match. The object of the game is to be the first to cover all the squares on one’s board. As the game is played, all players study the pictures and discuss the presence of design motifs. With such constant repetition, players quickly begin to recognize motifs and to see how prevalently they were used. The game also familiarizes them with masks and decorations that they have often not seen before.

After playing the game during one or two class periods, students are asked, "How can traditional 'signs tell us something about what people believed?" Two examples are given to stimulate discussion. One is a simple explanation of the concentric wooden rings which commonly encircled masks, and which represented the Yupik conception of the cosmos. The Yupik word for these rings is ellanguat, literally "models of the universe." Students learn that the cosmos was perceived as having four or five levels, which correspond to important ritual numbers (as they read Cauyarnariuq, they encounter these numbers repeatedly). For comparison, teachers point out the significance of the number three in Christian art and symbolism, representing, e.g., the trinity, and the divisions...
of the Christian cosmos into heaven, earth and hell. The stylized decorative use of concentric circles, often with a central dot, also recalls the mask surrounded by its wooden rings. This example suggests that the explanation of a symbol in a known context may be extended to its stylized representation elsewhere.

Students then look through the Yupijit Qaraliit cards and talk about the designs. Some picture mythological creatures, about which students may recall stories. In an example from the Teachers' Guide, the toothy mouth and pierced hand motifs are reminiscent of a story about a giant hand with a sharp-toothed mouth in its palm that attacks disobedient children. The toothy mouth may also recall a well-known story about a cannibalistic infant with a grotesquely wide, carnivorous mouth. Stories of animals that lift their muzzles to reveal human faces are related to the depiction of the yua on an animal mask. The Teachers' Guide emphasizes that designs can be like a code, understood by the people who share certain beliefs. For example, Christians recognize that the fish and the lamb are symbols for Christ. But someone who is not Christian would only see them as pictures of a fish or a lamb. In the same way, you have to know something about old Yup'ik beliefs to interpret Yup'ik designs.

The Guide then extends this to an interpretation of ritual behavior, stating that Yupik ceremonial activities also reflected religious beliefs. With this understated preface, students are introduced to the study of their ancestors'
beliefs, and the proposition that these beliefs, like Christianity, constituted a meaningful religion.

The introduction to Cauyarnariuq, which is then assigned for reading, reiterates these points, lists the ceremonies which the book covers, briefly explains why so little is known about them today, and describes the research sources, both oral and written, which the author consulted. Two of the photographs included show a traditional ceremonial house (qasgiq) in use as a church, and a missionary instructing a small group of people beside their dogsled, suggesting a period of religious transition at the turn of the century. A series of study questions guides the students' reading. Among other things, these questions ask students to draw parallels between traditional and contemporary religious expressions, on a very simple level. For instance, they are asked to give examples of lore associated with contemporary holidays (e.g., the story of Christ's birth and the origin of Christmas gift-giving) in preparation for the many origin stories included in Cauyarnariuq (e.g., how a youth was instructed by Thunderbirds to initiate certain Bladder Festival practices). While emphasizing such parallels is not intended to reduce either tradition to simplistic terms, it does allow students to approach an unfamiliar subject via familiar pathways.

The author of Cauyarnariuq spent many years reconciling her own religious beliefs with an appreciation of the
indigenous worldview, and recognizes this as a crucial conflict for readers. Consequently, she ends the description of each ceremony with a discussion of relevant cultural values which continue to be expressed in modern contexts, and the final chapter shows photographs of a Kevgiq (Messenger Feast) held in 1978. Mather also suggests that some neglected moral principles should be revived. While value judgements like this must be avoided by non-Yupik educators, they are appropriate in her writing, for they directly address the issue of traditional values education. In this way, Mather provides an important reference point for students confused by conflicting social forces.

The Ceremonies project ends with this introduction to the subject, simply encouraging teachers to continue assigning readings from Cauyarnariuq, and asking village elders about local ceremonial practices, if possible. This is the final project of Level I, but the text is used more extensively in Level II.

Cauyarnariuq in use

It was anticipated that Cauyarnariuq would be met with controversy, but its impact has been positive, and classes have been bolder in its use than we expected. In general, whenever we had indications that a subject might be sensitive, we tried to err on side of caution, for this gave us a certain margin of safety in gauging acceptance.

When the Ceremonies project was in the conceptual stage,
we had thought of the possibility of student re-enactments of some parts of ceremonies. This idea was rejected because of concern that the schools would be accused, by offended Christians, of reviving "heathen" customs. The possibility also existed that those who honored the memory of ceremonial traditions might think that students' incomplete reconstructions were disrespectful. It was a surprise, then, when two classes elected to re-enact ceremonies.

One enacted a Petugtaq ("tie-on") gift exchange between the boys and the girls in a class, based on information from Cauyarnariuq. In another village, a more ambitious effort involved students in all four high school grades. The upper level students wrote a script, based partially on information from village elders, and the younger students enacted Qaariitaaq (derivation unknown), Qengarpak ("Big Nose") and Aaniq ("to give someone a mother"), ceremonies which preceded the well-known Bladder Festival.1

Both of the re-enactments by L.K.S.D. students, one in the form of a play, occurred in Moravian villages, and the latter involved the construction and use of a mask representing the "spirit of Qaariitaaq". Students' research also yielded new information about ceremonial details. For example, in this

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1 Readers are referred to "It is Time for Drumming: A Summary of Recent Research on Yupik Eskimo Ceremonialism" (Morrow, 1984) for more information about these and other Yupik ceremonies. In addition to those mentioned above, Cauyarnariuq includes descriptions of the Bladder Festival, Memorial Feast, Messenger Feast, and Inviting-In Feast.
coastal village, students learned that the "big noses" worn by Qengarpak participants resembled large bird beaks. Student replicas were carved from wood and attached to a perpendicular support.2

Two possible precedents for writing plays which showed masked spirits may have come from other sources. One was a presentation by Greenland's Tukak Theater, which performed in Bethel and some outlying villages in 1981. A few years later, the Tanqik Theater group from the village of Chevax wrote and performed "The Bladder Festival Play," in which an outwardly successful but spiritually unfulfilled Yupik executive, wearing a three-piece suit and carrying a Sony Walkman, is becl:oned by masked spirits to return to the values of the land. He goes back in time to participate in a Bladder Festival and thereby reclaim his identity and cure his alcoholism. The play was performed at the 1986 Bilingual-Multicultural Conference, and was seen by many bilingual teachers who had, by then, also read Cauyarnariuq. These innovative performances may have inspired similar efforts.

