When Indigenous and Modern Education Collide

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Abstract

Indigenous education has been heralded as an effective pedagogical strategy for perpetuating and reinvigorating the history, culture, and language of indigenous groups. In this article we make the case that the specific goals and practices of indigenous education, with an indispensable particularistic approach, find opposite hegemonic counterparts in national systems of education that end up diluting and weakening its intended purpose. By exploring curricular and pedagogical issues, the relationship between children and nature, connections between school and community, the promotion of certain languages above others, and the commodification of education, this article explores the common tensions that arise from the divergent epistemologies of indigenous and Western, modern education. The article concludes that if indigenous education is to be successful, it must continuously re-invent itself to ensure that it honours the basic cultural tenets of the ethnic groups it serves, recognises the hybrid nature of many indigenous practices, and uses learning as a springboard to foster social and environmental integrity.

Keywords: indigenous education, modernity, environmental education, school-community links, alternative forms of socioeconomic development

Indigenous Education and Western Education: Unresolved Tensions[1]

There are an estimated 300 million indigenous people worldwide, roughly 5 percent of the world's population (UNICEF Innocenti Research Centre, 2004). Despite this significant presence, national schooling systems have ignored, minimised, or ridiculed their histories pre- and post-Western contact, as well as their cultural contributions toward social and environmental sustainability. Only since the 1960s have ministries of education around the world, regional enti-

ties, and community-based groups, set up education programs that seek to rescue and protect the values, practices, languages, and knowledge systems of indigenous groups, including their relationship to local ecosystems; social relationships within each group; subsistence-based production, such as agricultural, pastoral, and hunting and gathering techniques; and language, art, games and other cultural aspects (e.g., Barnach-Calbó Martínez, 1997; Hernández, 2003; May, 1999; May & Aikman, 2003; Neil, 2000). These educational efforts have sought to recover indigenous peoples' own history and identity to help them resist the pressure to assimilate into the surrounding dominant societies.

Despite important advances, there are deeply entrenched tensions between the aspirations, goals and practices of indigenous education and those of mainstream Western education. Often enough, the educational programs are initiated as Indigenous peoples themselves and non-Indigenous allies seek to reform educational efforts by infusing formal schooling efforts with the unique alternative Indigenous knowledge systems, pedagogies and languages. At the same time, over time these same educators commonly must negotiate numerous pressures, ranging from inflexible national systems of education, bureaucratic red tape, institutional inertia, lack of financial resources, the need to develop and create educational materials, and the necessity of training and socializing educators to creatively incorporate indigenous knowledge systems, pedagogies, languages and community members into schooling efforts. These pressures present immense ongoing challenges for those who seek to Indigenise schools and school systems. If educators bend too far towards Western models of education, they risk reproducing the same fossilised and insensitive systems they are trying to circumvent (Abu-Saad, 2006; Arratia, 1997; McCarty, 2002; Sarangapani, 2003). At the same time, through ongoing struggles to orient local efforts towards Indigenous models of education, educators can ground students in their communities and geographical spaces while fostering academic achievement, providing preferable alternatives to homogenised Western schooling efforts.

In this article we establish a parallelism between both forms of education, showing how for each of the main goals of indigenous education there is an opposite hegemonic counterpart in mainstream schooling. In doing so, we synthesise a large body of literature from various disciplines – namely, anthropology, sociology, education, linguistics, political science, and environmental studies – to make explicit how the ideals of indigenous education can clash head on against the goals and practical realities of systems of public instruction.

As the reader will see, we have created archetypes of indigenous and modern education, in effect setting up an artificial juxtaposition of these models. In reality, individual indigenous programs vary considerably, and seldom tend to encompass all the qualities detailed here, just as no single modern system of education exhibits all the defects outlined within. Nonetheless, setting up our arguments via archetypical models illuminates the most important challenges currently faced by programs serving indigenous children. Without a clear understanding of these points of conflict, it will continue to be extremely difficult for indigenous educational programs to flourish. More generally, and in light of the 2007 United Nations Declaration on the Rights of Indigenous Peoples, we hope that this article serves as a conceptual framework for guiding and inspiring supporters of indigenous education to renew their efforts as they struggle with some of the issues outlined here.

Goals and Practices of Indigenous Education

An increasing number of schools worldwide serving indigenous populations are involved in a restructuring of the purpose, content, and form of education (e.g., Abu-Saad & Champagne, 2006; Barnhardt & Kawagley, 2005; Hornberger, 1997; May, 1999). Under ideal circumstances, indigenous education strives to teach indigenous children about their culture and history in an appreciative manner; offer a significant part of their schooling outdoors and in authentic settings; support a well-balanced education that addresses children's intellectual, emotional, physical, social, and spiritual dimensions; bring together children and adults (including elders); teach competence in vernacular, non-hegemonic languages; and foster the importance of non-commodified practices that teach children how to live well in their own bioregion. These characteristics are outlined in more detail below.

1. Indigenous education exposes children to their histories, and the traditions of their communities

Indigenous education can help to ensure the survival of the cultural wealth of indigenous communities. This wealth is essentially the social capital of the poor, their main asset to satisfy basic community needs (such as food, shelter, communal and spiritual growth) and to have control over their own lives. Efforts to reclaim the cultural wealth of marginalised communities are found in Wigginton's 'cultural journalism' (1985), Moll and colleagues' 'funds of knowledge' (1992), Kretzmann and McKnight's 'community assets' (1993), Arenas's (2001) and Sobel's (2004) 'pedagogy of place', and Barnhardt and Kawagley's 'culturally responsive pedagogy' (2005). These scholars report on a small sample of the many schools worldwide that centre

learning on the life of the community, with an emphasis on oral traditions, face-to-face and intergenerational communication, and value systems that view the individual as a part of a larger human and nonhuman community. For instance, New Zealand schools promote *kapa haka* (Maori performance arts) as part of the Maori studies curriculum (Harrison & Papa, 2005: 67). *Kapa haka* is practiced by students of all ages, from preschool to the last year of secondary schooling, and is considered an integral part of the holistic conditioning of mind, body, and spirit. Through regional and national competitions, youth demonstrate their knowledge and artistic talent by performing their tribe's historical chants in public, and are judged by the most respected and knowledgeable leaders in Maori culture. Because *kapa haka* is an integral part of the school activities throughout the year (and not just a sporadic event), youth acquire a sense of confidence and pride in Maori culture that would not be achieved otherwise.

