

ON THEIR OWN: HOW THIRTY-ONE TRIBAL COLLEGES ADDRESS

FIVE EDUCATIONAL CONCEPTS

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This qualitative research, specifically a content analysis of 31 tribal colleges' mission statements and curricula, examined how the colleges' curricula aligned with the five educational concepts suggested in the colleges' mission statements. Cajete's (1994) seven foundations to indigenous thinking proved to be a major theoretical framework which provided a worldview for tribal learning. The study concluded that whereas the five educational concepts aligned between mission statements and curricula, the curricula emphasized culture, tribal community, and academic success at a greater level than mission statements indicated. Further, tribal colleges' curricula did not emphasize economic concepts as the mission statements indicated. A particular finding suggests that tribal colleges' are investing in environmental studies programs, thus increasing their intellectual capacity to protect their environmental interests while promoting indigenous thinking and community learning across all academic disciplines.

Considerable implications include that an increase of American Indian environmental studies graduates may have a positive impact on environmental justice matters as well as the ability to promote new agricultural technologies. Additional implications include how mainstream universities will adapt to an increase of native students studying the sciences rather than liberal arts.

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CHAPTER 1

INTRODUCTION

When I was growing up, my summers were spent on my great aunt's farm, a Comanche allotment located in Southwest Oklahoma near the town of Apache. During one of the summers in the early 1990s, my aunts introduced me to Wallace Coffey, Executive Director for the Comanche Nation. Mr. Coffey was scheduled to do a short presentation to a group my great aunts belonged to, but he made time to visit me. We had a brief conversation in which Mr. Coffey encouraged me to stay in school. During his presentation to the group, Mr. Coffey re-emphasized his thoughts about the importance of education to the tribe. I still remember his quote, "We must put down the arrows and arm ourselves with diplomas." Only on the drive back to the farm did my Aunt Julia tell me that Mr. Coffey earned his masters from Harvard University. Even though I was in my early twenties, I knew that few American Indians make it to Harvard.

Historically, American Indians viewed mainstream higher education as an extension of acculturation (Morris, 1997). While Mr. Coffey was one of the few who did persist through college, evidence suggests most American Indians who attended a mainstream college realized that tribal customs and teachings were not valued on the college campus (Reyhner & Dodd, 2006). With few avenues open for American Indians to integrate themselves to the mainstream college, the vast majority of American Indians would not persist and instead return to their homes unable to combat the

economic and social problems that are far too common in tribal communities (Guardia & Evans, 2008). The long-term impact on tribal communities is sobering. In a 2000 report prepared by the United States Department of Education, it was reported that American Indians per capita income was at \$12,893 and 21.8% of American Indians live below the poverty line. The same report associated “poor health, high infant mortality, low literacy and high crime rates” on tribal communities as a social impact of the low poverty rates.

Today, more tribes are addressing these matters directly using an inherited right granted by the United States government called tribal sovereignty. American Indians belong to tribes, which are “independent sub-national governments” recognized by the various treaties signed with the federal government (Ashly & Jarrett-Ziemski, 1999). Because tribes existed before the United States, treaties granted tribes the right to be sovereign, a unique right that is not given to other minorities. Certain scholars, such as Kalt and Singer (2004), suggest that tribal sovereignty is achieved when tribes, as a whole unit, gain control over certain socio-political aspects of their existence.

Joseph Kalt and Joseph William Singer give insight to what comprises tribal sovereignty. In their 2004 article, they state sovereignty “has proven to be the only policy that has shown concrete success in breaking debilitating economic dependence on federal spending programs and replenishing the social and cultural fabric that can support vibrant and healthy communities and families” (Kalt & Singer, 2004, p. 1). Kalt and Singer argue that tribal sovereignty is not a legal fact or a special right for American

Indian tribes, but rather “the social, cultural, and economic viability of American Indian communities” (Kalt & Singer, 2004, p. 4).

Tribal sovereignty may very well be the key to the future of Indian communities. Tribes that practice their own sovereignty are able to enforce laws, enforce environmental regulations, decide what businesses can develop and where, oversee property disputes, care for the foster children, provide health centers, form drug-task forces, and related, without an outside non-tribal influence (Kalt & Singer, 2004, p. 5). While Kalt and Singer do not specifically mention tribal colleges, many other scholars link these colleges as fresh hope to ensuring sovereignty. As just one example, Clement wrote that higher education is the “latest chapter in a long struggle to regain self-sufficiency and cultural identity “(Clement, 2006, para. 7)

Discussing tribal sovereignty is incomplete without understanding the role of higher education, particularly the role of tribal colleges. John Tippeconnic III (2000) believed that “tribal colleges are the most successful story in tribal control” (p. 42). In 2000, the American Indian Higher Education Consortium (AIHEC) report discussed that tribal colleges impact their own communities by offering direct spending and employment, workforce development, business attraction, small business and entrepreneurship development, technology transfer, leadership and communication linkages” (Fogarty, 2007, p.12). Social benefits of tribal colleges include the tribe’s capacities to better understand and appropriately address modern social issues such as alcoholism and methamphetamine addiction.

