Yupiit Schools in Southwest Alaska: Instruments for Asserting Native Identity and Control

José A. Torralba
University of Hawaii, Manoa

This essay argues that the Yupiit people of Southwest Alaska have transformed and are transforming formal institutions such as schools into instruments of Indigenous[1] *self-identity and self-governance. These efforts are conceptualized as both external and internal to education, but are nevertheless developmentally related to each other, being that external changes lead to internal ones. The mechanisms of such resistance efforts consists of: (a) increasing socio-political participation in key economic aspects of the region; (b) place-based and cultural-based pedagogies driving school curricular reforms; and (c) strong efforts to incorporate Yupiit community leaders and Elders into the design and functioning of local schools.*

Introduction

This paper argues that the Yupiit people of Southwest Alaska have used and are currently using formal institutions, such as schools, to exert their cultural, political, and social identity, and that such processes can best be understood by tracing the historical role played by schools among the villages of the Yukon-Kuskokwim (Y-K) Delta area. The paper traces the historical development of schools (and other formal institutions) as described in the scholarly literature to explicitly show how Indigenous groups in the Y-K Delta area have resisted settler-colonial pedagogies in the past and to examine what resistance looks like today. Ideally, one would want to document that development from a Yupiit perspective, to ask, "How did the Yupiit perceive schools within traditional village life?" And what sense of utility did they assign to this foreign institution?" In response, the paper relies on historical descriptions and interpretations by contemporary scholars, some who have, in turn, relied on oral histories provided by Yupiit Elders (Barnhardt, 1994; Barnhardt & Kawagley, 2010; Black, 1984; Collier, 1973; Feldman, 1973; Fienup-Riordan, 1984, 1990; Flanders, 1984; Iutzi-Mitchell, 1992; Kawagley, 1993; Morrow, 1987, 1990)[2]. It is important to keep in mind that, historically, schools were formal institutions of learning and teaching for the Yupiit people. The type of learning and teaching necessary for subsistence or for becoming a member of a Yupiit community was (and still is, in large part) acquired outside of the classroom. Consequently, I make the assumption that, historically, schools were not concerned with conserving[3] a Yupiit way of life. Instead, the main goal of schools was to transform the Native population into a trading *part-*

ner and to do that, a new set of social, moral, and civic norms needed to be in place. I propose that a version of the *trading partner* still permeates schooling in this region today. Such an analysis makes visible the current resistance of Yupiit people, and how they continue to modify those educational institutions in ways that reflect their efforts to continue to be Yupi'k within a world subject to a diverse set of cultural, political, and social tensions (Alfred & Corntassel, 2005; Demmert, 2010).

I do not, of course, intend to speak for nor represent the Yupiit people. I am a non-Native scholar interested in issues of access to education for under-represented students. The development of this paper took place during my self-education about the way Southwest Alaska Yupiit youth in schools might be integrating their knowledge of traditional practices, such as fishing, into school subjects such as mathematics and science. In doing so, I met Yupiit and non-Yupiit scholars, teachers, and others who guided my inquiry and, in the process, expressed their goals and perceptions of education to me.

In this essay, I explicate how the Yupiit people, through the institution of schooling, have managed to live with but also resist colonial goals and norms in order to assert their own cultural identity, and how such efforts are currently embodied in the struggle to continue to modify educational institutions in a way that Yupiit students can become leaders of such institutions (Ongtooguk, 2010a, 2010b). The mechanisms of Yupiit resistance efforts consist of (a) increasing socio-political participation in key economic aspects of the region; (b) ensuring that place-based and cultural-based pedagogies drive school curricular reforms; and (c) making strong efforts to incorporate community Yupiit leaders and Elders into the design and functioning of local schools.

The essay is organized into two parts. The first part offers a historical review of the development of schooling in the Y-K Delta region. This background creates the context from which to develop an analysis of the leading concept proposed in this paper: how the Yupiit people have used the formal institutions of schools as tools of resistance and sites in which to strengthen cultural identity, by means of locally-based Indigenous pedagogies. The essay also seeks to contribute to a larger conversation about how formal institutions and structures have affected the social, cultural, and political fabric of Indigenous people (Berry, 1999). However, it departs from some of that work in two important ways. First, it seeks to focus on the active role of individuals and groups using foreign or colonial institutions as tools of resistance and self-determination. Such a stance does not ignore the tremendous costs and losses these groups have endured since contact with non-Indigenous cultures (Chance, 1984) or the current effects of the historic relationship (see Berry, 1999 for personal Native accounts and Signer, 1993). Instead, the essay tries to understand and, to some degree, validate the strength and flexibility of Yupiit peoples to adapt to

hugely challenging changes in their communities. Resistance can take many forms; the one explored in this essay may appear at times invisible or indirect, but its effect in terms of transforming education will be revealed in the course of the essay. The second part of the essay explores how concepts of self-identity cultural affiliation, most often thought of at the individual and psychological level in education, should also be viewed as important at the collective or socio-cultural level. The implications of both parts (i.e., Native groups actively changing institutions as a way to exert their cultural identity, and the treatment of cultural identity at the collective level) will be discussed within the context of current Yupiit pedagogical efforts in local schools.