While the perpetuation of non-commodified knowledge is important for all indigenous children, those living in urban areas need special attention. In 2008, for the first time in history, more than 50 percent of the world's population lived in towns and cities (Dugger, 2007), and by 2025, an estimated two-thirds of the world's population will be living in urban areas (World Resources Institute, 1998), with indigenous families found in increasing numbers in urban settlements (Rakodi, 1997; Sieder, 2002). In urban areas, children from indigenous backgrounds have much less exposure to the knowledge and practices of their ancestors related to ethnobotany, religion, manual skills, oral histories, performance arts, basic survival in nature, and their vernacular language. To prevent the very real possibility of cultural loss, urban schools need to place much greater emphasis on reclaiming these material and immaterial assets. At the same time, there needs to be a strong recognition of the hybrid nature of many understandings and practices engaged in by indigenous youth. An interesting example has come out of El Alto, Bolivia's indigenous capital and home to about 800,000 Aymaras. A whole new musical movement has emerged among Aymara youth that combines US-born hip hop (including the trappings of baseball caps, baggy pants and hand signs) with politically-charged lyrics in Aymara and Spanish (Forero, 2005). Andean flutes and drums mesh with a hip hop rhythm. This syncretism is part of the daily reality of indigenous youth of urban and rural areas around the world.

Recognizing the importance of these cultural manifestations and their rightful place in the curriculum is helpful for Indigenous students in both urban and more remote and seemingly traditional communities. For example, in one charter school serving primarily Tohono

O'odham students in an urban school in southwestern United States, in an annual event, dozens of student groups present skits or puppet plays that feature a modern twist on traditional Tohono O'odham stories alongside master storytellers from the community before a crowd of hundreds (Reeves, 2006: 199). As another example, in the rural Yup'ik Eskimo school district where Wyman conducts her research, Native Youth Olympics (NYO), a series of Native sports events, are sponsored during the school year alongside the non-Native sports of basketball and track. As part of NYO, individuals compete in a series of Native games such as one and two legged high kicks and jumps, and a seal hop where students lie flat, hold themselves up using only their knuckles and toes, and hop across a gym floor. Elders used versions of the events traditionally to maintain strength, balance and flexibility during the long winter months. In the standardised school-sponsored versions of the events, students compete in tournaments for individual medals and team trophies and their cumulative scores are used to put together an all-star district team for state competition in Anchorage, and adults can compete for titles in the international World Eskimo Indian Olympics (WEIO) (Wyman, 2004).

Events such as the Tohono O'odham storytelling nights from the first example, and NYO in the second, serve as catalysts for educators to build curriculum and avenues for performance around the syncretism found in Indigenous students' lives, and allow opportunities for educators and students to embrace Indigenous knowledge in its many manifestations.

2. Indigenous education stresses holistic learning, with an emphasis on children's attachment to nature

It has become imperative to address what Pyle (1993:140) called 'the extinction of experience'. Schools should seek a balance between participating in indoor and outdoor settings, spending time in human-built and natural habitats, and fostering intellectual talents alongside manual training, physical activities, and artistic endeavors. In opposition to the lopsided intellectual development of modern, Western education, indigenous education seeks to strive for holistic forms of education more akin to those found in many pre-modern societies that fostered children's emotional, intellectual, artistic, physical, social, and spiritual development (Reagan, 2000).

The original Santiniketan, a school founded by Indian poet and philosopher Rabindranath Tagore near Calcutta in 1901, contained many of the characteristics described here. In terms of outdoor activities, Santiniketan:

Facilitated learning about the divine and the natural . . . The natural surroundings of Santiniketan were vast and remarkable: Open air, solemn rivers, expansive plains of prickly shrubs, red gravel and pebbles, date-palm and sal trees, amalaki and mango groves, the air stretching its brown arms, the air enveloping everyone with its warmth. Children were free to move about this incredible scenery as they liked: to climb trees, swim in rivers, run, dance . . . they wore no shoes, socks, or slippers, for Tagore believed that they should neither be deprived of their freedom, nor should they be deprived of the learning contexts that nature provided them – to intimately know the earth by touch (Jain, 2001:31).

Children learned about science in the context of the natural world, practiced the arts almost daily (music, drawing, and drama), engaged in vigorous physical activity (sweeping, washing dishes, fetching water, cooking, weaving, and gardening), and participated in communal activities with local community members. Like Santiniketan, numerous indigenous schools worldwide to a greater or lesser extent have introduced a healthy balance of activities that promote vernacular knowledge and skills.

At the same time, recent scholarship in indigenous education has deepened our understanding of how terms such as holistic learning and vernacular skills themselves belie how, 'Indigenous epistemologies are complex philosophical instruments subject to analysis, interpretation, and metaphoric unpacking' (Lomawaima & McCarty, 2006: 24). While the details of indigenous knowledge systems vary from group to group, each system incorporates elements of formal and informal learning, providing a structured understanding of multi-leveled sets of relationships 'requir[ing] a lifetime of study to master at their deepest levels' (2006: 24). Currently, scholars are documenting the way indigenous youth have been, and in some cases still are, socialised to understand their place in the world and their relationship to other humans and spaces through rich language practices ranging from stories, naming, chants, catechism, and lectures, as well as a range of activities from observation, imitation, practice and the actual physical learning of skills in apprentice-style learning situations (Lomawaima & McCarty, 2006; Ongtootguk, 2000). As these scholars have recognised, Indigenous knowledge systems are dynamic, and have changed over time as Indigenous peoples have experienced both local manifestations of environmental and social changes, as well as the extreme pressures and historical experiences of colonization. Recently scholars have begun to assert how studying the complex and interrelated strands of indigenous education, as well as the adaptation of indigenous knowledge systems over time, can provide key understandings for how to 'reconnect education to a sense of

place and its attendant cultural practices' (Barnhardt & Kawagley, 2005:10).

3. Indigenous education connects children with caring adults, including elders

There is an increasing recognition of the importance of breaking down the barriers that separate school from community. One key aspect of this task is to reclaim the premodern practice of involving the entire community in the children's education. As Reagan (2000: 206) wrote of non-Western educational traditions:

Not only have adults and older children in the community tended to play important educational roles, but with relatively few exceptions there has been little focus on identifying educational specialists in non-Western societies. Education and childrearing have commonly been seen as a social responsibility shared by all of the members of the community.

Reducing the barriers between school and community requires bringing the community to the school and taking the school to the community. In the first instance, community members can enhance school life through an active presence in curriculum enrichment, teacher assistance, extracurricular activities, school board membership, and so on. Hammond (2003) described how a group of parents and community members from the Mienh tribe (from Laos, Thailand, and Vietnam), who immigrated to California years earlier and had children in the public schools, constructed a house with teachers on school grounds. The house, built to hold cultural activities, included typical design and construction features from Asia and the US, becoming a true Mienh-American hybrid. The construction crew contained Mienh elders who had building experience but could no longer do heavy physical work; younger Mienh parents; US teachers; a local US architect; and US, Mienh, and Hmong students who served as cultural brokers. The culturally hybrid house they built – neither completely Mienh nor completely from the US but something new altogether – became a symbol of peace and harmony among the ethnic communities in the school.