Like all higher education institutions, tribal colleges have mission statements that prioritize what is important to that college. Wayne Stein (2003) insisted that tribal control of the college is paramount. In his research on tribal college mission statements, Stein (2003) found that guiding documents “incorporate their tribal cultures, languages, and histories, and place these elements in the center of the colleges’ purpose” (p. 33). In a similar examination of tribal college mission statements, Paul Boyer (2003) found that tribal colleges operate a dual mission. Tribal college mission statements task the college in providing students educational opportunities to build a certain set of skills, while at the same time, also “address the social and economic needs of their communities” (Boyer, 2003, p. 142).

Stein’s and Boyer’s research into tribal college mission statements provides a foundation to understanding the college’s role in ensuring tribal sovereignty. Both Stein (2005) and Boyer (2003) warn that tribal colleges are susceptible to not fulfilling their mission. As a result, tribal colleges may be subject to distractions from their declared mission statements, thus not being able to contribute to the development of tribal sovereignty.

Emergence of the Study

As more tribes control their own educational institutions, it is important to understand Boyer’s (2003) and Stein’s (2003) concern that tribal colleges that are unable to fulfill their mission can be diverted away from achieving tribal sovereignty. Given the earlier statements of Stein and Boyer, it is reasonable to assume that tribal

college mission statements describe tribal colleges as one means to achieve tribal sovereignty. However, there is a lack of past scholarly efforts to critically analyze how a tribal college fulfills its missions. As a result, tribes that created tribal colleges have entered into a poignant discussion of how to use the curricular and co-curricular activities to achieve tribal sovereignty. While there is not a definitive study on what influences tribal colleges curricula, it is reasonable to assume that there is some type of relationship between the mission statements and curricula. I want to further understand how the concepts and goals identified in the tribal college's mission statements are embedded in the curriculum and as a result, have the potential to contribute to furthering tribal sovereignty.

I conducted a content analysis of the mission statements of 31 accredited tribal colleges who are members of the American Indian Higher Education Consortium (AIHEC), an advocate group for tribal higher education. After I examined the mission statements of 31 accredited tribal colleges, five concepts that relate to sovereignty emerged: economic stimulation, academic integrity, culture, pedagogy and tribal community. Each of the concepts will be explained fully in the methodology section.

Problem Statement

Tribal sovereignty remains a critical issue for tribal people. Scholars believe that education plays an increasing role toward fostering tribal sovereignty. As such, the mission statements and curricula at tribal colleges should communicate the purpose and priorities of the tribal colleges' role to contributing to sovereignty. In what ways are the

mission statements and curricula aligned to achieve educational goals that will promote tribal self-sufficiency and community development which will have implications for tribal sovereignty?

Research Questions

My research design will be guided by the following questions:

1. What concepts can be inferred from the 31 tribal college mission statements?
2. How are economic stimulation, academic integrity, culture, pedagogy and tribal community embedded in the curriculum?
3. How reflective of the institutions' mission statements is the curriculum of the 31 tribal colleges?

Purpose Statement

The purpose of this dissertation is to determine if the five concepts expressed in an analysis of 31 tribal college mission statements exist in the college's curriculum. Such an alignment would provide indication of the tribal colleges' commitment to promote various educational, socio-cultural, and economic development of the greater community the college serves. Tribal colleges that are unable to demonstrate an alignment between mission statements and curriculum are susceptible to Boyer's (2003) concern of the college being distracted from its mission.

Glossary

The problem statement and questions introduce concepts that are unique and often misunderstood when applied to tribal colleges. The following definitions are provided by scholars who have done considerable research in tribal colleges.

Academic integrity – This is defined as how tribal colleges are “expected to provide students with training for immediate employment, as well as academic preparation for continued learning at mainstream institutions” (Boyer, 2005, p. 140). During the content analysis of the curriculum, indicators of academic integrity included transfer agreements, professional recognition and accreditation status.