Cauyarnariuq has stirred tremendous excitement among teachers, as well as students, for it is rare to find anyone under the age of forty who is even aware that ceremonies existed. As soon as they hear of the ceremonies, however, people discover that there are elders in their own villages

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2The general shape was that of a Z, with the center line vertical, and the bottom projection held in the mouth.
who remember them. The knowledge has reopened communication on
a long-disregarded subject, for many elders have been very
willing to relate their memories to students who express an
interest. And while each memory in itself is fragmentary,
Cauyarnariuq provides a framework for details by presenting
accounts from many people and using them to explain, augment
or modify published accounts.

Like the games produced for this and other projects, but
to a much higher degree, the Cauyarnariuq text stands on its
own. Because it does, and because of our reluctance to
suggest accompanying activities that might be objectionable in
some villages, the Ceremonies project seems to be the least
"hands-on" of all the Level I projects. Nonetheless, it has
unquestionably had the most widespread impact.

In remote areas of the Arctic, word-of-mouth and
professional conferences, the latter often dependent upon
uncertain funding, form a fragile network for the diffusion of
ideas. Through these channels, this project has filtered to
other levels in the L.K.S.D. schools, and even beyond the
area. Some mid-elementary teachers report that they read
simplified segments of Cauyarnariuq aloud to their classes.
Others have used the Yupiit Qaraliit game as a way of
familiarizing elementary students with design motifs that they
then use in art classes. Elsie Mather has introduced her work
at both state and international conferences -- a few copies of
Cauyarnariuq have even filtered into the hands of Siberian
Yupik citizens of the U.S.S.R., although the Central Yupik language is not readily intelligible to these speakers.

Because of its implications for Native education elsewhere, Ceremonies constitutes an introduction to wider issues, as well as a suitable ending to the program I have described. It is our hope that the L.K.S.D program, and Mather's work in particular, will be inspiring to others. Indirectly, the positive effects of one local educational effort in Southwestern Alaska will be shared with people elsewhere seeking to find "the best of two worlds."
CHAPTER ELEVEN

MAKING THE BEST OF "MAKING THE BEST OF TWO WORLDS"

The case study presented in the previous chapters is the result of a dialogue between education and anthropology in a particular cultural setting. What remains is to consider the place of this work in relation to previous research relevant to bilingual and/or multicultural education, and to suggest its application in other cultural contexts.

Historically, bilingual-bicultural research has moved from a linguistic to an anthropological emphasis in line with current theories about why language-minority children may evidence low academic achievement (Guthrie, 1985). It is the resolution to this question that has been the justification for bilingual education from its inception. Originally following the "linguistic mismatch" hypothesis, bilingual education was based on the notion that children could not learn in a language which they did not understand.1

1James Cummins has recently questioned both the linguistic mismatch hypothesis and its counterargument, the idea that if children are to learn English they should be maximally exposed to ("immersed" in) English. While each of these propositions is based on some intuitive truth, neither is entirely borne out by research. Cummins contends that L1 and L2 are just the tips of the iceberg in language learning; any two languages share a large base of cognitive similarity. In fact, he says, the most significant factor in predicting success in bilingual
If initially instructed in their Native tongue, it was argued, students could more gradually learn to function in the language of the schools, English. This contention precipitated linguistic research to refine understanding of the processes of first and second language acquisition, to determine measures of language proficiency, and to gauge the relative effectiveness of different means of language instruction as shown on standardized tests. Linguistic research has contributed information about the nature of bilingualism itself, language maintenance, dialectical variation, and language change. Especially in the case of world minority languages, such as Yupik, linguists continue to build the actual data base on which bilingual education is founded; they record texts, write grammars, devise orthographies, and compile dictionaries.

Rather recently, linguists began to ask questions about meaning, and the interrelationships of language, culture, perception, and cognition, that are basic to understanding cross-cultural situations. Sociolinguists, who study language in specific contexts of social interaction, have broadened linguistics' contributions to bilingual-bicultural education by drawing attention to programs is whether or not each culture is socially validated. Thus, he contrasts a positive immersion model with a negative "submersion" model.
such phenomena as code-switching and the relationship between differential language use and social status, the structuring of pauses, turn-taking and other interactional patterns which regulate communication, the implications of literacy, and features of oral performance and narrative structure. Research in these areas has the potential of increasing educators' awareness of the obvious and subtle dimensions of both language use and language instruction.

There are also limits, however, to the usefulness of linguistics in multicultural education. Linguistic writings tend to be technical and language-specific, a negative recommendation for the educator hoping to simplify, rather than complicate, a multivariate teaching situation. Linguistic writings offer little direct help to the educator working with students of varying degrees of fluency in more than one language. Furthermore, the focus of linguistics is on language, with culture seen as an intervening variable.