The second direction of indigenous education is from the school to the community, with an emphasis on transgenerational communication. Schools must find ways of linking children to older community members who have retained knowledge of being connected to a place through sustainable practices. For example, in a school in Colombia, secondary students became cultural reporters, going into the community and interviewing mothers and grandmothers regarding their knowledge of medicinal ethno-botany (Arenas, 2001). After compiling

extensive lists, which included the common (and eventually scientific) names of plants, physical descriptions, medicinal uses, and forms of preparation, students created an ethno-botanical garden on school grounds. Students and teachers began to use the ethno-botanical knowledge on a regular basis to alleviate common ailments, instead of relying on pharmaceutical products.

In societies where a person's worth is measured in terms of economic productivity and where older people are displaced precisely because their capacity in this area is limited, ethno-education can greatly serve to offset this situation. In the studies focusing on the Mienh-American house or the Colombian ethno-botanical garden, it was due to the ethno-education projects that community members in general, and elders in particular, were able to share their skill and wisdom.

4. Indigenous education helps to perpetuate and revitalise minority languages

Vernacular, minority languages are passed from generation to generation through oral communication, something that schools have immense difficulty replicating. As Fishman (1996 para. 20) wrote, 'Schools are normally programmed and not inter-generational, and mother-tongues are inter-generational and not programmed. They have almost completely opposite constellations of forces.' The great paradox of modern schools is that the same instrument (education) used to eliminate minority languages must be used to perpetuate and rescue them. To guarantee the perpetuation of minority languages, a significant amount of instruction must occur in the minority tongue from pre-K through 12th grade. Successful models to accomplish this are found in well-developed bilingual and multilingual programs whose purpose is to develop both the minority and the majority language to native or near-native proficiency (Hinton & Hale, 2001). Such is the case with Hawaiian, which has undergone in the last three decades arguably the most successful language revitalization effort of an indigenous language in the US (McCarty, 2003). Community pressure in the late 1970s and 1980s led to the creation of Hawaiian immersion preschools, followed by Hawaiian immersion elementary and secondary schools as 'schools-within-schools'. Nowadays, a child can receive an entire education in Hawaiian from preschool to graduate levels.

Another interesting case of language revitalization is presented by East Timor. During the Indonesian occupation, Bahasa Indonesian was the main language of communication in schools, with Portuguese being banned, and Tétum, the most widely spoken indigenous language with

between 60%-80% of the population as native speakers, used only on a limited basis at the elementary school level towards the end of the occupation (Arenas, 1998). Once East Timor became independent in 2002, Portuguese and Tétum became official languages and have gradually been introduced in the schooling system, a move that will probably eventually phase out Bahasa Indonesia from schools. With a push for the full development of Tétum in society in general and in schools in particular, an effort that includes the standardisation of its grammar and spelling; the widespread publication of texts in Tétum; and the use of Tétum (alongside Portuguese) as the main language at the primary level and over time including it at all educational levels (Borgerhoff, 2006; Hull, 2000), the chances are high that Tétum will be preserved and reinvigorated by future generations.

It must be stressed that schools by themselves cannot reverse language loss. As several scholars have emphasised, schools are but one of the key change agents in language revitalization (Fishman, 1996, 2001; Hornberger, 1997; Skutnabb-Kangas, 2000). As Fishman wrote (2001: 14),

If the threatened language is not first acquired as an ethnic mother tongue at home, before children arrive to school, and if it is not used out of school, after school and even after schooling as a whole is over, then the school has a much more difficult task on its hands.

Particularly to reach Stage 6 of what Fishman has called 'Reversing Language Shift' (2001) in which the threatened vernacular language is spoken informally between and within three generations of a family and spoken informally by children and adults in the neighbourhood, a great many institutions need to be present to ensure the revitalization and perpetuation of the language. Some of these other institutions include: mass media at the local, regional and national levels; governmental services; non-formal education for adults; youth groups; and cultural groups in general.

Indigenous language revitalization movements also require constant negotiation of tensions inherent in opposing underlying assumptions of Indigenous and Western languages and language education, broadly conceived. Within these efforts, indigenous language educators and language planners must make ongoing decisions about details ranging from how to incorporate oral narratives into materials and curriculum, whether and how to use literacy to promote primarily oral languages, how to create new words to express modern concepts and material objects and how to use new technologies in ways

that support face-to-face language learning and use (Hinton & Hale, 2001). Even when classroom materials and instruction are in an indigenous language, educators must resist the impulse to teach indigenous languages within familiar 'frames' and patterns of language instruction of dominant languages, in order to move beyond piecemeal efforts at language revitalization (Wong, 1999; Meek & Messing, 2007). These decisions involve multiple levels of negotiation from the broad levels of language policy to the microlevels of how to represent single sounds in writing, as well as careful attendance to informal patterns of classroom interaction (Hinton, 2003; Holm, Silentman & Wallace, 2003). For these negotiations to be successful, the outcomes, products and pedagogies must ultimately 1) be recognizable as linked to ancestral precedents; and 2) be supportive, rather than disruptive, of intergenerational and everyday uses of indigenous languages in community life.

5. Indigenous education exposes mainstream children to indigenous histories and traditions

To be successful, indigenous education must be accompanied by formal education that exposes mainstream children to the histories and cultures of indigenous and minority groups. A peaceful coexistence and a just society cannot be accomplished if mainstream children do not learn about ethnic minority cultures and the importance of respecting and affirming them. While the main victims of an educational system that silences the cultures and voices of minority groups are minority children themselves, all students, minority and non-minority alike, become miseducated insofar as they only receive a partial and biased education (Santa Ana, 2004). Mainstream children who see only their own selves portrayed in the curriculum believe that they are the centre and everyone else is peripheral and secondary (Banks & McGee Banks, 2004; Nieto, 1992). Intercultural forms of education are essential for ensuring that children learn from each others' communities and hold them in high esteem. In the Mienh-American example presented above, European American, Asian American, Latino, and African American students all enriched their education through sharing intercultural knowledge and power and through learning to solve conflicts by creative and peaceful means (Hammond, 2003). When mainstream children are robbed of the opportunity to learn about indigenous knowledge systems, they are prevented from envisioning the human capability to adapt to unique ecosystems over time. They also miss the opportunity to learn from the resilience and perseverance of Indigenous groups who have survived histories of colonization. This exposure to non-hegemonic histories and cultures dislodges the comfort of the privileged. It is much

easier for mainstream children to assume that their ancestors found land that was abandoned, or that indigenous groups simply were conquered and no longer exist, for instance, than to wrestle with histories of oppression, both past and present, related to such issues as competing land claims of peoples with ancestral connections to the geographic spaces where their schools and mainstream communities are located. Educators can expect roadblocks to discussion as mainstream students come 'face to face with their own assumptions about notions of cultural assimilation, individualism and capitalistic society' (Ongtooguk & Dybdahl, in press). At the same time, awareness of these histories provides children with important exposure to the facts, rather than a false and stereotypical understanding of Indigenous realities. Such awareness may motivate mainstream children, on reaching adulthood, to defend the right of other cultures to be respected and affirmed.