Cultural initiatives – The various attempts tribal colleges are implementing to prevent the further disintegration of language, folkways, and ceremonies. There is evidence that a correlation exists between American Indian student success and education programs that are “grounded in native language and culture” (Benham & Mann, 2005, p. 169). During my content analysis of the curriculum, indicators of cultural initiatives included native language and native history requirements, and native studies degree.

Economic initiatives – These are defined as “how Tribal Colleges and Universities are working with their local communities to create economic development programs that are designed in-house (by community members) to meet cultural principles and local needs, and to ensure long-lasting sustainability” (Barden, 2005, p. 103). During the content analysis of the curriculum, indicators of economic initiatives included degrees or

certificates or programs in entrepreneurship degree, small business development, and career or technical education that meets the economic needs of the tribe, region, or country.

Indian Country- While American Indians use this term informally to speak about specific locations where the extended family lives, Indian Country is defined in the United States Code (18 U.S.C. 1151) as “reservations, dependent Indian communities and allotments.”

Pedagogy – Those philosophical, value perspectives foundational for the selection, delivery, and mastery of content in tribal college curricula. This included the identification of the content, requirements, programs and instructional goals that indicate tribal sovereignty as an ultimate educational goal.

Tribal community –Guillory and Wolverton (2008) explain how “the home community is a source of encouragement and motivation” and that “many people within the community had given (students) so much support, emotionally, spiritually and financially” (p. 75). The community extends far beyond immediate family, as the community shares cultural practices, religious ceremonies and gift-giving (Guillory & Wolverton, 2008). During my content analysis of the curriculum, indicators of tribal community included elder and tribal participation in teaching or any educational activities that seek to create tribal community.

Tribal sovereignty – A philosophical-legal term encompassing “the ideas of self-determination, -government, -identification and –education that are rooted in a

community's conceptions of its needs and past, present and future" (McKinley & Brayboy, 2006, p. 435). Boyer (2004) highlights the difficulty in truly defining tribal sovereignty, as tribes define sovereignty as "more than an abstract right. It is also a practical tool for the development of tribal economies and, more broadly, for the long-term survival of tribes as distinct peoples" (Boyer, 2004, Sovereignty Matures section, para. 3).

Significance of the Study

This study is significant for a variety of reasons. First, it contributes to the current body of scholarship by offering a critical description of tribal colleges' mission statements and how tribal colleges align their mission statements with the curriculum. The alignment of mission and curriculum in tribal colleges would indicate congruence of mission and action; non-alignment of mission and curriculum would potentially imply failing to achieve the stated ends of the college or a re-direction of priorities for the college.

Secondly, this study contributes to the limited amount of literature regarding if a tribal college's curriculum can be used as a tool for achieving a facet of tribal sovereignty. The literature review identified certain scholars who have potentially linked certain concepts that are commonly associated with achieving sovereignty. For example, Barden (2003) summarized the impact a tribal college can have to maintaining the tribes' sovereignty by stating that tribal colleges "are making fundamental changes in the way reservations operate" (p.119).

Third, I hope that the study adds to emerging theories in defining how tribal education can contribute toward sovereignty. Currently, there is not a pivotal theory that assists in tribal education (Cajete, 2006). This examination may provide insight and serve as a curriculum model in the context for using American Indian higher education to achieve tribal sovereignty. By understanding the educational priorities of the tribes identified through the mission statements and curricula of the colleges, inferences are drawn that potentially assist Indian policy makers, Indian educators and researchers with insight in adapting and maintain a curriculum model supporting tribal sovereignty in the context of tribal colleges.

Today, sovereignty matters as tribal colleges attempt to cultivate the necessary economic and cultural components to ensure the future of tribal communities. It is generally agreed that tribal colleges measure their success by strengthening their reservation's economy while promoting their own culture within western teaching standards and measurement. How this goal of balancing culture and economic revitalization efforts while maintaining western approaches to academic standards is integrated into the curriculum is a continuing question not generally reviewed in literature.

Organization of the Study

The study begins with an overview of the literature describing the relationship between tribal colleges and tribal sovereignty. It starts with a brief timeline for understanding Native American education, and it identifies how the tribal college

movement was born. A philosophical discussion of why tribal colleges are considered agents of sovereignty through advancing native intelligentsia is presented. Finally, the emerging but still very limited scholarship on tribal curricula development is discussed.

The methodology of the study was largely inductive. It uses primarily qualitative data from a content analysis of curriculum and related documents in the 31 tribal colleges. A discussion of the findings of the study, conclusions and recommendations will conclude the dissertation.