Almost as soon as bilingual education was institutionalized, it became obvious that language was only one aspect of the larger cultural and cross-cultural issues. Many people were opposed to "mainstreaming" language minority students because of the high costs to minority cultures: across the globe, ethnic groups have, with increasing intensity, emphatically asserted their rights to linguistic and cultural diversity. In a country
which fears the rise of power among ethnic minorities, bilingual education, having "stumbled into the troubled waters of language and ethnicity, much to its own surprise" (Fishman, in Ferguson and Heath, 1981: 591) has become a highly politicized subject. In recent years, Native American groups throughout the United States have been among those striving to preserve their languages in a cultural context, while at the same time fostering education that enables students to function in the non-Native sphere: "The development of educational programs which provide necessary life skills without destroying personal identity is a current priority in all Indian communities" (Leap, ibid.). Native American groups have, on the local level, supported various models of Native language and cultural education, some entirely community-based, and others centered in the schools, but all concerned with questions of identity.

With these concerns looming large in the public eye, research has turned more in the direction of language in culture. Anthropological research on distinct learning styles and other cultural behavior patterns has supported the view that bilingual programs should also be bicultural, if academic success and ethnic identity are both to be fostered. As an alternative to the transitional model of bilingual education, maintenance and language enrichment models have been upheld as ways of validating
and preserving students' home culture, by integrating it into the curriculum. Simultaneously, intellectual opponents of bilingual education (c.f. Glazer and Moynihan, 1975) remain staunch in their views. An important article by Paulston (1980) has suggested that studies of the efficacy of bilingual education in terms of academic achievement will continue to produce contradictory results as long as bilingual programs are considered to be the cause of students' behavior rather than the result of larger social forces, in the form of institutional conflicts.

Research in the anthropology of education has not tended to focus particularly on the bilingual classroom, but it has illuminated cross-cultural issues in education. Since 1955, when George Spindler first compiled a volume suggesting the potential contributions of anthropology to educational studies, the ethnography of education has become an active research field (c.f. Spindler, 1975). Ethnographic studies have taken individual classrooms and schools as discrete units of study; in addition, many have placed educational research in the context of communities. Such studies have heightened sensitivity to the larger cultural context in which formal and informal education occur, increasing understanding of what goes on in a given school. In addition to revealing such processes as gender and racial stereotyping in the classroom, this approach
has led to studies of the interrelationships among community members and school staff and the possibilities for collaboration in resolving various problems.

By paying detailed attention, in the sociolinguistic tradition, to the structure of interactions among students and between students and teachers, ethnographic studies have also revealed the existence of "hidden curricula," the academic and other social expectations implicit in verbal and non-verbal patterns of behavior. Again, it is often in contrast to the expectations implicit in students' interactions outside of the school setting, that the "hidden curriculum" becomes clear (c.f., "Cultural Transmission and the 'Hidden Curriculum'" in Spindler, ed. 1982; Phillips, 1972). While educators have always known that what students learn in school may be something other than what teachers intend them to learn, ethnographic studies are able to describe those "other lessons" precisely, and often with surprising results. Since teacher-student interactions are ingrained and ritualized, however, changing those that are clearly counterproductive is difficult. Such studies underscore the need to investigate the processes by which patterns of cross-cultural interaction are learned, reinforced, and perhaps modified.

Behind these ethnographic studies lie a number of generally relevant anthropological questions and
concerns. Studies of cultures in contact and of contemporary ethnicity tell us much about the dynamics of human groups, and the changing degrees to which people invoke discrete cultural differences (i.e., the "content" of culture in the form of e.g. language, customs, and technology) and/or common genetic origins as a basis for ethnic identification. These issues are important in determining what role schools play in fostering and/or suppressing children's' ethnic identity, and thus the futures of minority and majority cultures.

In short, linguistics and anthropology both suggest questions which need to be asked by educators in multicultural settings, and also offer methods for the collection and analysis of data to help address those questions. Their overall effect, however, is to demonstrate that issues in bilingual education are not simple, while leaving the difficult task of applying the research findings up to the educators. In the literature, one too often reads recommendations (to involve community members in program development, incorporate accurate cultural and linguistic information in materials, and to train teachers in language pedagogy, curriculum development, and cross-cultural communication) that are more easily said than done. In practice, therefore, such goals are often stated and rarely achieved, especially for languages which represent a relatively small number of
This thesis has suggested that cultural relevance in education does indeed hinge on issues of identity, but on a more subtle and pervasive level than generally addressed by either researchers or educators. I have contended that cultural relevance will continue to be particularly difficult to achieve as long as it remains a concept which is essentially contested between two cultural groups. That is, as long as this essential feature of ethnic education is debated using two different but implicit paradigms of indigenous culture and culture change, program decisions will not reflect consensus.

The process of cross-cultural interaction in which essentially contested concepts are the medium of negotiation has here been termed bargaining for reality, a phrase previously applied to negotiations among members of a single culture (Rosen, 1984). Because the cultural associations that inform contested concepts are assumed to be congruent between negotiating parties, neither party is completely aware of the actual discrepancies that distinguish two cultural paradigms. In cross-cultural negotiations, bargaining for reality results in an erosion of ethnic minority identity, as Native paradigms are overridden by those of the ethnic majority, without ever having been acknowledged.

If the actual shape of culturally-relevant
educational programs continues to be the result of bargaining for reality, we are left with a paradox in which it is inherently impossible to achieve the goal of validating Native identity. The markers of ethnic identity -- language, material goods, knowledge of the environment, dress, and so on -- are not additive elements which, when taken together, comprise identity. While school programs which are based on this premise may he...

to bolster students' sense of cultural pride, their ironic effect may be to deny ethnic identity at the level of interactive process. What affirms identity at its source is the explicitly and implicitly positive valuation of patterns of interaction and relationship in the culture. In other words, ethnic identity is created and reinforced through the enactment of cultural processes which characterize the ethnic group. These are patterns which become manifest in the observable markers of cultural identity, but they are not reducible to such markers. Thus it is counterproductive for minority students to study the forms from a perspective external to the culture; that is, to take such forms as objects of study rather than involving students in the Native interactional processes conditioned by Native paradigms of reality which produce the forms.