One effective strategy for indigenous education is to create language programs where mainstream children with a high-status mother tongue are instructed using the minority language. There are plenty of examples of this with European languages – as in the case of Spanish immersion for English speakers in the US or French immersion for Anglophone speakers in Canada – but it is much less common with indigenous languages. One notable exception is Paraguay, where 95 percent of the population is to some degree bilingual in Spanish and Guaraní (Gordon, 2005). In 1992, when Guaraní and Spanish became dual official languages, legislation was passed mandating the use of Guaraní in schools with the goal of full bilingualism. In a 2000 survey of secondary students in Asunción, not only did the vast majority of students express pride and respect for Guaraní, but when asked, 'With whom do you speak the most in Guaraní?' Twenty-eight percent answered with their parents, 20 percent with their grandparents, and 15 percent with their friends (Choi, 2003). These are significant positive findings. Hamel (2003: 125) in fact considers Guaraní a "former" indigenous language, given its massive presence in all strata and the privileged position it enjoys as part of national identity – in this sense, it occupies a similar position to Tétum in East Timor in terms of serving as a social marker of national unity. This is not to say that both languages have the same status; Paraguay is still a society where Spanish has more prestige than Guaraní. Even so, efforts by schools are significant enough to help all children, indigenous and non-indigenous alike, become proficient (or at least semi-proficient) in Guaraní culture and language, revalorizing the place of Guaraní in Paraguayan society.

Goals and Practices of Modern Education

The aforementioned goals and practices are in direct conflict with those of modern public schooling, which serves first and foremost as an instrument to integrate the population into the rationalistic and totalising project of the nation-state (Berry, 1990; George & Jain, 2000; Prakash & Esteva, 1998). Through the transmission of a national language, an intentional pedagogy that privileges fragmented and book-codified knowledge, and a continuity of practices involving discipline, obedience, and respect for impersonal authority, the school seeks to train the child to become an effective worker-citizen (Gellner, 1983; Spring, 1980). To the nineteenth-century aims of fostering nationalism, patriotism, and good citizenship, public schools in the twentieth century added the goal of providing equality of opportunity in a hierarchical occupational structure. In this context, practices that thank the forces of nature during the harvest, follow the cycles of the sun, moon, and wind, honour the land for the food it provides, and uses non-rational approaches to science belong to a much larger group of non-commodified knowledge that resists standardization, assessment, and credentialism, three key aspects of modern schools (Bowers & Apffel-Marglin, 2005; Sieder, 2002).

Even when educators display the noblest of intentions, as evidenced by the examples of schools serving indigenous populations in the previous section, there is enormous pressure for these schools to lose momentum and strength over time. A setting that exemplifies the difficulties faced by indigenous education is the Rough Rock Navajo School, founded in 1966 in Arizona as the first Native American community-controlled school in the US and one of the most influential Native American schools in the country (McCarty, 2002). Despite its many accomplishments – including serving as a catalyst for Indian American education leaders and inspiring the growth of the Native American bilingual education movement – a host of reasons have cropped up in recent years that have greatly mitigated its positive impact, specifically its language and cultural studies program. The problems have included chronic funding problems, governmental pressures to adhere to national curricular and accountability standards, change in personnel that have brought in administrators and teachers who deemphasised Navajo cultural revitalization, and parental insistence on academic success but often at the expense of Navajo language and culture. Thus, there have been gradual but incessant attempts at institutional cooptation by State, market, and social forces. While Rough Rock still struggles to be faithful to its original vision, many other indigenous schools have faced varying degrees of success in the struggle to resist institutional cooptation over time.

To understand why this happens, it is vital to explore the goals and practices of modern schooling and the way these are at cross-purposes with those of indigenous education. The goals and practices of modern schooling can be summarised as follows.

1. Modern schools emphasise cultural homogenization

The concurrent rise of nationalism, representative governments, and industrialization necessitated the rise of mass schooling in the Western world in the nineteenth century (Gellner, 1983; Spring, 1980). Johann Fichte's 1808 Addresses to the German People, which advocated for a single German Gemeinschaft, helped popularise the concept of unified educational systems that would foster a national consciousness based on the culture of the centers of political, social, and economic power. This consciousness developed in part by the provision of a common history, literature, set of symbols (e.g., flag, map, anthem), and a national language (Anderson, 1983). The European concept of national systems of instruction was then exported and imposed around the world, often with the complacency and support of local elites. As a result, as Anderson pointed out (1983), individuals who received formal schooling became modern subjects who viewed themselves as belonging to an imaginary community called a 'nation-state'. Prakash and Esteva (1998: 16) argued that inevitably local and even regional cultures were systematically excluded from the halls of academia:

The classroom, however celebratory and respectful of cultural diversity, can only be a deliberately Western site; transmitting only the culture/s of the West . . . The pluriverse [as opposed to *uni*-verse] of cultural diversity cannot be nourished or regenerated through the project of education [because] education is of modern western origin.

When schools around the world display a high degree of isophorism, local and regional differences tend to be erased through these larger hegemonic practices (see Benavot et al., 1991 for world-wide curricular isophormism). As Gellner wrote in *Nations and Nationalism* (1983: 27), the educational system of societies worldwide 'is unquestionably the most universally standardised that has ever existed'. The Huaorani people of the Ecuadorian Amazon offer an example. Rival (2002) wrote that the arrival of the modern school and of modernity in general created a whole new way of life for the Huaorani. Among the physical changes brought about by modernity were the deforestation of vast areas around the village school to mark its separation from the forest; the sedentarisation and higher population density in the village as a result of the school's location and yearly schedule (the Huaorani are nomadic and live in sparsely populated

areas); and the conversion of the temporary longhouse, the tradition-al housing unit comprised by 10 to 35 individuals, to new modern con-structions that followed the example of the school with its concrete floors, plank walls, corrugated iron roofs, and sense of permanence. Ultimately, the school assisted in the gradual transformation from the Huaorani's unique social relations and spatiotemporal organizations to a homogenised modern village.

The problem of the way schools tend to converge towards one sin-gle, global village was emphasised by Chief, a Blackfoot Indian from the USA, when he wrote, 'At the present time, our educational sys-tems are almost identical to the mainstream, and therefore we are merely being taught to fit into the dominant society. We don't have a choice, we must deconstruct our colonised thinking' (2000:27).