The Yupiit and Their Environment

Most of what I will discuss in this essay will focus on Yupiit groups along the Kuskokwim River and Y-K Delta area (see Figure 1).

The vast majority of Yupiit people live in the area labelled 'Central Yupi'ik' (see Figure 2, which depicts geographical areas demarcated by Native languages). Ann Fienup-Riordan (1990) has pointed out that, unlike other indigenous groups of the North, the Yupiit:

> ... lived in an environment that was very different from our stereotyped images of a barren, icy, harsh existence. The abundance of food enabled the Yupiit in the region to form a more settled lifestyle with larger groups of people, although yearly fluctuations in food availability and weather conditions necessitated some degree of mobility. (p. 5)

In my view, this relationship to the local geography is important for understanding the nature of the resistance efforts I address in this paper because such efforts are deeply entrenched in the relationship the Yupiit people have with their traditional habitat and its resources.

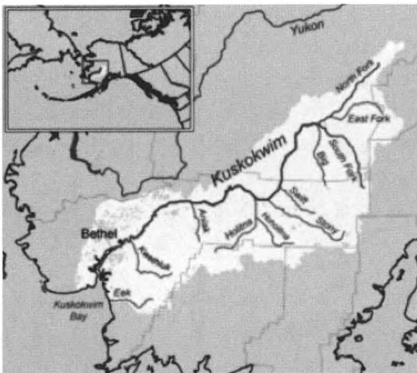

Figure 1. Map of Y-K Region of Southwest Alaska

Figure 2. Map of Native Peoples and Languages of Alaska (Krauss, 1974/1982)

History of Schooling in Southwest Alaska

Schools within Yupiit communities first appear during the Russian presence in the area around 1820, followed by American schools after the purchase of the Alaskan territory in 1867. The paper's main focus here is to examine the underlying assumptions accompanying the emergence of these institutions within the Yupiit communities.

Russian Contact

The emergence of the first schools in the area was a product of religious and trading efforts by Russian colonists. As VanStone (1984, p. 237) has pointed out, these first contacts directly and partially contributed to the modification of subsistence practices of the Native population, since hunting for game that held value for these colonialists, but not necessarily for the Yupiit, was highly encouraged. For the most part, these *trading* schools were geared toward teaching Natives the Russian language and skills needed to sustain the trading posts (e.g., carpentry, accounting) (Iutzi-Mitchell, 1992). Other types of schools, introduced by the Orthodox Church across the Y-K Delta, instructed students of both sexes in the Russian and Native languages through text. The Yupiit script, introduced by Iakov Netsvetov, served as a literacy tool in later development of Yupiit written texts (Black, 1984). Schools were, in fact, an extension of the Orthodox Church and, as such, played a central role in making sure Orthodox morals and sets of beliefs were passed on across several Yupiit generations.

American Contact

After the American purchase of the Alaska territory from the Russians in 1867, the Protestant Federal Council of Churches began dividing up the district of Alaska into missionary territories that partially endure today (Flanders, 1984). Presbyterians, Moravians, and Episcopalians were all *assigned* territories within southwestern Alaska. Aside from their religious mandates, these denominations saw as their mission the education of the Natives, and thus began the printing of liturgical materials in the Yup'ik language (Morrow, 1990). In 1884, the US Congress passed the First Organic Act for Alaska which, among other things, provided for the education of the territory's people. Public schools for Native people were established through contracts with missionary groups (Flanders, 1984) and thus the process of Americanization that had taken place in the Lower 48 States began to take effect in Alaska. As in the Lower 48 States' Indian schools, Alaska education was aimed at imparting Christianity as a way to induce appreciation for Americanism. The government later moved toward non-sectarian schools and, in 1910, implemented a strict English-only language policy for every school under federal control, with the aim of rapidly assimilating the Native population to the English language, American values, and Western ways of acting and thinking. Teachers were

prohibited from using the Native language and parents were encouraged to communicate with their children in English (even though they had limited proficiency in this foreign language), as the Native language was believed to retard the acquisition of the new language. Instruction in these early schools was provided via the three Rs (reading, writing, arithmetics) in industrial skills and patriotic citizenship (Barnhardt, 1994).