The question, then, becomes one of developing an educational process in which cultural relevance is not a
negotiable term in the power struggle between cultures, but rather a concept to be expressed (and perhaps negotiated) by members of the Native culture, in their own terms. There is no simple or single description of such a process, but some general principles derived from this case study will be applicable to most cross-cultural contexts. While situations in which the Native language is still viable, and can be used as the language of instruction, are ideal, the approach is also valid in second-language situations. In general, it depends on the formation of a collaborative group to contribute to the ethnographic perspective on their own culture, and the use of community-based projects to explore issues of immediate cultural concern, in both historic and contemporary contexts.

Forming a Collaborative Group

When the education program is based within the public school system, which is the most likely case, it often happens that one or two non-Native employees are assigned the apparently impossible task of designing materials to reflect a culture that is not their own. This problem is not solved simply by hiring Native materials developers, for two reasons. One is that most Natives who are hired in such positions have had years of education in non-Native schools, and often return to their communities with mainstream educational perspectives and, frequently, a
sense that they are out of touch with the local culture. Furthermore, regardless of the talents and perspective of the materials developer, it is unrealistic to expect a single individual to adequately represent the diversity of cultural stances present in the community at large. Therefore, the materials developer, whatever his/her ethnic background, must be able to form an effective collaboration with a group of Native people, and to relinquish a large degree of control and direction over that group and the products of its collaboration. The process which makes this possible will be discussed point-by-point, below:

1. For a group to collaborate effectively, it will, ideally, approximate work groups that are active in the culture in question. Yupik work groups, for example, are generally same-sex, kin-based, and consensual. During meetings, we frequently separated into same-sex groups, and decisions were made by consensus. Existing kinship ties which happened to cross-cut the group also helped to form a basis for cooperation, although in this case the group members also had a history of working together at teacher training sessions.

2. The group must be chosen carefully; it cannot consist of random volunteers. Optimally, a group would include individuals who are well-respected, while reflecting as much community diversity as possible. While
it is helpful to include people from different religious, economic and geographical backgrounds, however, the degree of diversity may be limited by the possibility of social cooperation among these individuals. This will depend on the social structure of the ethnic group in question.

If at all possible, the group should include experienced teachers who will be working with the program. They have prior knowledge of the flexibilities and constraints inherent in the existing school system, and of the interests and capabilities of their students. They are also able to pilot-test materials in their classrooms.

3. Especially if the materials developer is from another ethnic background than that of the group members, it is important to have already developed relationships of mutual respect with at least some members of this committee. It takes time to develop trust and rapport, which are essential to collaboration. Furthermore, the cultural materials developer easily becomes a target for hostility, for he is addressing intrinsically emotional issues. Community acceptance is more likely when the materials developer has earned trust and the working committee accepts joint responsibility for and ownership of the materials which result from collaboration.

4. The environment should approximate working conditions which are comfortable within that culture. Details such as dress, spatial arrangements of tables and
chairs (or use of the floor, if that is more comfortable), relative physical positions of participants, availability of familiar foods, and degree of flexibility in the work schedule may all contribute to, or detract from, the group's ability to cooperate effectively.

5. Since the materials developer is in a structural position of power vis a vis the rest of the committee, she needs to consciously relinquish much of that power, in order to balance relationships. This requires her to accept direction, which in turn involves understanding sociolinguistic dimensions of her own communication and that of her co-workers. Especially, she needs to recognize how and when agreement and dissension are likely to be expressed in difficult situations, so that she can be aware of and facilitate their expression. In Yupik society, for example, disagreement is communicated by various indirect means, and is often misconstrued as agreement by non-Yupik people. In addition, pause lengths which signal turn-taking in speech differ enough between the two groups that non-Yupik people tend to dominate talk in cross-cultural situations. Habitual dynamics such as these can easily obstruct collaboration. Since their operation is subtle, they contribute to the unconscious interplay that turns attempted dialogue into monologue, and consensus into reality bargaining.

6. The group needs numerous opportunities to plan and
review the program singly, together, in small groups, with and without the materials developers, orally and/or in writing. The more varied opportunities are provided, the more work will reflect genuine consensus.

7. In the process of collaboration and pilot-testing, committee members may become well-qualified to assist in training teachers to use the program.

Developing the Materials

The standard approach to educational materials development is to disguise a learning agenda within some other activity. Thus, it is common to teach the concept of rhyming with jump rope jingles, spelling and vocabulary with crossword puzzles, and mathematical concepts with cooking. In this way, teachers often intentionally "hide" the curriculum in order to make learning pleasant. While each activity actually involves many other skills than those which are consciously emphasized, students are expected to demonstrate knowledge of only those which are being "taught." This means that the method itself is a product of the unconscious hidden curriculum in which students need to learn (without being "taught") which of the many skills they are employing is relevant to the teacher's agenda.

Cultural materials development has been characterized by the same process of recognizing and validating certain linguistic and other isolated skills that are embedded in
planned cultural activities. Usually, the skills which are emphasized and the activities used to teach them are simple transferences from the English curriculum, assumed to be universally appropriate for particular subjects and grade levels. Such a method is particularly limiting if the goal is to make materials culturally appropriate, for it derives from a particular culture-bound notion of education. It assumes that certain skills are isolable and that they are hierarchically arranged, with some considered more important than others. In fact, neither the relative separability of skills, nor their comparative valuation can be assumed to apply across cultures, or even from situation to situation within a given culture. The assumption that they are is a clear example of the way bargaining for reality can turn culturally-relevant education into education which erodes cultural identity. The presumption of congruence between educational systems allows the majority system to rule by default.