2. Modern schools foster mostly indoor, decontextualised, and intellectual learning

On average, children spend about 1,000 hours a year at school, sur-rounded by four walls for the vast majority of this time. They study the world second hand, through lectures, books, and electronic audio-visual materials, and their knowledge is divorced from the earth, plants, and animals that surround the school (Berry, 1990; Smith, 1992; Sobel, 2004). Children seldom go outdoors except for the uncom-mon fieldtrip and recess – and even recess is being severely curtailed or in the process of being phased out in countries like Germany, Japan, Russia, and the USA (Goodale, 1998). Children end up learn-ing the insidious message that the actual experience of the phenome-non is unnecessary and intellectual discernment is the main respectable avenue for knowing.

Similarly, the knowledge transmitted in school is impersonal and abstract, with little or no relationship to the students' lives (Prakash & Esteva, 1998; Sobel, 2004). Knowledge valued by the local commu-nity, associated with non-industrial economic practices or based on non-rational approaches, receives little credence. In Rival's (2002) study, Huaorani children who attended modern schools had less knowledge of the rain forest than did non-schooled children. School children spent considerably less time in the forest, fewer knew how to climb trees, none knew how to prepare curare poison, and none knew how to make a clay pot, all familiar activities to non-schooled Huaorani children and basic to their culture. Rival concluded that as Huaorani children learned the modern cognitive skills of reading, writing, and numeracy they became alienated from the context of the forest and the longhouse. Modern schools in fact de-skilled indigenous

children from the knowledge and practices of their ancestors.

When traditional knowledge and skills are introduced into the school, they risk becoming disembedded from their original context. Once a time-honored belief and activity is packaged for transportation to and consumption in the classroom, it is severed from the land that gave it life and nurtured it. Grimaldo Rengifo Vasquez, one of the founders of the Andean Project for Peasant Technologies (PRATEC), explored how Quechuas and Aymaras understood the connections between deities, nature, and humans, and how this complex set of interactions often did not find a respectful place in schools (2005:38-39). During the festival honoring the first fruits of the land during Carnival season, Aymaras call the potato tubers *Ispallas*, "potato deities". Aymaras consider that under certain circumstances the fruits of nature have supernatural powers, so the tuber is a potato and an Ispalla simultaneously. Furthermore, the women who participate in these festivities become deities of the potato, because the sacredness in each person comes to the surface as an Ispalla. If a group of educa-tors, with the best of intentions, packages this extremely intricate cos-movision for an ethnoeducation course, it loses its richness and sacredness in the barrenness of the global classroom. Situations of this type have even led some researchers to suggest that there is an inherent incompatibility between indigenous knowledge systems and the modern system of schooling (e.g., Sarangapani, 2003).

3. Modern schools separate children from caring adults in the community

A key claim made in Willard Waller's classic *The Sociology of Teaching* (1932) was that schools systematically limited the emotional and intellectual development of teachers. He found that in order to maintain a professional persona, teachers had to distance themselves from students and community members, which impeded their normal psychosocial development. This also damaged the healthy develop-ment of students and presented a major stumbling block to humanis-tic reform in schools. About 80 years after Waller published his educa-tional text, the difficulties faced by teachers to share authentic expres-sions of the self have changed little (e.g., Cooper, 2004). An overempha-sis on curricular standards, prescribed technique, student assessment, and legalistic definitions of education have contributed to teachers shutting off their true selves and their acceptance of the students' cul-ture when in the classroom. Classrooms have become bland and emo-tionless settings where the main relationship between teachers and students is cordial but distant, and whose allegiance is stronger to the institution than to the child. This is not the fault of teachers, many of

whom are extremely caring and committed, but of modern, bureaucratised practices that dampen the intimate relationship that should exist between teachers and students (Pajak & Blasé, 1984).

Even teacher preparation programs specifically created to assist indigenous and other marginalised communities have great difficulty in overcoming entrenched barriers. Hegemonic practices emanating from the State and from dominant social and economic spheres frustrate the open acceptance from the part of teachers of true interculturalism. As Arratia (1997) showed in her study on teacher preparation in Aymara communities of northern Chile, even after undergoing sensitivity and cultural awareness training, teachers (many of whom were Aymara themselves) assumed the role of civilizing agents and of reproducers of the social hierarchies found in the larger society.

In their work on indigenous knowledge systems in Alaska (US), Barnhardt and Kawagley (2005) highlighted the importance of cross-generational communication by noting how elders help to renew and carry forward knowledge on the basic interconnections between natural and human relationships. They emphasised the way elders play a vital role in holding together a sense of cultural identity and spiritual centeredness that tends to be diluted and ignored by the more extreme forces of modernization.

Even when schools as a whole do not embrace indigenous knowledge, indigenous students can benefit from efforts to incorporate knowledge keepers into school settings. In one Yup'ik village in Alaska, Wyman found that adults working outside the school resisted the commodification of the relationship between youth and elders. Adults encouraged youth to work for elders "without pay" and emphasised how, in return, according to *Yuuyaraq* (the way to be a good human), a system of beliefs and practices specific to the Yup'ik way of life, elders would share their extensive knowledge of subsistence and the local ecosystem to assist youth in their carrying out of local day-to-day practices. Older youth described their relationships to elders in general as a key component of their valuation of the local community, and as a factor in their decision as to whether to stay in the community as young adults to raise their children. The local public school, on the other hand, proved to be one of the least stable village institutions within which to incorporate elders' knowledge, due to the rapid turnover of primarily non-Native outside educators and administrators who made up the majority of the local teaching force. Regardless, even as the school overall struggled with instability, when elders were brought into the school, consecutive groups of youth responded posi-

tively to their inclusion in formal schooling efforts. On one occasion, when an esteemed elder was employed as a counsellor in the school, many of the young people commented how the regular incorporation of his presence and teachings positively impacted their overall learning. As one youth reported, 'He talked to us about that [a school shooting that had taken place in the region], and before he started, everybody, most students were like, *anaruteq* or mischievous. [Then he] started talking to us and changed the whole school. He started talking to us and kids started acting better.'

At the same time, individuals who can serve as a cultural bridge between teachers and students seldom find a space in schools. Teachers, especially at the primary level, do invite parents and other caregivers to assist as volunteers in the classroom, but often their main role is to help students acquire Western, modern knowledge. In the US, adults must obtain a post-secondary degree or pass a proficiency exam in order to become teaching assistants in public schools; consequently, those whose knowledge of non-commodified traditions is the richest tend to be excluded. Tohono O'odham and Yaqui grandparents in Arizona (US) are often rejected for lack of proper credentials, and schools end up relying on CD-Roms and other technologies to teach native language and culture (Duarte, 2002). At the other end of the spectrum, indigenous education programs are sometimes able to resist the notion of outside certification and bring knowledgeable local elders and adults into the school based on the recognition of their talents as fluent speakers of an Indigenous language. Yet even in these instances, community members without outside certification may be unfairly compensated for their efforts based on school pay scales, or may find that their co-workers and administrators assume that they have minimal need for professional development opportunities since they are fluent in the local languages and are from the community, as community members told researchers in one language planning effort involving representatives from 20 Athabaskan villages in Alaska (Dementi-Leonard & Gilmore, 1999).