CHAPTER 2

REVIEW OF PERTINENT LITERATURE

Prior to 1492, indigenous peoples in North America developed and advanced their own educational system that placed great emphasis on sharing and group harmony. Learning was accomplished through the interconnections among elders, clan, kinfolks, and nature which formed a living history that would be passed down to the next generation of tribal learners (Benham & Mann, 2003). European colonization in North America introduced a new worldview which placed greater value on individual success rather than community success (Nichols & Kayonge-Male, 2003). Guardia and Evans (2008) highlighted eleven core values that are often reflective in native identity: sharing, cooperation, noninterference, present-time orientation, being versus doing, extended family orientation, respect, harmony, spiritual causes for illness or problems, group dynamics and importance of the tribe. Though the authors warn their readers that these core values should be assumed to be universally embraced by all Indian people, the native identity described by the authors played a significant role in forming a worldview that was not shared by Euro-American colonizers (Stein, 2003). In fact, Indian communities were often viewed as an impediment to western expansion, commonly known as manifest destiny, by the Euro-American colonizers.

While there were numerous, often violent, confrontations between native tribes and Euro-American colonizers, I am more interested in why Euro-American expansionist policies incorporated education as a tool to solve what one *New York Times* article called the “Indian problem” (Laderman, 2002, p. 92). As early as 1819, various government-sponsored elementary and secondary Indian boarding schools dotted the countryside with the purpose to educate Indian children. On the surface, the existence of these schools may give the impression that the government was interested in providing a caring, nurturing educational experience for American Indian youth. However, a growing body of scholarly literature suggests that government-sponsored schools had other intentions - to assimilate tribes into mainstream, Euro-American culture.

A Brief Timeline of American Indian Education

A *New York Times* article coined the famous phrase “cheaper to teach a young Indian than to fight an old one” when describing a possible solution of using government-sponsored schools to solve the “Indian problem” (Laderman, 2002, p. 92). Jana Noel (2002) in her article “Education toward Cultural Shame: A Century of Native American Education,” presents a useful timeline documenting federal efforts of using education as a means of assimilating tribes into Euro-American culture. Once reading the timeline, readers should have a better understanding of how federal efforts add to the historical complexity of native education. In addition to federal efforts, the timeline

incorporates the works of a number of native scholars and authors to provide a critical perspective of how native tribes addressed governmental assimilation efforts.

1819-1873: Missionary Schools

Missionary schools were the first indicators for the assimilation period. These schools were formed by well-meaning churches and various missionary groups that believed it was part of their duty to civilize the Indians. These schools, established by a “civilization fund” created by the United States government with the written goal to “promote civilization,” concentrated most of their educational efforts in teaching American Indians how to read, write and understand the English language (Noel, 2002, p. 20). Cultural knowledge that was orally passed down from elder to child was dismissed, and replaced by Christian and moral values. Perhaps most damaging was language loss. Native children were forbidden to speak in their native tongue, and doing so would result in harsh punishment (Lomawaima & McCarty, 2002). At its height, the civilization fund grew to approximately \$215,000 (Stahl, 1979). The missionary schools would only be the beginning of what many authors who have studied the complex history of American Indian education would label as “the grand experiment of standardization” (Lomawaima & McCarty, 2002, p. 282).

1870-1901: Off-Reservation Boarding Schools

In 1873, the United States government no longer provided monies to the civilization fund used to build and maintain missionary schools, and instead appropriated money toward off-reservation boarding schools (Noel, 2002). By 1891, all

Indian children would be required to attend boarding schools by the Commission of Indian Affairs. These schools removed children from reservations either through coercion or forcibly. In describing the boarding schools, Richard Morris (1997) wrote, "it was a world marked by punctuality, discipline, competition, study and punishment; a cold and friendless passage to the culture that counted" (p. 156). In 1902, the Commissioner of Indian Affairs wrote the following about off-reservation boarding schools:

There are in operation at the present time 113 boarding schools, with an average attendance of something over 16,000 pupils, ranging from 5 to 21 years old. These pupils are gathered from the cabin, the wickiup and the tepee. Partly by cajolery and partly by threats; partly by bribery and partly by fraud; partly by persuasion and partly by force, they are induced to leave their homes and their kindred to enter these schools and take upon themselves the outward semblance of civilized life (Noel, 2002, p. 24).

Richard Pratt, considered by many as the founder of the off-reservation boarding school movement, founded Carlisle Indian School (1879-1918). This school is often considered a conduit from Indian culture to dominant culture. Like the earlier off-reservation schools, Pratt concentrated his school's curriculum on assimilation; however, technical training and the instilling the value of private property would become part of the curriculum (Stahl, 1979). Although the goals of Carlisle Indian School and other off-reservation boarding schools was seemingly one of education, Indian leaders argued the schools purpose was to neutralize Native American resistance to westward expansion (Laderman, 2002).