Within a program intended to affirm ethnic identity, it is inappropriate to use such educational techniques, unless they are clearly shown to be applicable cross-culturally, based on an understanding of educational processes within the culture in question. Otherwise, they merely presuppose and therefore promote the educational agenda of the majority culture. Such techniques become inefficient and confusing to the students. As an
alternative to submerging local culture on an implicit level, techniques which help students understand and devise strategies for reconciling different sets of potentially contradictory expectations can be found.

Once she realizes the potential cultural impact of automatically employing standard educational methods, the materials developer develops a healthy skepticism towards the simple solution. This does not mean that the materials development process need be overwhelmingly difficult or prohibitively expensive, but rather that it must be carefully conceived at every turn. The following principles, then, become important in developing materials.

1. If one assumes that all tasks require multiple skills, then activities which do not presume a single set of answers are more likely to reflect cultural expectations of appropriate learning than those which do. Activities which help students recognize the dimensions of their culture and identity are those which make them reflect on their surroundings, rather than those which tell them what their surroundings are.

2. An important aspect of such activities is that they are often oral and participatory, rather than written and decontextualized. While some cultures have a long history of literacy and value the written tradition, many do not. Furthermore, oral "literacy," (that is,
familiarity with the body of knowledge orally transmitted in the culture) is vital for an individual to be able to function successfully in his/her ethnic community.

3. The materials developer, in order to create such a program, must also depend on oral sources. In addition to the working committee he has formed, he needs a network of community members known to be well-versed in specific areas of oral tradition on whom he may call for additional information and verification. The areas of expertise of various individuals are generally known by reputation.

4. Reliance on scholarly and written sources of information is important, but the information they provide may not be completely accurate, immediately applicable, or advisable to use in unmodified form. Museum curators, biologists, and other professionals have access to sources of cultural information that are typically unavailable to members of the culture. However, it is best to allow members of the culture to review such materials (and the material developer's adaptations of them) to find out how they are likely to be received and interpreted, and to check them for possible misconceptions. In other words, one needs to balance experts by virtue of membership in the culture and experts by virtue of their perspective external to the culture. In the curriculum itself, it is more useful to use academic findings as a springboard for discussion and investigation than to simply treat them as
texts, since generalizations about cultural groups which appear in the literature may be negatively construed by the groups to whom they presumably apply.

5. The use of specific tasks to lead to general investigation is, as a rule, preferable to either limiting tasks to superficial or restricted lessons or presenting general topics of discussion. On the one hand, asking students to memorize kinship terms tells them little about kinship. On the other hand, asking them to discuss kinship, or to write about changing kinship roles, presumes that they will have an academic perspective on kinship as a social abstraction. More effective, in the Yupik case, was to center discussion around a game which required an "insider's" knowledge of the kinship system, assumed that kinship was not static, and led to interest in adding to that knowledge and discovering how flexible the system might be.

6. Emphasize interactive projects which can easily be structured by culturally-familiar group dynamics. Encourage Native teachers to use classroom arrangements and allow group interactions which feel comfortable, rather than modelling the classroom structures which are assumed to be correct in the school setting. Take students out of the classroom and into the community as much as possible.

7. Projects which require skills and result in
products valued by the ethnic community integrate the school and community, validate ethnic identity, and are adaptable to the levels and interests of the students.

8. Avoid trying to validate ethnic identity in reference to contributions to mainstream culture. To explain how an ethnic minority has contributed holiday customs to the larger society, or produced notable artists and scientists, may raise the status of that minority in the eyes of the majority, but does little for the self-esteem of the minority members. Such defenses are referenced to the dominant society as the standard. A more valid approach for minority education stresses the factors which have contributed to group cohesion, responses to changing conditions, interactions with the majority culture, and the perceived costs of changing and maintaining various cultural markers. If this led to a discussion about members of the ethnic group who became famous, the discussion then has more potential of centering on the concerns of the minority culture in relation to that of the majority.

9. Present culture as a simultaneous process of creation and continuation, in which traditions are alternately questioned and validated in the interactions among people who identify themselves as group members and in interactions with people from other groups. There is no single description of an authentic culture; culture is
10. Center the program around topics which have been identified by the collaborative group as being of contemporary and historic concern in defining ethnic identity.

Materials Review and Evaluation

Evaluation and review occur at different levels in this process. It may be difficult to obtain approval to even initiate a program which is radical in its deviation from the educational standard. What is required is a carefully-constructed curriculum development plan, backed by research evidence, which includes goals that are universally acknowledged to be important by both school authorities and community members, but explains that methods of achieving those goals will be based on appropriate cultural processes. The general goals of the Yupik Language and Culture Program, for example, were specific in addressing both academic and social aspects of Native education, which reflected the concerns of both community and administration.

1. If a prospective program is well-planned before presentation, demonstrated to be based on firm research and feasible within the limits of budget, personnel and school scheduling, then it is more likely to meet with initial approval.

2. The support of Native teachers and students will
largely justify the continued existence of the program.

3. The materials themselves should be subject to review and evaluation throughout the development process. The collaborative group forms one body for review, as do other Native and non-Native consultants. Students and teachers should be involved in evaluation as well.

4. Evaluation procedures need to be as culturally-accessible as the curriculum materials themselves. This means that adequate provision must be made for oral as well as written evaluations. If questions are asked (and the possibility that this may not be the most culturally-appropriate method of eliciting criticism should be considered) they should be worded in such a way as to make response easy, given the language use of the respondents. A limited distribution of evaluations is initially useful; the types of responses received will form a basis for revising the evaluation process, if misunderstandings are apparent.

5. Classroom observation is an essential part of evaluation, for the teacher's and students' use of the materials suggests the variety of ways in which they can be interpreted and the types of restrictions they impose or improvisations they allow, in the cultural setting.