In light of these challenges, indigenous educators and their non-indigenous allies have experimented with various models in order to teach teachers how to incorporate elders and elders' knowledge into schools by traversing the boundaries of indigenous ways of knowing and formal school processes. In the Athabaskan effort mentioned above, community members, indigenous educators and university-based collaborators created spaces for overcoming the "taken for granted" attitudes and assumptions found in State- run school spaces through regular project meetings held in community, rather than

school settings. In the process, they not only envisioned, but implemented multiple projects within which indigenous teachers could gain certification while learning from knowledgeable elders. These efforts included a master-apprenticeship program that paired teachers with elders to learn advanced levels of their own languages, and a summer institute and a career ladder program designed to make teacher certification more accessible to Athabaskan community members in urban as well as rural schools (Dementi-Leonard & Gilmore, 1999). Within another promising approach in Alaska, longstanding teacher study groups provided sustained opportunities for indigenous and non-indigenous educators to work together to creatively integrate indigenous education and formal schooling while countering power asymmetries in specific school contexts found in rural Yup'ik villages (Lipka et al., 1998).

As evidenced from these examples, Athabaskan, Aymara, Tohono O'odham, Yaqui, and Yup'ik elders, as elders and other caring adults from indigenous groups worldwide, serve as vital holders of transgenerational renewal of knowledge that over time becomes something akin to wisdom. This wisdom, however, seldom fits into the narrow designation of professionalization as defined by the State. Building on the strengths and knowledge of indigenous elders and caring community members in formal school spaces takes ongoing negotiation of the assumptions about power, knowledge relations, teaching and teacher-training found in universities as well as local schools.

4. Modern schools undermine linguistic diversity

There are an estimated 6,900 extant oral languages (Gordon, 2005), the vast majority of which are indigenous and minority. Despite this linguistic plurality, more than half of the world's states are officially monolingual and fewer than 500 languages are used and taught in schooling systems worldwide. It has been precisely through the agents of the so called 'consciousness industry' – namely, schools and the mass media – that hegemonic, nationalistic languages have been imposed on very dissimilar populations inhabiting the same nation-state, to the detriment of the less prestigious vernacular languages. A clear example of linguistic subjugation occurred at the end of the Middle Ages when Antonio de Nebrija published the first Castilian grammar in 1492 – constituting the first standardization of a modern European tongue. A key reason for this grammatical homogenisation was the intent of the Castilian crown to use language as a main tool for spreading a single, nationalist sentiment while suppressing competing vernaculars (Illich, 1981). Since Nebrija's time, the emergence of the consciousness industry and economic globalization have led to

such a critical language loss that if present-day evolutions continue, over 90 percent of these languages will be dead or dying by the year 2100 (Skutnabb-Kangas, 2000).

To achieve national homogenous linguistic identities, schools employ both overt and covert practices (McCarty, 2003; Skutnabb-Kangas, 2000). Overt practices include using physical punishment and humiliation if the minority tongue is spoken (e.g., many Native American and Native Alaskan groups experienced direct punishment for speaking their indigenous languages in schools and Català and Euskada were excluded from schools during the Franco dictatorship in Spain); dispersing minority children in special boarding schools far from their homes (e.g., numerous Native American and Native Alaskan groups; Kurds in Turkey; Sámi in Norway and Sweden); and using the vernacular tongue only during a transitional period to help students learn the hegemonic language. This latter strategy, the most common overt practice in contemporary schools, was called by Lambert (1975) 'subtractive bilingual education'. Covert practices occur through structural means, as when a sizable group of minority children do not speak the dominant language but no bilingual teachers are provided to assist them, and through ideological means, as when the minority language is viewed not as a resource but as a handicap (Ruiz, 1984).

As some scholars argue, 'The most significant challenges for . . . language revitalisation efforts . . . involves transforming the long-term effects of policies and practices that continue to condition language attitudes and choices in favor of [dominant languages] at the expense of mother tongues' (Lomawaima & McCarty, 2006: 138). In some places, such subtractive ideologies have led to very restrictive language policies that severely constrain the options for bilingual educational programs in US states like Arizona with relatively large numbers of indigenous and immigrant students. In other states like Alaska, where bilingual education programs are still overtly supported, such subtractive ideologies are covertly undermining indigenous language educational efforts as school funding, personnel, and control over public schools serving indigenous students have become tied to the performance of students on dominant language tests in a new era of accountability. One telling example is a school district in Alaska, nationally recognised for 30 years of efforts to provide culturally and linguistically relevant programming for Native Alaskan students. Yet at the time of this writing, it appears that some communities, after historically maintaining their indigenous language through many of the forms of overt linguistic oppression listed above, are now wavering in

their commitment to bilingual education and are choosing to speak English in the hopes of helping their children achieve on a high stakes graduation exam conducted in English, threatening to undermine Alaskan linguistic vitality and diversity (Williams & Rearden, 2006).

As languages disappear, so does biological diversity. As Luisa Maffi argued in *On Biocultural Diversity* (2001), there is a close connection between literacy (in the hegemonic language), industrialisation, and urbanisation. As these increase, there is a concomitant reduction in cultural and biological diversity. Once a language dies out, not only is there a loss of a way of communication, it also signals the demise of a way of relating to the world. As Paul Nabhan wrote, once a language is gone, the 'traditional ecological knowledge about relationships between plants and animals is lost. Indigenous and minority communities are reservoirs of considerable knowledge about rare, threatened, and endemic species' that vanishes once the members of these groups cease to speak the language (2001: 151). This lost knowledge represents a missed opportunity to promote the protection and sustainable use of endangered species and fragile ecosystems, as well as of cultural traditions that maintain communities united. In a report on African languages, it was found that in Mozambique oral histories and the making of traditional crafts are fading away because the vernacular languages that give life to these traditions are not found in schools. Mozambique has 23 native languages, but the only official one is Portuguese. Paulo Chihale, director of a project that trains Mozambican youth in traditional crafts, said, 'Our culture has a rich oral tradition, stories told from one generation to another. But it is an oral literature our kids will never learn. Our culture is dying [because] our sons no longer speak the language of their fathers' and schools do little to protect this linguistic wealth (in Leonard, 2005).