1901-1910: On-Reservation Boarding Schools

Off-reservation boarding schools became a costly venture for the government to continue. As a result, the assimilation process was transformed with on-reservation boarding schools or schools that were located closer to the children's family. The curricula of these schools still concentrated on providing an industrial education to Indian children. Students were still forbidden to speak their native tongue, and they would not be allowed to practice their religion or other cultural traditions. One example of on-reservation boarding school is the Pawnee Industrial School. The Pawnee Industrial School is located the northeastern part of Oklahoma. In 2002, the Pawnee tribe reclaimed the Pawnee Industrial School original buildings to start the Pawnee Nation Academy, an emerging tribal college formed in the last 5 years. The 2005 catalogue of the Pawnee Nation Academy provides a native perspective of how government-sponsored schooling dictated the future of American Indians:

The Industrial School, affectionately termed "Gravy U" by former students, opened shortly after the tribe was forcibly removed in 1875 from its traditional homelands in Nebraska and resettled in Indian territory. As a government-sanctioned boarding school for Indian children, the institution's explicit purpose was to teach trade skills (to boys) and homemaking (to girls), all the while forbidding children from speaking their native languages, practicing ceremonies, or otherwise celebrating their own cultures. Part of the school's goal was to introduce Indian children to "Western ideals" and, at the same time, discourage them from practicing and discussing their own native customs. In this way, the government established and enforced wide-reaching policies that required Indian to acquiesce to such policies as the Dawes (Allotment) Act of 1887. Since assimilation and acculturation were a prevailing objective for the government, thousands of Indian children (and their parents) were denied the right to maintain traditional belief systems. (Pawnee Nation Academy Catalogue, 2005, p. 6)

1920 – Present

The Meriam Report of 1928 promoted the first change in government policy toward American Indian education, one that moved away from boarding schools. The report, properly called *The Problem of Indian Administration*, was commissioned by the Institute for Government Research. Most importantly, the Meriam Report is significant because it marks a turning point where the federal government started to realize that acculturation efforts were simply not working (McClennan, Fox & Lowe, 2005). The first sentence of the report highlights tribal poverty as a ongoing, significant problem: “An overwhelming majority of Indians are poor, even extremely poor, and they are not adjusted to the economic and social system of the dominant white culture” (Meriam, p. 3). In 1928, the Meriam Report found that American Indians were in a desperate situation and concluded that American Indians were expected to follow an educational system meant for another culture (Foerster & Little Soldier, 1981). Many believe the Meriam Report is still relevant today.

When considering higher education, not much has changed since the Meriam Report. John Tippeconnic III, in his 2000 article “Reflecting on the Past: Some Important Aspects of Indian Education to Consider as We Look Toward the Future,” remarks on what he believes is little progress since the Meriam Report:

While my life does not go back to 1928 when the Meriam Report was issued, I was born at a time when the recommendations of the Meriam Report were being implemented in schools, I often revisit the Meriam Report to get a sense of where we have been in Indian education and to reflect on where we might be going. One of my favorite quotes on the education of American Indian students

is from this early study: “The most fundamental need in Indian education is a change in the point of view” (p. 346). When it comes to the education of American Indians and Alaska Natives, it seems we still need not only an attitudinal change on the part of the general public, but also more efficient and creative approaches by educators. The Meriam Report’s discussion about the need for additional money to support “a better educational program” in Indian education also seems as salient today as it was back in 1928. (Tippeconnic, 2000, p. 39)

Current Status of American Indians in Higher Education

While the Meriam Report may be the turning point of how the federal government treated tribes, it was not until the Indian Reorganization Act of 1934 that the United States government would officially recognize tribal sovereignty. But it was the Civil Rights movement and the administration of President Richard Nixon that marked the start of the self-education era of American Indian tribes, an era where tribes started their own colleges in order to counter mainstream educational methods and practice (McClennan, Fox & Lowe, 2005). The tribal college movement, starting with the passage of the Navajo Community College Act in 1971, has become the most significant development in tribal sovereignty. These colleges were a response to the continuing low-performance of American Indian in mainstream higher education.

Guillory and Wolverton (2008) suggest that American Indian perseverance in mainstream higher education is a mixture of lack of preparation and the failure of mainstream educators to engage native students. The latest data available (from 2002) show that American Indians represented less than 1 % of all students enrolled in college and American Indians earned “0.7 percent of all associate’s, bachelor’s, and advanced

degrees conferred in that year” (Guillory & Wolverton, 2008, p. 59). The 2002 Department of Education report, which includes all degree-granting institutions, suggests that tribal colleges are partly responsible for increasing graduation rates of American Indians.