Teacher Training

The success of a program which validates ethnic identity depends on Native teachers who are well-trained
not only in the subject matter to be taught (e.g., Native language literacy, aspects of cultural heritage), but also in the dynamics of cross-cultural interaction and the methodology of the program itself. Teachers who have participated in program design and used materials in their classrooms become effective trainers for other teachers, with the materials developer available to contribute additional information about the program, including its philosophy and rationale.

Native teachers may tend to rely on standard academic methods inappropriate to their own culture, after years of training by non-Native instructors of education. A program such as this may require them to rethink their training; it is empowering, however, in that it acknowledges the value of using cultural techniques which are more intuitively acceptable.

Self-Determination and Cultural Survival: The Future of Minority Education

Anyone aware of the histories of indigenous peoples will recognize similarities between the contemporary conflicts of Yupik people and those of other groups, worldwide. On a relative scale of cultural catastrophe, the Yupik Eskimos have, like the Inuit of the Canadian Eastern Arctic described by Eric A. Smith (1984: 37):

never been faced with colonial settlement, forced to battle colonial armies, placed on reservations, or conscripted for forced labor. They remain adaptable,
relatively free of cultural disorganization, and optimistic about their chances of retaining a large degree of self-determination.

The ability to achieve self-determination is dependent on an integrated sense of self. Yet the negotiative process of achieving self-determination in relation to the majority culture undermines that very sense of self. It has been suggested here that the use of educational processes which are fundamentally based on an anthropological understanding of cultural patterns is a potentially significant and powerful force in validating Native identity, an essential step in achieving self-determination.

The general principles involved in creating such an educational process, as described above, become highly specific in the context of a particular culture, such as that of the Yupik Eskimos of Southwestern Alaska. The issues raised, and the solutions posed in the previous chapters, can form a basis for comparison with other educational settings. A body of comparative descriptions and studies would enable researchers to determine more precisely the approaches which are successful under a variety of conditions.

When Yupik elders advise youth, they begin and end by reminding their audience that their voice is only one of many. My voice, too, is only one of many, that of one anthropologist and educator grappling with questions to
which there may be no answers, only a variety of more and
less effective stances. I am reminded of the words of a
number of elders, speaking on the subject of education
(Ikayuriiriiit Unatet, 1980): “Indeed the discussion of
childrearing is endless and there is still so much to say
about it yet.” Face to face with the serious consequences
of our educational choices, our humility makes each of us
“walk a step lower than the others,” making slow progress
by agreeing on the truth of common observations, while
each contributing a unique and individual sensibility:
“all of us say practically the same thing, but each may be
a little different.”

What I have said here contributes in this manner to a
long dialogue in education and anthropology, in which many
people, professional and non-professional, have said and
will continue to say much that is similar but a little
different. The dialogue between author and readers is also
a dialogue internal to the discipline of anthropology, and
internal to the author. In the words of another Yupik
elder, “although we talk in front of you, we are also
speaking to ourselves.”
APPENDIX I
A NOTE ON THE YUPIK LANGUAGE, AND DESIGNATIONS
USED IN THIS THESIS

The Yupik language is one member of the Eskimo branch of the Eskimo-Aleut language family. The other member, Inupiaq, is spoken with dialectical variations from Northern Alaska through Canada and Greenland. Several Yupik languages are spoken in Alaska and Siberia. Central Yupik, the language of the area with which we are concerned, consists of several dialects. Those spoken along the Yukon and Kuskokwim Rivers, the Upper Kuskokwim, Nelson Island, Bristol Bay, the Nushagak River and Lake Iliamna are collectively referred to as General Central Yupik (GCY). Separate dialects are spoken on Norton Sound, in the villages of Hooper Bay and Chevak, and on Nunivak Island (Jacobson, 1984: 28). The area referred to in this thesis, the Lower Kuskokwim School District, encompasses speakers of the Nunivak Island dialect, which is the most divergent of these dialects. All others are speakers of GCY, which is phonologically fairly uniform, although vocabulary varies in different parts of the region.

In this thesis, the spelling of Yupik words follows the standard system described in the Yup'ik Eskimo Orthography (Miyaoka and Mather, 1980) and Yup'ik Eskimo Grammar (Reed, et al., 1977). A guide to pronunciation may
be found in Appendix II.

The Eskimos of the Yukon-Kuskokwim Delta of Alaska refer to themselves as Yupiit or Yupiat ("real people," from yuk, "person," and a postbase meaning "genuine"). The singular form is Yup'ik, with the apostrophe an orthographic convention indicating gemination of the p. In English, the common designation for both the language and the people is Yupik (locally, often spelled with the apostrophe) although in the literature one sometimes reads Yuk or Yuit (properly, yuut, the plural of yuk). To anyone familiar with the language, "the Yupik" sounds awkward in English sentences which require a plural; on the other hand, using the English plural to form "the Yupiks" is clearly incorrect, and Yupiit, which is never used in the literature, is confusing to those who do not recognize the Eskimo plural. The word "Esk mo," on the other hand, is too non-specific, although it rarely has the derogatory connotations for Yupik people that it has for many Canadian Inuit. My compromise has been to use "Yupik people" or "Yupik Eskimos" throughout this thesis. In speaking of all Eskimo peoples, the accepted term is Inuit, the plural of inuk ("person"), and the equivalent of yuut in the Inupiaq language. Although Yupik Eskimos do not call themselves Inuit in their own language, they have adopted this collective identification as members of the Inuit Circumpolar Conference. Indigenous peoples of Alaska,
including Yupik Eskimos, also commonly refer to themselves as Alaskan Natives, or simply Natives. These terms are used here, as well.