Concurrent with these educational developments, large numbers of non-Natives arrived in Alaska as mining and fishing industries sprang up. This influx produced a dual system of education in Alaska. The Federal Bureau of Education, and later the Bureau of Indian Affairs (BIA), ran schools for Native students, while schools for white children and a small number of *civilized* Native children were operated by the Territory of Alaska. By the late 1920s, most Yupiit children were attending BIA day schools in villages where teacher turnover was higher than 50 percent. In response to the 1928 Meriam Report, in which Federal Indian education practices were severely criticized, the Johnson-O'Malley Act (JOM) came into force in 1934. This Act allowed more local (state) control over Native schools, and by the early 1950s, approximately 50 percent of Alaska Natives were in territory-supported public schools and 50 percent were in BIA schools (Barnhardt, 1994). However, for most Yupiit students wanting to go beyond junior high school, the only option available was to go to distant BIA schools, often located outside of the state (Chance, 1984).

In general, during this hundred years period, the school system for the Yupiit significantly changed in quantity and quality. The initial Native language literacy efforts made by religious denominations were later limited by incoming federal policies that promoted non-secular education (Krauss, 1980). At the same time, schooling that would allow individuals to pursue a profession was not available to Yupiit youth. The trend towards *local* control of schools was slow and marked by a lack of significant curriculum reform[4]. Institutionally, the BIA schools (those where most elementary school Yupiit students attended) provided less opportunities for the community to participate in the design of the schools than did the territory/public schools (Barnhardt, 1994). To some extent, today's views on schooling among the Yupiit can be directly traced to their own experience within these schools, and their legacy has adversely affected Native education reform attempts (Andersen-Spear & Hopson, 2010)[5].

The Re-Emergence of Yupiit Identity Through Formal Institutions

How do the Yupiit people go from those rather oppressive experiences to transforming schools into instruments of self-identity and cultural revival? The answer is complex because it involves historical issues not directly associated with schools (e.g., industry, land issues, and political organization), as well as those issues that are directly related (e.g., curriculum and school reform, educators, and cultural activities). The answer is also partial

in that the transformation described in this paper only describes efforts that are relatively new (over the past 15 to 20 years). Nevertheless, what I attempt to show is that the Yupiit people have been actively involved in this transformation. Yupiit voices and participation in educational decision making did not emerge in a social vacuum. There were both external and internal factors affecting the educational arena that enabled the Native population to gain some recognition and control over their institutions. Through access to those institutions, the Yupiit have been able to move forward with the strengthening of their cultural identity. These various key external and internal factors are examined, as follows.

External Factors

I first examined the factors external to education to determine what type of socio-political and economic voice they have provided to the Yupiit people.

The Fishing Industry

The particular salmon fishing industry that began to develop in Bristol Bay during the 1880s was a colonial enterprise whereby the Yupiit people found a stable source of economic development, although not until there was a critical need for additional labour in this industry. Only during and after World War II (WWII) were Yupiit allowed to participate in all aspects of the industry, perhaps as a result of the war effort and the large availability of labour in the area.[6] By the 1960s, many adult males from river communities in the Bristol Bay area were involved in fisheries during the summer months and could, in fact, extract relatively high incomes from the industry. The fishing industry continued to grow and by 1975 it became regulated by the state of Alaska. Limited-entry fishing permits were issued according to past participation in the industry. In other words, fishing permits became an economic commodity and the sale of them brought extremely high prices. The policy of permits commoditization has been criticized as a reason for Indigenous people losing access to natural resources and autonomy from non-Natives. Yet, the fact remains that Yupiit people eventually gained a significant economic stake in this industry. In discussions with state and federal agencies regarding fishing regulations, Yupiit people have emerged as key players in the industry. At the same time, these Yupiit people play a central local leadership role within their own communities, at least in issues related to relations with formal Western institutions. In this manner, individuals who emerged as leaders or spokespersons in relation to fishing industry institutions began to play similar leading roles within the context of other Western-based institutions. Importantly, those leaders that emerged from the fishing industry were individuals with an intimate knowledge of the local natural resources and the Yupiit land base and culture. Thus, we begin to see how the relationship with the local geography emerges as a factor in exchanges with formal institutions and their non-Native representatives.

Political Groups and Acts

Other important external events impacting education were: (1) the emergence of Alaska Native political groups during the 1960s and 1970s; and (2) the passage of the Alaska Native Claim Settlement Act (ANCSA) of 1971. The first event was partially a response to the newly-formed state and its land appropriation policies. The threat of land expropriation prompted the creation of regional Native organizations and, in 1966, eight of these organizations combined forces to establish the Alaska Federation of Natives (AFN). One year later, this group had submitted title claims to 370 million acres of Alaska's land (approximately 98 percent of the state's total land mass). As a response to these events, the federal government halted disposal of public lands that were subject to Native Claims until Congress dealt with Native rights and settlements. The political voice that Alaska Natives obtained through their collective efforts was unprecedented in the history of Alaska. As Chance (1984) notes, "For the first time in Alaska, Eskimos, Aleuts, and Indians found themselves in a position of real political strength" (p. 655). This political strength found a voice in the Native newspaper *Tundra Times*, with wide circulation across Alaska's Native villages.