But even when indigenous languages do find a rightful place in schools, they may unwillingly displace less prestigious indigenous languages. While Tétum appears to have a hospitable future in terms of its schooling presence, the same cannot be said of the 15 or so other indigenous languages in East Timor because at this point there are no plans to include them in any systematic basis in public schools. Clearly, no society has enough resources to ensure the introduction of all indigenous languages in the schools' curriculum, but the greater political clout of some indigenous languages over others – as measured by numbers of speakers and access to political and economic spheres of influence – ultimately determines their greater prominence in schools. The institutionalization of Tétum may in fact have the unwanted effect of de-stabilizing the presence of other indigenous lan-

guages (and even non-standard variants of Tétum), as has been suggested occurred in Tanzania with the institutionalization of Swahili (Blommaert, 2005a, 2005b). When Swahili was implemented in Tanzania in its primary schools during the 1960s as a liberatory and revolutionary strategy, it had the effect of relegating the other 100-plus indigenous languages to a subordinate position. One author even remarked that 'Swahili, rather than a world language such as English, may be the main direct threat to the existence of minority languages' in Tanzania (Blommaert, 2005a: 499). The Tanzanian example underscores the point above that indigenous language education efforts are inherently situated. When schools serve children from multiple indigenous groups, clearly the goals and methods of indigenous language education must be considered in the light of all students in the school.

5. Modern schools promote the commodification of education

As the number of years of compulsory schooling has increased over the decades, and as "successful" preparation for adulthood is partly determined by the amount and type of schooling one gets, students have become "consumers" of education (Illich, 1977). Pecuniary rewards and social status are largely determined by the academic degrees one possesses, thus transforming education and knowledge into commodities that are bought and sold in the market. This has led to a swelling of academic degrees for jobs that previously did not require them, something which has arisen at least since the 1960s when the concept of the *credential society* was coined (Collins, 1979). Authors from this line of thinking claimed that while a small proportion of new employment (an estimated 15 percent) did require specialised skills that could be obtained through further schooling – and thus justify the acquisition of an advanced degree – the vast majority required the same skills that were needed decades ago (e.g., Dore, 1976). Today, the amount of knowledge and skill required by secretaries, teachers, lawyers, assembly-line workers, sales people, bus drivers, and administrators have not changed much, and whatever new skills are required – especially related to operating computers – can be learned on the job during the first few months of employment (Oppenheimer, 2003).

Schooling has become such a powerful force in society that it currently partially defines people's personal and professional worth. As Gellner wrote, 'The employability, dignity, security, and self-respect of individuals . . . now hinges on their *education*' (1983: 36, italics in the original). The overrating of formal paper qualifications has led to the disregard and disdain for the informal, intimate transmission of

skills. Accredited centres of learning have virtually become the only spaces where transmission of knowledge is deemed legitimate in the eyes of employers.

An understanding of the commodification of education allows us to acknowledge that as a society we could retain the same standard of living with much less formal education. It also allows us to grasp why truth and justice have become secondary to crass commercialization and consumerism. As O'Farrell (1999: 14) said,

> The question asked by the state, by students, by schools and universities is no longer "is it true" but "is this knowledge useful?" In an environment where money is all, this question also becomes "how much money can be made out of this knowledge?" and further "will this knowledge make the process of making money more efficient?" In short, knowledge is no longer assessed in terms of its truth or falsity or its promotion of justice, but in terms of its efficiency at making money.

This attitude results in the devaluing of local knowledge that has little worth in terms of enhancing an employer's or a nation's economic productivity. As governments gear curriculum standards to meet the goals of national economies, oral traditions and knowledge that do not have a built-in value that can be measured in the economic market become irrelevant. As Illich (1977: 82) wrote of the prevailing attitude, most people have come to believe that 'only through schooling can an individual prepare for adulthood in society, [and consequently] what is not taught in school is of little value, what is learned outside of school is not worth knowing'.

Evaluation

In light of the previous discussion on the characteristics of modern, Western education, does this mean that the efforts by practitioners of indigenous education are futile? Does the juggernaut of Western schooling nullify the work of indigenous education? We do not believe so. Supporters and practitioners of indigenous education are correct in defending this pedagogy for three main reasons. First, indigenous education is important now more than ever because the prestige and pecuniary benefits associated with modernity are such that, without a minimal counteracting force, the virtual annihilation of native languages and customs worldwide will continue unabated. In terms of language revitalization, while schools are not the only site for language reclamation, they nonetheless constitute a key place where this may occur. Secondly, as a result of the migration of large segments of indigenous groups to urban areas in search of a higher standard of living, many of these new urbanite families are forced to live in squalor and destitu-

tion due to unfair economic conditions. In urban areas, children tend not to have the support networks they might have enjoyed in their ancestral homelands, nor do they receive fundamental ancestral knowledge that kept the community together. Schools have the potential to pick up where the community has left off. And thirdly, the reality in most urban areas is that poor families might realise a modicum of economic well-being only by accruing academic credentials that open doors to modern employment. While there is no guarantee that these diplomas will secure employment, without formal education they have even less hope of leaving the ranks of the underclass. The challenge is to guarantee that children learn the language and symbols of power while still retaining – and, many cases, recuperating – their vernacular cultural wealth. In sum, we do believe that Indigenous educators and their non-Indigenous allies can improve schooling for Indigenous children through a renewed push for a more systemic centering around Indigenous epistemologies as a way to counter homogenizing forces that undermine Indigenous education efforts (McCarty, Borgoiakova, Gilmore, Lomawaima, & Romero, 2005).

At the same time, supporters and practitioners of indigenous education must address several issues in the process: First, they must go far beyond superficially adding isolated pieces of cultural praxis onto the existing structure of schools. If educators want students to progress beyond a tourist-level appreciation of cultural difference we need to reconceptualise the form and content of public schooling, including the introduction of indigenous languages as a main vehicle of communication. Such a rethinking offers important opportunities for improving the educational achievement of indigenous students (Lomawaima & McCarty, 2006). As leading Maori educator Linda Smith pointed out, and as we have shown here, 'Indigenous frameworks for thinking about schooling [also] present new and different ways to think through the purpose, practices, and outcomes of schooling systems' (2005: 94). As increasing numbers of scholars are recognizing, these opportunities have the potential to benefit not only indigenous students, but all students and all those who seek to understand how education might foster a more just society (Barnhardt & Kawagley, 2005; Lomawaima & McCarty, 2006; Tharp, 2006).

Second, proponents of indigenous education need to take care to avoid essentializing indigenous cultures and believing they remain static over time. This is problematic because minority cultures (like all cultures) are fluid and experience change, both in urban, multicultural settings, as well as in rural, ethnically homogenous ones. New hybrid cultural forms tend to emerge that have even brought some

observers to suggest that "indigenous" and "modern" need not be oppositional terms (McCarty, 2002: 191). These syncretic manifestations need to be acknowledged by educators and found a legitimate space in the schools' curriculum. A related danger with essentialising indigenous groups is to focus on ethnicity as the only identification marker. This runs the risk of masking a variety of realities (including other forms of oppression) that occur within all cultural groups. While ethnicity may be the primary identification marker for many of its members, for some oppressed social groups other markers may be just as salient – e.g., as in the case of gays and lesbians, people with physical disabilities, or women. When the Zapatistas went to the Mexican Congress in 2001, a short Maya woman dressed in white with embroidered flowers, and a ski mask covering her head, stood at the podium and told the crowd: 'Here I am. I am a woman and I am an Indian, and through my voice speaks the National Liberation Zapatista Army' (Marcos, 2006: 69). *Comandanta* (sic) Esther, one of the Zapatistas' most important leaders, was letting the world know by placing *woman* before *Indian* that her reality was a complex one that should not be simplified through the prism of ethnicity alone. Her speech embodied the idea that indigenous cultures are neither monolithic nor static, and that they want the right to decide what and when to preserve, and what and when to transform their cultures.