It is equally difficult to find a satisfactory term for people who are not Yupik. The Yupik word "Kass'aq" (from the Russian, issack) is generally applied to all non-Natives, although some specific words are used to describe particular racial or national groups. In itself, the word "Kass'aq" is neutral. Since, like all racial terms, it may be used derogatorily in certain contexts, some people object to it. Others do not like "non-Native" or "non-Yupik" because they define people by what they are not. "Euro-American" is generally accurate, but often awkward. Apologies are extended to those who take exception to my use of non-Native, non-Yupik, or Euro-American: the meaning of these terms, at least, is generally clear.
APPENDIX II
GUIDE TO PRONUNCIATION OF YUPIK WORDS

All Yupik spellings in this work follow the standardized orthography which is taught in elementary and secondary schools throughout the Yupik-speaking area as well as at the University of Alaska. The following chart, which represents the sounds of the language, and the pronunciation rules and examples that follow, are excerpted from the Yup'ik Eskimo Dictionary (1984) with permission from compiler Steven A. Jacobson. The standardized orthography is also described in Yup'ik Eskimo Grammar (Reed, 1977) and Yup'ik Eskimo Orthography (Miyaoka and Mather, 1981). A description of the relationship between Yupik and other Eskimo-Aleut languages may be found in Anthony C. Woodbury's "Eskimo and Aleut Languages," (Damas, 1984: 49-63). Readers who wish additional information are referred to these sources. In order to simplify the following account, information on dialectical variation is omitted.

Because Yupik is phonologically complex, the Yupik orthography is necessarily abstract in order to assure that there is a one-to-one correspondence between a given spelling and a specific pronunciation. In other words, unlike English, the same sound in Yupik is never represented by different spellings, and a single
spelling never represents different sounds. Because of this, knowing the phonological values of the Yupik alphabet alone will not enable the casual reader to pronounce Yupik words correctly. Those who are merely interested in approximate pronunciations may want to read through the alphabet chart and the following descriptions of sounds alone. Others will find it essential to understand other features of the orthography, which are described further on in this appendix.

### Yupik Alphabet Chart

<table>
<thead>
<tr>
<th>Consonants</th>
<th>labial</th>
<th>apical</th>
<th>velars</th>
<th>labialized velars</th>
</tr>
</thead>
<tbody>
<tr>
<td>stops</td>
<td>p</td>
<td>t</td>
<td>c</td>
<td>k</td>
</tr>
<tr>
<td>voiced</td>
<td>v</td>
<td>l</td>
<td>s/y</td>
<td>g[γ]</td>
</tr>
<tr>
<td>fricatives</td>
<td>v̑̑</td>
<td>l̑̑[l̑]</td>
<td>s[γ]</td>
<td>r[γ]</td>
</tr>
<tr>
<td>voiceless</td>
<td>v̑̑</td>
<td>l̑̑[l̑]</td>
<td>s[γ]</td>
<td>r̐̑[γ̐̑]</td>
</tr>
<tr>
<td>fricatives</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>voiced</td>
<td>m</td>
<td>n</td>
<td>ng</td>
<td></td>
</tr>
<tr>
<td>nasals</td>
<td>m̑</td>
<td>ń</td>
<td>ng̑</td>
<td></td>
</tr>
<tr>
<td>voiceless</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>nasals</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

[Phonetic symbols for some sounds foreign to English are given in brackets.]

### Vowels

<table>
<thead>
<tr>
<th></th>
<th>front</th>
<th>back</th>
</tr>
</thead>
<tbody>
<tr>
<td>high</td>
<td>i</td>
<td>u</td>
</tr>
<tr>
<td>low</td>
<td>a</td>
<td></td>
</tr>
</tbody>
</table>

### Stop Consonants

Yupik stops are voiceless and (except at the end of a word) unaspirated. That is, Yupik stops are like the
sounds p, t, k in the English words spy, sty, and sky.

Yupik c is similar to the ch in English 'church,' but unaspirated. It is never pronounced as k as it is in the English word 'cat'. When the vowel e follows c, c has the sound of English ts in 'hits'.

Yupik q is a stop consonant which is produced farther back in the mouth than k, with the tongue against the soft palate rather than the hard palate. English does not have this sound.

Fricatives

v Sounds like English v when next to a consonant or the vowel e; between vowels other than e, generally sounds like English w.

vv Sounds like English f.

l Sounds much like English l, but the tongue is held more tightly so that there is more friction.

ll This is the voiceless counterpart of l, a sound which does not occur in English. It is made by holding the tongue in the position for l and allowing air to be blown out the sides between the tongue and the back teeth without allowing the vocal cords to vibrate.

y Sounds like English y.

s Has the voiced sound (English z) of the s in the English 'resemble'.
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ss Pronounced as in the English word 'assemble'. g The voiced fricative counterpart of the Yupik stop k, sounding almost like English g, but with no stoppage of the airstream. Found in Greek gamma.

gg The voiceless counterpart of Yupik g, like ch in German Bach.

r The voiced fricative counterpart of Yupik q, much like the Parisian French r.

rr The voiceless counterpart of Yupik r, like German ch (Bach) spoken by those who give this sound an especially "guttural" quality.

ug A voiced fricative made with the tongue in the position for g but with the lips rounded, sounding much like English w.

w The voiceless counterpart of ug, as in wh of the English 'which' for those speakers who differentiate pronunciation of 'which' and 'witch'.

ur The labialized counterpart of r, like r but pronounced with rounded lips and sounding like the beginning of the French roi (phonetically rwa).

urr The labialized counterpart of rr (occurs rarely); like rr above but with rounded lips, phonetically like rrw.

Nasals

m Sounds like English m.
Made with the mouth in the position for m but with the vocal cords not vibrating while the air is being blown out through the nose. Sounds something like hm.

n
Sounds like English n.

u
The voiceless counterpart of n. Sounds something like hn.

ng
As in the English 'singer' (for those speakers who distinguish the ng in 'singer' from that in 'finger')

ug
The voiceless counterpart of ng. Sounds something like hng.