The second event, the passage of ANCSA, was partly a governmental response to the rise of Native concerns across Alaska. In fact, the AFN (formerly National Indian Brotherhood) was responsible for most of the lobbying and formal negotiations leading to the passage of ANCSA. ANCSA's young, educated, and determined Native leaders found themselves in the position of having to speak for all Alaska Natives, and the agreements they made at that time seemed the most appropriate to make. Many unforeseen consequences later appeared due to the speedy nature of the negotiations and the lack of time for Native people to consult among themselves on major decisions. Yet, however ambivalent the results of ANCSA were[7], Native people emerged as responsible for managing a large institution, that being the Native corporations. These regional corporations were later responsible for the establishment of non-profit organizations in villages that would administer social and educational services (Barnhardt, 1994). One of the most critical consequences of ANCSA was the ability to move toward more local control over issues that concerned Native groups. The importance of this cannot be underestimated, and it is present in most statements coming out of Native villages for the past twenty years. For instance, in discussing the way in which Yupiit people envision their future, Fienup-Riodan (1990) states that, "Today, the major issues that animate Yupiit residents are regaining control of their land, resources, and local affairs" (p. 223).

Native political efforts to exercise control over their own communities lead us to two factors related to schools: (1) The establishment of state Regional Educational Attendance Areas (REAAs) in 1975; and (2) the Molly

Hootch class-action lawsuit filed in 1974 against the Alaska state-operated school system. The former originated with the state's efforts to unify rural education in Alaska in 1971. This move, however, was viewed as leading to centralized power that was out of touch with village affairs and, in 1975, Native pressures for local control forced the legislature to abolish this system and put in its place 21 separate school districts, referred to as the Regional Educational Attendance Areas (REAAs). Later, I will discuss how some Yupiit viewed the state's unified school districts as centralizing power, and how Native people actively took control over their villages' schools. There is little doubt that these decentralization efforts enabled the Yupiit to gain additional control over their educational institutions. However, this educational control was partial since almost no high schools existed in Native villages. Most students who wanted to attend secondary school had to go either to main regional centres (e.g., in Barrow, Bethel, Kotzebue, Nome,), or to BIA-operated schools inside and outside of the state (e.g., Mt. Edgecumbe, Sitka; Chemawa, Oregon; and Chiloco, Oklahoma).

This policy of students having to leave home for education came to an end as a result of the 1974 Molly Hootch class-action lawsuit. In this lawsuit, the Hootch family, a Yupiit family from the village of Emmonak (population 400), faced the prospect of sending their daughter away to high school for the entire school year. The lawsuit was filed on behalf of all rural secondary school-aged students and was argued by Alaska Legal Services. Alaska Legal Services "contended that their right to education encompasses the right to attend public secondary school in the communities in which they reside" (Alaska, 536 P.2d 793). After some legal battles, the state agreed to establish a high school program in every community in Alaska where there was an elementary school (which requires a minimum enrollment of eight students) and one or more secondary school-aged students, unless the community specifically declined such a program. Today, there are over 120 small high schools in Alaska villages operated by their respective REAA. This decision set the tone for increasing Native involvement in educational issues. In fact, all schools that enroll Native students are now required by federal regulators or by their organizational structures to include parents and other community members in the decision making process. For instance, most of the 26 Yupiit schools served by the Lower Kuskokwim School District (the largest rural school district in Alaska) have created independent Village Advisory School Boards with members representing the ethnic configuration of their communities. Those boards, while limited in their policy-making power, have a say on the hiring of school personnel and the implementation of curricula in their schools. It is evident that, at least at the administrative level[8], Yupiit people are no longer the involuntary recipients of federal or state educational policies. The Molly Hootch class-action lawsuit was an example of how Alaska

Natives, led by Yupiit people, spoke out and used the existing legal and institutional mechanisms to gain educational control of their schools, thereby generating a pedagogical pathway for Yupiit voice and culture.