The tribal college movement is a relatively new phenomenon in higher education. The first 25 years of the movement was a time of simple survival. Many of these institutions were not viewed as competent colleges, but as “second-class citizens in higher education” (Boyer, 2002). Many educators, both Indian and non-Indian, casted doubts that American Indians are even be able to build a competent college. In 1972, four years after the establishment of Navajo Junior College, the North Dakota Board of Regents still did not understand the value of a tribal college on a reservation, instead believing that “existing state institutions were adequate to serve tribal members” (Brown, 2003, p. 38). The tribal colleges that were being constructed during that time period were tasked with building a curriculum in an environment of rural isolation, extreme poverty and general distrust of higher education due to the decades of federally imposed assimilation strategies (Boyer, 2002, What Have Tribal Colleges Accomplished section, para. 6).

The American Indian Higher Education Consortium (AIHEC), a collective voice representing 34 tribal colleges, in 2005 reported that tribal colleges graduated 2372 people in the 2004-05 academic year. Certificates or degrees ranged from vocational programs to nursing. The tribal college or university (TCU) with the largest student

population is Dine College with 1822 students; White Earth Tribal and Community College had the lowest student population of only 60 students. The report highlighted how TCUs must continue to “provide culturally relevant curricula, extended family support systems, and community educational services to overcome the socioeconomic challenges that face many American Indians” (AIHEC Factbook, p. vi, 2005).

Tribal Colleges as Symbols of Sovereignty

It is common misperception for majority population to believe that Indian people were overtaken, or even conquered, by western expansion. Instead, most tribes entered into treaties that recognized their own sovereignty, which is believed to be the inherent right for tribes to self-govern. As a result, tribal nations are a part of the federal structure of the United States as we know it today. Kalt and Singer (2004) offer one explanation on how tribal nations function under the United States Constitution:

The United States was not formed merely by the Constitution, but by the treaties entered into with Indian nation. Those treaties from the original framework of American government and recognize both tribes’ sovereignty and retained property rights. U.S. law respects both property rights and contract rights, as well as international treaties. To fail to honor treaties with Indian nations would take from the property rights recognized by those treaties, constitute breach of contract, and violate the structure of American government. In asserting sovereignty, Indian nations are not seeking special rights. They are asking that the U.S. to grant the same respect to its commitments to Indian nations that it grants to its commitments made to the other sovereigns that is subsumed upon its formation and expansion (i.e., the states. (Kalt & Singer, 2004, p. 16)

Outsiders who visit reservations or Indian country will discover just how important sovereignty is to the tribes. By embracing their sovereignty (or self-

determination), tribal nations are embracing their ability to solidify a promising future for their people without non-tribal influence. Tribes have built health centers that provide trained physicians and nurses in health conditions that have impacted Indian communities, such as diabetes and various forms of addiction. Tribes have also constructed daycare centers, hotels, gaming centers and provided police and fire protection.

The literature gives insight to certain concepts that are commonly associated with promoting tribal sovereignty. A primary example is the March 2006 issue of *fedgazette* is dedicated to how tribes have taken control of their own economy, thus contributing to the tribe's sovereignty. Clement wrote that American Indian-owned businesses and colleges are "the last chapter in a long struggle to regain self-sufficiency and cultural identity" (The Wealth and (poverty) of Indian nations section, para. 6). To accomplish this, tribes understand they must provide the educational means to teach Indian people how to start and maintain their own business. A growth of American Indian-owned businesses is believed to contribute to the tribal economy.

The ability of American Indians to design a curriculum at their own educational institutions is evidence of self-empowerment. Even though the colleges are isolated in impoverished and extremely rural areas, they have built a curriculum that, as the emerging literature demonstrates, mirrors similar concepts that were inferred from the mission statements. As a result, it may be true that tribal college are a potential vehicle to accomplish a better future for the tribe as a whole – something that mainstream

higher education has been unable to accomplish. In fact, many Indian educators believe “it is time for Indian people to allow ourselves to explore and express the richness of our collective history in education” (Cajete, 2006, Voices section, para. 12).