Leading scholars of indigenous education have shown how essentialised views of indigenous cultures commonly lead to assumptions about indigenous children as one-dimensional learners. Even when these assumptions are based on positive stereotypes of Native learners as holistic, ecological, or visual, such assumptions can lead teachers to lower expectations in the classroom, leading to the further educational marginalization of Indigenous students (Deyhle & Swisher, 1997; Lomawaima & McCarty, 2006; Ongtooguk, 2000). While we have presented common tenets of Indigenous education, we have also demonstrated how Indigenous knowledge is situated, multilayered and must be fostered within young people's relationships to specific histories, geographical spaces and dynamic communities. Practitioners of indigenous education need to be mindful of the multiple and dynamic realities of indigenous students, the depth of indigenous knowledge systems, as well as tribal histories, the contemporary circumstances of students' communities, and institutional dynamics of power in order to integrate indigenous ways of knowing sensitively and powerfully into the schools' curriculum.

And third, in following the lessons from the deschooling movement, it must be recognised that indigenous education faces continuous

struggles as it attempts to mitigate the commodity fetish that education has become. By synthesizing existing literature and our own experiences as researchers, here we have underscored the complexity of indigenous education by articulating contradictory assumptions that currently produce common tension points, pressures, and areas of struggle for indigenous education efforts. In a work examining over a century of Native American education, for instance, Lomawaima and McCarty documented how, throughout the history of indigenous education in the US there have existed two very different yet coexistent realities:

> [First, the] reality of a revolution in Indigenous education, of opportunity seized by Native people in the name of self-determination [and second, the reality] of an entrenched federal bureaucracy that . . . has protected its own powers and stifled Native self-determination at every turn. When Indigenous realities have crossed the line between allowable, safe difference and radical, threatening difference, federal control has been reasserted in explicit, diffuse, and unmistakably constricting ways (Lomawaima & McCarty, 2006: 168-169).

In sum, governments tend to support the inclusion of indigenous knowledge in formal schooling efforts to the degree that they remain non-threatening to assumptions upholding the governing body itself, and to a key goal of contemporary educational reform, namely, to support late industrial capitalism. In this context, the goal of education has been to a large degree the earning of a certificate in order to amass individual mobility, material wealth, and high status, along with grossly inflated levels of production and consumption (Holt, 1976; Illich, 1977). A realistic appraisal of the possibilities for change should include the acknowledgment that without concomitant changes in other sectors of society, particularly the economic one, the undervaluing of noncommodified knowledge and practices will persist, with profound cultural losses for us all.

Yet along with other leaders in the field of indigenous education we believe that these challenges call for a continuing effort to deepen, rather than abandon or back away from, engagement with indigenous epistemologies and ways of knowing in formal educational efforts. As shown by Lomawaima and McCarty (2006), historically in the US, even when efforts to incorporate Indigenous ways of knowing into formal educational efforts have been severely constrained and controlled by the kinds of hegemonic forces described within, some of these efforts have been 'remarkable harbingers of new possibilities, new visions for Indian education' for their time (Lomawaima & McCarty, 2006: 108). In the 1930-1950s in the USA, for instance, non-Native employees and

academic experts often controlled the production of indigenous bilingual materials production in ways that 'blatantly intended to acculturate readers' by 'gently guiding [indigenous students] away from the values of their own society and toward the Protestant work ethic' (2006: 92). Even within such constraints, as Lomawaima and McCarty showed, individual indigenous educators, such as the Hopi translators who worked for the Bureau of Indian Affairs in the effort above, were sometimes able to find avenues for infusing materials with terms that provided windows into unique ways of knowing. While these efforts later rightly came to be seen as severely flawed from a perspective of indigenous education, within the history of indigenous education in the US the same efforts 'laid a foundation that later generations built on, directly or indirectly, as Native people increasingly took hold' (2006: 108) of the local processes and mechanisms of Indian education. As such, even such flawed steps represented 'important steps in the journey toward increasing self-determination at the levels of educational policymaking and control' (2006: 108).

Conclusion

The main contribution of this article has been to serve as a heuristic device that spells out the specific challenges faced by schools serving indigenous populations as they confront modern hegemonic educational practices. Because national systems of education exist to consolidate the nation-state, construct the modern citizen, and strengthen capitalist labor formation, they end up colliding with an indigenous education that seeks first and foremost to recuperate non-commodified vernacular knowledge critical for sustainable living. Even when the mandates from the central or regional government are flexible, allowing schools ample space to create their own programs, the pressures for resorting to the more conventional pedagogies and knowledge transmission are still too great.

At this point a caveat is in order. We do not believe that the experience of schooling for indigenous children will inevitably lead to the series of educational problems typically associated with subordinated minority children (e.g., low grades; low self-esteem; high levels of dropout). Children from indigenous communities can certainly succeed in school and eventually may even occupy positions of high status in society. As Sonia Nieto (1992), John Ogbu (2003), James Banks and Cherry McGee Banks (2004) and others have shown, schooling affects different minority communities, and different individuals within each community, in varied ways. The likelihood that a child will do well will depend on a host of factors related to the larger context of schooling, including the degree of the cultural mismatch

between home life and school life, students' and families' oppositional relationships to schools, racism and discrimination, financial inequities suffered by poor schools, and particular interactions between teacher and child. Our argument, however, is not related to the possibility that children may accrue the necessary cultural capital to do well in school and eventually amass the alleged benefits of modern society (e.g., individual mobility, material wealth, high status). It is also not our intent to devalue the ongoing efforts of educators and indigenous community members. Rather, we have pointed out the need to maintain a broad perspective on the goals of education itself, and the value of questioning Western educational assumptions so that indigenous children might maintain connections to knowledge and traditions, that historically have kept their communities together and attached to the land in harmonious ways. We have also shown how, when this broad perspective is lost, both indigenous and mainstream children lose important opportunities for deepening their connections and understanding of specific places, traditions and communities. Schools can play a role in reversing cultural loss, but educators must be mindful of the imperative to continuously re-invent indigenous education to ensure that it honours the basic cultural tenets of the ethnic groups it serves, recognises the hybrid nature of many indigenous practices, and uses learning as a spring board to foster social and environmental well-being.

Note

1. The authors would like to thank Professor Teresa McCarty for her invaluable support in the preparation of initial versions of this article. Any remaining mistakes are ours alone.

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