Native Organization
A final external factor examined is the role of the Yupiit Nation as a vehicle for regaining educational and political authority. This organization, originally founded in 1983 by villagers of Akiak, Akiachak, and Tuluksak, declared its sovereignty and sought to re-establish self-government and local control of its lands and lives. Today, the Yupiit Nation is composed of 19 villages from across southwestern Alaska. The organization saw education (schools in particular) as one of the important vehicles for reaching Yupiit aims (Fienup-Riordan, 1990). The original three villages unified as a chapter and established the Yupiit School District, which contracted directly with the state to manage primary and secondary education in the member villages. With regard to this Yupiit initiative, Fienup-Riodan (1990) has keenly observed that, "Although setting up and managing a new school district has not been an unmitigated success, it has established a precedent for increased local involvement in education" (p. 194). More recently, the emergence of full Yupiit immersion schools, such as Ayaprun Elitnaurvik in Bethel, reflects the outcome of a long political and ideological struggle to re-establish Native languages among the Yupiit. One of the main ways in which the Yupiit Nation has tried to re-establish a sense of Yupiit identity is by seeking social and cultural guidance from Elder members of their villages. The issue of control over their educational system is critically linked to that of sovereign leadership.

In their efforts to gain federal recognition under the Indian Reorganization Act, the Yupiit Nation has experienced difficulties in counteracting governmental assumptions that Eskimos lack historic governmental structures, let alone tribal or regional organization. This led to the self-imposed task of documenting their traditional forms of government and laws[9]. The definition of leadership that emerged from that effort was based on the ability of a person to voice the will of the people to others. Today, a primary function of leadership in western Alaska is to negotiate between the local Native community and the larger non-Native world. Those with the ability and willingness to speak out for the Yupiit are often younger men and women who, in addition to their Native knowledge, are also familiar with the non-Native world. Schooling in Western institutions has thus provided these leaders with the ability to voice their Native concerns in a language that can be understood by non-Natives (Ongtooguk, 2010b, p. 315). One can understand why the Yupiit Nation is so determined to take control of their educational institutions. Schools, in their opinion, serve as instruments of self-identity (if they are successful at incorporating their cultural ideology and language) and also as a way to improve skills in English and

other technical skills necessary for success in the dominant society's political and economic spheres (Morrow, 1990).

While this objective, often spoken of as "the best of both worlds", is appealing, it may not be an easy one to achieve. Iutzi-Mitchell (1992), a scholar of Yup'ik language, has questioned whether a single educational system can indeed prepare every student for the best of both worlds. Iutzi-Mitchell points out that, "One system might be able to train most students to be minimally competent in both, perhaps, or to really excel in one and have a familiarity with the other" (p. 34). It is safe to say that this issue needs a more comprehensive and fine-grained analysis and, in particular, an examination of the Yupiit student today as he or she participates in a changing school system, and an in-depth analysis of the extent of bi-literacy that students are developing. Part of that work has been led by researchers such as Lipka (1994, 1990, 2005) and Kawagley (1993, 1998, 1999a-b) who, in the last 10 to 15 years, have spent considerable effort examining the relationship between Yupiit ways of knowing and subject matters in school, especially in the areas of mathematics and science. Their work has also looked carefully at how such connections can be embedded within existing curriculum and deployed by Native instructors. These initiatives are addressed as internal factors.

Internal Factors

I also examined educational factors that are transforming schools into vehicles of Yupiit self-identity and self-determination.

Language

One obvious place to start is with language. Yup'ik remains the first language of approximately 10-14,000 people in southwestern Alaska (Krauss, 1980, p. 45). There are, however, local variations in its use (Morrow, 1990, pp. 2-5). Views regarding its use in schools also vary from village to village. Those views have been formed since 1970 when the first Yupiit bilingual educational program (the Primary Eskimo Program, or PEP) was enacted under the Federal Bilingual Education Act of 1970. Views regarding bilingualism were initially, and still are, marked by those supporting bilingual education for Native "language maintenance", and those viewing it as a "transition" to English (Morrow, 1990, p. 9). Most of those aligned with the former view are Native people, while non-Native educational administrators and teachers, as well as others, opt for the latter view. A survey of 2,192 persons in the area, as reported by Morrow (1990), reveals that views have changed little over time. In 1990, the majority of certified school staff (64%, mostly non-Natives) wanted more English than Yupik taught in the bilingual program, while 54% of students and 62% of "other important adults" (Yupiit) wanted equal time for both languages. It is possible that with increased control of schools by Yupiit (more Native teachers, principals, and

administrators) that the actual use of the Native language for maintenance purposes will also increase. Currently, the expected time of instruction in Yupiit is a minimum of half an hour a day through the eighth grade but, in actuality, it may be as little as one and a half hours per week (Morrow, 1990). This is one of the reasons schools of the Yupiit Nation have decided to implement their own language plan. Morrow believes language issues will remain closely associated with Native control over educational and social institutions (Morrow, 1990, p. 11). Others emphasize the key role of language use in settings other than educational ones if the Native tongue is to survive (Fishman, 1991, p. 371; Iutzi-Mitchell, 1992; Martz, 2010).