The Mission Statements of Tribal Colleges

The mission statements of the 31 tribal colleges are the official philosophical foundation of what the college believes is important to accomplish. In an earlier study of tribal college mission statements, Stein (2003) found that “Each maintains the philosophy that the protection, enhancement and teaching of its tribal culture and language are central” (p. 36). In a similar study, Barden (2003) reported that “TCUs maintain that they have a responsibility not only to provide education service to local communities, but also to serve them in a number of economic, social and cultural ways”(p. 100). However, Barden did not explain his methodology or extend his research into tribal college curriculum, but rather concentrated on identifying some economic and community initiatives that only a few tribal colleges were practicing in 2003.

When I reviewed the mission statements of the tribal colleges, it was evident that the tribes were very concerned not only about protecting native culture, but ensuring a healthy future for their communities. The terms and phrases that were common among the mission statements seemed to fall into five concepts, re-affirming Barden’s claim. The glossary introduced these five concepts using definitions from Native scholars as it relates to American Indian higher education. Each concept

represents an educational strategy that the tribal college believes is a priority for Indian controlled education.

Concept 1: Economic Initiatives

A report entitled *Tribal College Contributions to Local Economic Development* prepared by the American Indian Higher Education Consortium and the Institute for Higher Education Policy (2000) indicated a positive correlation between tribal college communities and lower poverty rates. The report states that as tribal college mature, income of graduates increase. In a concluding remark, the report states “All of these findings suggest that tribal colleges are directly impacting the economic health of their local communities” (AIHEC, 2000, p. 17) Further, the report states “the tribal colleges are vital components of the process of building a foundation for future growth on Indian reservations and are strongly contributing to the economies of this nations’ most disadvantaged areas” (AIHEC, 2000, p.3). In essence, tribal colleges nurture economic prosperity leading to greater sovereignty.

Elden Lawrence, former president of Sisseton Wahpeton College, said in a 2002 interview that “The salvation and survival of tribes will be through economic development” (Boyer, 2007, Voices section, para. 9). It can be assumed that President Lawrence’s statement implies the need for tribes to invest in economic initiatives and partnerships to ensure future sustainability. Support for this argument comes from Bay Mills Community College, located in northern Michigan. Bay Mills Community College built a curriculum that invested in the needs of the community and more importantly,

provided an educated Indian workforce. Today on the Bay Mills reservation one finds recently built tribal housing, health services and a booming tourist industry.

By providing a capable workforce, tribal colleges have become hubs to their community (Clement, 2006). Colleges such as Fort Peck Community College and Lac Courte Ojibwa Community College regularly visit reservation businesses to re-familiarize themselves with the local economy (Clement, 2006). However, most tribal colleges are not as transparent. In a 2007 article entitled “Commitment to Building Prosperous Nations,” author Mark Fogarty stated “Although they [tribal colleges] do not always report their efforts, they seek to promote culturally appropriate development and to improve the financial situations not only of their students but the tribal matrix they come from” (Fogarty, 2007, Tribal Colleges take aim against poverty section, para. 3).

Concept 2: Academic Integrity

Gaining legitimacy as higher education institutions was not an easy task for the tribal colleges in the 1960s. Today, tribal colleges have made links and articulation agreements with the major universities in their states, thus enabling reservation students to transfer their credits without question (Boyer, 2003). Even more promising are a handful of tribal colleges that are “becoming involved in conducting, directing, and influencing medical and behavioral research at their schools” (Hernandez, 2004, Preventing Exploitation section, para. 8).

Still, tribal college leaders are concerned about their vulnerability in the age of accreditation. As observed by Paul Boyer (2003), Sinte Gleska University president

Cheryl Crazy Bull criticized regional accreditors in a 1994 visit. Crazy Bull echoed what many in tribal colleges still believe today, that “We are being evaluated against standards and expectation foreign to our tribal environments and needs” (Boyer, 2003, p. 139). In 2006, the AIHEC renewed its call for indigenous evaluation as “mainstream thinking weakens cultural survival, indigenous thought and traditional values” (Deschenie, 2006, Editor’s Essay section, para. 15).

Tribes have learned the skills to manage not only a college, but a modern day community (Boyer, 2002). However, still today, tribes commonly do not readily provide feedback or provide documentation on the success of their efforts as soundly as their mainstream counterparts. As told by Mark Fogarty (2007), Leah J. Carpenter, president of Leech Lake Tribal College, stated “At this point, there isn’t any formal reporting we do to the local community. I would like to start running an ad in the local newspapers briefly detailing the amount of money we put into the community” (Reporting Back to Tribal Communities section, para. 2).