Vowels

a
Sounds much like the English a in 'what' when single, and like a in 'father' when double (aa).

u
Pronounced as in English 'Luke'. Next to a back velar, sounds more like English o in 'cork'; may be devoiced between q and rr or between k and gg.

i
Has a sound midway between English i in 'hit' and e in 'he'.

e
Sounds like the e in English 'roses'; is silent or nearly so at the beginning of words; is often voiceless between voiceless consonants. Phonetically, it varies between [ə] and [ɪ].
The pronunciation of a Yupik sound depends on the sounds which precede and follow it. The following two sections describe orthographic rules which allow a reader to pronounce sounds correctly in different environments.

Automatic Devoicing

A fricative which is written single or a nasal written without the accent mark will be voiceless in certain environments.

1. An s at the beginning of a word and any fricative at the end of a word are voiceless.

2. A fricative which is next to a stop or which follows a voiceless fricative is also voiceless.

3. A nasal which follows a stop or a voiceless fricative is voiceless.

Marked Gemination

If a consonant is followed by an apostrophe and then a vowel, then that consonant is *geminated*. This means that the preceding syllable ends with that consonant and the following syllable begins with the same consonant, so that it sounds as if it is being held briefly before being released, as is the case with the k in English 'bookkeeper'. An example is the word *Yup'ik* in which the p is geminated. These apostrophes are counted phonetically as consonants (there are, however, other uses of the
Stress and Related Features of Pronunciation

Stress is a very prominent feature of Yupik pronunciation. It is determined by the pattern of light and heavy, closed and open syllables in a word. Thus, in order to apply stress correctly, it is necessary to be able to syllabicate words. (For purposes of simplification, Jacobson's description of Stress-Repelling Bases is omitted below)

Syllabification

Yupik syllables are of the following types (where V represents a vowel and C a consonant): CV, CVV, CVC, CVVC, and, at the beginning of a word also V, VV, VC, and VVC. A syllable is open if it ends in a vowel and closed if it ends in a consonant; light if it contains one vowel, and heavy if it contains two vowels.

Primary Stress (Inherent and Rhythmic Stress)

Initial closed syllables and heavy syllables have inherent stress.

Rhythmic stress, on the other hand, falls on every syllable following an unstressed syllable (subject to the rule of stress retraction described below). For example, in the word năn/var/păg/teng/năq/ngăi/cug/năr/quq 'he
probably won't try to go to the big lake', the syllable nan has inherent stress because it is initial and closed, and ugai has inherent stress because it is heavy. Following these two inherently stressed syllables are unstressed syllables var and cug and following these are rhythmically stressed pag, naq, and nar. Accents are used to indicate stress in this and other examples.

Stress Retraction

If the syllable on which rhythmic stress is due to fall is open, non-final, and follows a closed syllable, then stress is retracted to the preceding syllable. For example, in the word ang/yár/pa/lí/ciq/súg/nar/quq 'he probably will make a big boat', after the syllable ang which has inherent stress, rhythmic stress is due to fall on pa, but since this is an open syllable following the closed syllable yar, stress is retracted to the syllable yar. Rhythmic stress next falls on li, and after that on sug.

Loss of stress in Final Syllables

A final syllable loses its stress. For example, in angyaqa 'my boat' and in angyaqa 'it is his boat', the final syllables qa and qaa lose their stress.

Rhythmic Length

A prime vowel of a stressed open light syllable will be lengthened in pronunciation. The is called rhythmic lengthening; using ^ to indicate rhythmic length, the
previous example would be pronounced: áng/yár/pa/lî/ciq/ súg/nar/quq.

Automatic Gemination

There are two circumstances in which a consonant will be pronounced geminated though not followed by an apostrophe in the spelling.

1. The initial consonant of a heavy syllable which follows an unstressed open light syllable will be automatically geminated.

2. The consonant following a stressed e in an open syllable is automatically geminated.

Automatic gemination serves to distinguish a heavy vowel from a rhythmically lengthened light vowel; for example, in ataata 'paternal uncle' the first t is automatically geminated, while in atata 'later on' the middle a is rhythmically lengthened and sounds as long as aa, but the t preceding it is not geminated.

Secondary Stress

A syllable preceding a heavy syllable receives secondary stress. Secondary stress is phonetically identical with primary stress, but in rule ordering is assigned at a later stage.

There remain a few other features of Yupik pronunciation which are dealt with by orthographic
The Apostrophe

The apostrophe serves several functions in Yupik, depending on the letters around it.

1. After a consonant and before a vowel (C'V), the apostrophe indicates gemination, as previously mentioned.

2. After a vowel and before the consonant r (V'r), the apostrophe indicates that the syllable in which it occurs and the preceding syllable as well are both to be stressed, when without the apostrophe this would not be so.

3. Between two vowels (V'V), the apostrophe blocks gemination of a preceding consonant. The apostrophe has the same effect as if it were a consonant (it is not, however, a glottal stop).

4. Between two consonants (C'C), the apostrophe either (a) prevents the separate sounds of n and g from being read as the single sound ng, or (b) prevents automatic devoicing.

5. At the end of a word, the apostrophe indicates that the word is a shortened form.

The Hyphen

The hyphen serves four functions in Yupik.

1. It separates elements of a word which are not in
the Yupik orthography (i.e., English borrowings spelled in
the English way) from the Yupik suffixes attached to them.

2. It separates enclitics at the end of a word from
the main body of the word and from each other.

3. It indicates an overlong vowel in the words aa-ang
and ii-i, both meaning 'yes'.

4. As in English, it is used at a syllable boundary
for word division at the end of a line of writing.
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