School Curriculum

Perhaps the most notable and promising area of transformation is taking place in curriculum reform across several Yupiit schools. The specific area I want to emphasize here is science curriculum reform, since it relates to validating several Yupiit social processes and is an area I am familiar with professionally. Two efforts are worth noting. One is headed by a Yupiit educator who has been interested in merging Native scientific knowledge embedded in subsistence practices (fishing, hunting, and gathering) with more conventional Western scientific knowledge taught in school settings. The other is an effort by a group of certified Yupiit teachers (*Ciulistet*, meaning *leaders* in Yup'ik) to incorporate Native teaching and learning practices in their schools.

Integration of Two Scientific Knowledge Systems

The initial efforts of Angayuqaq Oscar Kawagley (a Yup'ik educator) involved an ethnographic study of traditional and contemporary subsistence practices in a rural Yupiit village along the Kuskokwim River, and the examination of the teaching of science in a local high school (i.e., what was taught, who taught it, and how). Kawagley's interest in Native scientific knowledge as embedded within the subsistence practices, and Western scientific knowledge in the classroom, was the focus of his dissertation work. In his dissertation, he proposed a merging of Yupiit and Western scientific knowledge (Kawagley, 1993). As a Yup'ik educator, Kawagley believed that current Native knowledge of the local environment could provide a fruitful context for the teaching of science. He advocated for a place-based pedagogy in which the learning that traditionally takes place among the Yupiit can be validated and used inside formal schools as a context for developing non-Native knowledge. To show how that could take place, he embarked on a comparative analysis of scientific knowledge across those two knowledge systems, and proposed a focus on the overlap as a fruitful site for continued development of the Yupiit identity among Native students. However, as to who will control the educational system for Yupiit, he is quite clear that such efforts should continue to be the

domain of Yupiit people (Kawagley, 2010, p. 91). In fact, he calls for a shift away from the 'cognitive imperialism' that has dominated the schooling of Yupiit children.

Similar ethno-science or ethno-mathematical approaches have been mentioned by others (Cole et al., 1971; Denny, 1986; Jordan, 1985; Lipka, 1990). The implication for Native self-identity is clear: by validating Yup'ik knowledge through curriculum design and implementation, the importance of the local culture can come to the foreground in a place where the youth must spend a great deal of their everyday time, namely in the school. Moreover, the need for community involvement is not only important but also essential because such integration relies on knowledge embedded in the existing cultural practices and skills of the Yupiit.

Kawagley's study and the work that he generated are important for several reasons. First, it is a research project initiated and conducted by a Native Yup'ik for the benefit of his own people. Local people are more likely to be invested on any school implementation because it is *their* knowledge that is being used. Second, his work addresses curriculum issues that are relatively tangible. While curriculum reform in the sciences still involves political decisions (who should teach, what textbooks should be used, etc.), Kawagley's reforms start from the bottom up. It points to how science is perceived by Native people, both inside and outside of the school setting, and then proposes the incorporation of this knowledge into the formal science curriculum. Finally, the conceptual underpinnings of Kawagley's study have set the stage for a statewide initiative to reform the science curriculum for Native students (Alaska Native/Rural Education Consortium for Systemic Integration of Indigenous and Western Scientific Knowledge). This project has six major initiatives: (1) to study Native ways of knowing and teaching; (2) to develop a culturally-aligned curriculum framework; (3) to build an Indigenous science knowledge base; (4) to establish Elders-in-residence programs and cultural camps; (5) to engage Native students with scientists (Village Science Applications and Careers); and (6) to create an educational technology infrastructure through rural Alaska. This five-year project has brought together resources from most school districts in Alaska, scientific organizations, Native groups, and University of Alaska faculty in an effort to increase the scientific participation of Alaska Native people in developing solutions to human-created problems in an Arctic environment. The funding of this project, provided by the National Science Foundation (NSF), attests to the level of recognition of Native people at the state and federal levels. The project is a strong message for how Alaska Native people are transforming their schools into instruments of self-identity and self-determination.

It is important to note here that both of Kawagley's projects have dealt very marginally with the Yupiit student as a learner. Most of the Yupiit knowledge is assumed to reside within the Elders, their traditional prac-

tices, and cultural materials. The study of the experience of the contemporary Yupiit student has been peripheral, at best. How will this affect the success of self-determination efforts by the Yupiit? It is hard to say at this time. What we can safely say is that, as a pedagogical framework or as a theory of education, more must be known about the individual being educated (Russell, 1932). We cannot assume that Yupiit students in today's schools are learning in the same manner that Elder Yupiit did outside of these formal settings. Yupiit students as learners and participants in new forms of curriculum initiatives are the focus of the second example of educational reform, described as follows.

Incorporating Native Teaching and Learning Practices into Yupiit Schools

An effort headed by a group of Yupiit teachers (*Ciulistet*) in the Dillingham area aims to achieve a main goal of "validation, support, and enhancement of their professional growth as a native educator" (Ilutsik, 1994). The group is doing so by engaging in Native education research as practitioners, by serving as role models, and by encouraging young people to become teachers and leaders. One of the research projects these *Ciulistet* teachers are heading involves Yupiit Elders, teachers (Native and non-Native), and University faculty in developing a culturally-based mathematics curriculum. They have looked at traditional Yupiit ways of counting (a system using a base of 20), geometrical patterns, as well as other subsistence practices. That has led to the construction of curriculum materials that are first validated by Elders and later used in the classroom. Lipka (1994, p. 5) has formulated the premises behind this as threefold: "(1) to show students that mathematics are socially constructed; (2) to engage students in a process of constructing a system of mathematics based on their cultural knowledge; and (3) to connect students' knowledge of "their mathematics" through comparisons and bridges to other aboriginal and western systems." As a researcher, Lipka has shown how Yupiit teachers and students begin to excel in formal school disciplines when a culturally-based curriculum is implemented in the classroom (Lipka et al., 2005, 1998). The implementation of such curriculum in classrooms creates what Lipka calls a "third space", a context in which the culture of the students and teachers are not only validated, but also play a central role in the co-construction of disciplinary understanding (Lipka et al., 2005, p. 369). There is little to read between these lines as it is clear that validation of Yupiit culture through curriculum reform is an obvious objective. The work of this group of teachers and researchers has been well recognized throughout the area and state as a way to initiate educational leadership. Other Indigenous groups have adopted the research methodology and approaches associated with the Alaska Native/Rural Education Consortium for Systemic Integration of Indigenous and Western Scientific Knowledge.

A more recent and potentially important aspect of how the Yupiit people are using the formal school institution to regenerate Yupiit identity is emerging among high school students in the Upper and Lower Kalskag (on the Koskowin River). These students are gathering images and narratives of Yupiit traditions and culture and making them part of a web-based tool called the Virtual Museum (http://www.ankn.uaf.edu/NPE/CulturalAtlases/VirtualMuseum/Tour1/Home.html). Such engagement signals an important shift in how cultural identity is being constructed and disseminated. These young Yupiit are transforming the same institutions, that were formerly used to transform them, into sites where their own identity as Yupiit are developing. The results are offered to a potentially large audience, well beyond their communities via the Internet, making the results accessible by others. In short, we are seeing an attempt to voice an image of Yupiit identity well beyond the confines of the traditional Yupiit region, using newer forms of communications that can have rapid and important implications for decision and policy making. This shift may represent a development or an extension of the work Lipka and others have done with Yupiit teachers in Southwest Alaska for the past 20 years, with respect to curriculum reform and, indeed, schools serving the Yupiit (Lipka, 1994, 1998, 2005).

Discussion

There is a general sense among Yupiit educators and community leaders that control of their communities, and that of formal institutions such as schools, is an ongoing struggle in response to federal and state policies and bureaucratic frameworks. In a recent essay, Jones-Sparck (2010), a Cup'ik scholar, describes how resistance to government policies is always the beginning of a Native-driven transformative agenda for the education system. This scholar sees an imperative in the construction or development of a Native (Cup'ik) self-identity to achieve control, and to be able to confront and succeed in both Native and non-Native systems. In fact, she proposes that those Cup'ik who have been successful in the Native and Western ways of doing things have been those who first developed a strong Native identity (p. 327). Others have examined recent federal policies, especially the No Child Left Behind (NCLB) Act, as a weakening mechanism for Native (Yup'ik) language maintenance and revitalization efforts (Wyman et al., 2010). However, in looking closely at the situation, they also have found that Yup'ik educators can generate and share local language planning strategies when they have sustained opportunities for working through the complexities of bilingualism and educational policy making (p. 30).

We can view mandated standards and policies as modern versions of the *trading partner* first established by the missionary system. Standards are aimed at normalizing the knowledge and ways of knowing of a particular population. Educational standards, constructed to measure knowledge and

skills valued by non-Natives, replicates colonialist practices. The resistance efforts to such forms of cognitive colonialism are what I have tried to highlight during this essay. It is not clear to what degree such resistance can lead to self-determination in terms of Yupiit education within the current political climate, one in which high levels of accountability (to mandated standards) are closely tied to funding for schools. Nevertheless, the historical and current efforts to assert Yupiit cultural identity and values within the educational process itself are worth examining, because they may reveal the degree and nature of their resistance and make clearer the type of barriers encountered by them.

The historical trend of control documented here, from federal to state to local levels, has been disrupted by Native people being able to direct their affairs more in line with their cultural system of knowledge and beliefs. The Yupiit Nation is a testament to this. The continued transformation of Yupiit schools by the people who manage them has emerged as a key indicator of active self-identity and self-government in the Y-K Delta region. The initial mechanisms, originated mostly outside the school arena (ANCSA, Yupiit Nation), set the tone for legal and managerial reforms (REAAs, Molly Hootch court decision). These changes prompted further internal initiatives that are currently taking place (curriculum reform in language and science, Native teacher development programs). The transformation of schools to a focus on cultural identity can be viewed in terms of what some anthropologists call "secondary cultural/language responses" (Ogbu, 1982). Ogbu argues that such responses develop after two cultural groups with markedly different traditions are in continuous contact, or after a group begins to participate in an institution, such as the school system, that has historically been controlled by the other group. Secondary cultural differences usually develop as a response to a contact situation involving stratified domination. An example of this is provided by Holt (1972) in examining how Black Americans responded to the social reality during and after slavery, and transformed the Christian church into a "Black church." Holt points out that Black Americans developed their church into an institution within which to resist "the dehumanizing oppression, degradation, and suffering of slavery" (1972, p. 332). The "Black church" counteracted such forces by promoting self-worth and dignity, a viable identity, and by helping Blacks overcome their fears. It became a place where unique language codes and communication styles developed. This contributed to Blacks' sense of collective identity. Although the comparison of these struggles with those of past and current Yupiit people may not be appropriate at the historical level, the responses and mechanisms taken by the oppressed group are all directed toward gaining a sense of self-identity, and through it regaining a leadership role in determining how socio-cultural practices seen as relevant to their communities will be enacted within institutions such as the school.

In the context of cultural identity, "transformation" as a result of contact between Aborigines and non-Aborigines has been described as detrimental to the former (Berry, 1999). This paper argues that such processes should also be examined within a socio-cultural context, in which the groups often thought of as recipients of detrimental cultural norms and practices resist these through control over formal institutions, political voice, and diverse practices in schools and governance. In this paper, this point was illustrated by highlighting scholarly literature showing how the Yupiit of Southwest Alaska made use of institutions to assert their cultures as well as their political voices. I do not intend to imply that the process of reaffirming a groups' cultural voice necessarily ends in a positive note (see the recent edited volume by Barnhardt and Kawagley, 2010 to appreciate how most Alaska Natives still see this as an ongoing struggle). What I have tried to highlight in this essay is the historical, diverse, and proactive mechanisms by which the Yupiit people have been "reorienting the educational system for their children" (Kawagley, 2010, p. xiv), and their ability to create a "third space" (Lipka, 2005, p. 369) in which to begin to validate, assert, develop, and pass on their cultural heritage to their youth.

Notes

[1] The word *Native* and *Indigenous* are used interchangeably in this essay, referring to the people inhabiting lands prior to Western or European contact. In Alaska, the term *Native* is used more commonly than Indigenous. (See Barnhardt & Kawagley, 2010).

[2] Fienup-Riordan, A. (1977-1987). Transcripts and translations of interviews with Yupiit elders (Unpublished manuscripts compiled for the Nelson Island Oral History Project, Tapes 1-99).

[3] I use the word *conserving* in substitute of *preserving* since the latter implies, in my opinion, a static notion of culture and one associated with romantic notions of restoring a way of life incompatible with contemporary Yupiit views (Fienup-Riordan, 2005, p. 303).

[4] In 1980, there were still 43 BIA schools in Alaska and the transfer of all of them to state control did not end until 1986 (Barnhardt, 1994).

[5] Current feelings and memories about BIA schools from some of the Yupiit who underwent such education are often extremely negative and perhaps damaging to inter-generation relations. This same problem has been documented across many native groups in the US and Canada (see Berry, 1999).

[6] Today, the area provides one-third of the world's salmon harvest (Kizzia, 1991) or approximately 30 million salmon caught during a peak year (C. Hensel, personal communication, September 15, 1995).

[7] For a detailed analysis of ANCSA and its effect on the Native rural population of Alaska, see Thomas R. Berger's *Village Journey: The report of the Alaska Native Review Commission* (1985).

[8] In terms of curriculum,the issue of Native control is more complex due to the lack of Yupiit people: (a) with the necessary expertise in curriculum design and implementation; or (b) with the decision-making power at the school or district level. There are, however, important advances on this front with Yupiit teacher groups and Yupiit educational researchers trying to find a way to implement a curriculum that is more responsive to the educational needs of the Yupiit students (Lipka, 1994; Ilutsik, 1994; Alaska Native/Rural Education Consortium for Systemic Integration of Indigenous and Western Scientific Knowledge, 1994).

[9] Ann Fienup-Riodan was asked by the Yupiit Nation to guide the research and write a final report. The account of that work constitutes Chapter 9 of her book *Eskimo Essays*.

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