Concept 3: Tribal Community

Barden (2003) emphasized that economic development will only occur in communities that have created a social prosperity. Communities that have not directly addressed societal ills, such as drug addiction and family violence, will be unable to create an environment that allows economic development activities. Tribal colleges have taken large steps to strengthen their own communities. The family education model (FEM), explained later in the literature review, addresses the most prevalent

problems in Indian country are the same problems that promote stop-outs. The FEM is being practiced at an increasing number of tribal colleges.

Tribal College Contributions to Local Economic Development, prepared by the American Indian Higher Education Consortium and the Institute for Higher Education Policy (2000), goes beyond describing the economic impact of tribal colleges. The authors specifically highlight how tribal colleges are more connected to their community than the traditional community college. Tribal colleges have a “special responsibility to help local communities understand the nature of choices between different types of economic growth, given the specific history of economic development on reservations” (*Tribal College Contributions to Local Economic Development*, p. 11). As a result, the authors believe that tribal colleges should be known as “community-building colleges,” not community colleges.

Concept 4: Pedagogy

There is a great concern that mainstream education methodology, such as its short-term expectations of learning, “diminishes knowledge of indigenous language and culture among TCU students” (Deshenie, 2006, Editors Essay, para. 19). Further, there is a disconnect between western educational models and native identity. Guardia and Evans (2008) highlighted eleven core values that are often reflective in native identity: sharing, cooperation, noninterference, present-time orientation, being versus doing, extended family orientation, respect, harmony, spiritual causes for illness or problems,

group dynamics and important of the tribe. These core values are not usually part of mainstream education models.

While there is not a defined indigenous model of learning, Jorgensen (1994) emphasized group collaboration, mentoring, and story-telling as a necessary pedagogical approach to native learning. It is a living-learning model that is promoted by Cajete (2005), who cautions his readers that a native learning model may be impossible due to the number of different tribes. In his article titled “American Indian Epistemologies,” Cajete (2005) expressed that native learning is based upon a “holistic social context that developed a sense of the importance of each individual as a contributing member of a social group” (Cajete, 2005, p. 69). Cajete (2005) characterizes indigenous learning as going beyond the walls of a campus or school, and incorporating learning with the everyday interactions with nature and community. Cajete’s seven foundations of tribal learning are explained further in this chapter.

Concept 5: Cultural Initiatives

By far, most scholars agree that a cultural focus is integral for tribal colleges to survive. In 2001, Gagnon interviewed experienced tribal college officials about starting a tribal college. His article, titled “Keeping Tribal Colleges Tribal: Advice from the Veterans for the new Generation of College Builders,” cited that each of the TCU staff he interviewed believed that culture is the “core of the college” (Gagnon, 2001, p. 2). It is this area that co-curricular activities would flourish, offering powwows to family dinners. Additionally, Gagnon (2001) reported that a number of his subjects believed

that these initiatives should be a part of the required curriculum. In doing so, it ensures that tribal customs, traditions, history and language would not be set aside.

Language-loss was a severe, almost devastating, outcome of the early government educational efforts. Lomawaima and McCarty (2002) report that at least 125 native languages have been lost or exterminated in the last 300 years, tearing the very core of American Indians and their families. Today, the literature suggests that ensuring a safe haven for language and culture within the context of higher education is critical for tribal colleges to be successful. Culture engrained in the curriculum matters, as “empirical research now indicates greater student success in educative programs that are grounded in native language and culture” (Benham & Mann, 2003, p. 169). Fusing culturally relevant activities with a Western curriculum leads to more American Indian graduates; thus “tribes are laying the groundwork for their local economies in health care, teacher training, technology, tribal government, and business development” (Williams, 2002).

Though cultural initiatives are just one of the five concepts identified, this research does address how the curricula of tribal colleges utilize various approaches to address culture within their curricula. Many tribal colleges require an American Indian studies course. Most offer Native American studies as a degree option, while others offer only non-credit culturally relevant activities (Gagnon, 2001). Still, housing cultural initiatives in a curriculum remains a lingering question since the literature suggests there is no single best way to accomplish this task.

Curriculum of the Tribal College

While there are several models and assumptions, there is not a defined theory of building a curriculum for tribal colleges (Cajete, 2006). In fact, it can even be fair to say that building curriculum in tribal colleges is still in an amorphous state. We know that tribal colleges have crafted dual-purpose mission statements of Western knowledge with culture. We know tribal colleges attempt to build curricula that provides for the reservation's economic needs. We know tribal colleges continually address larger social issues unique to the reservation. Still, tribal college leaders are reaching out to their "communities, elders, indigenous scholars and students about how to forge a contemporary theory for Indian education" (Cajete, 2006, Voices section, para. 9).

What follows is a description of developing curriculum theories for tribal colleges that have not been explored systematically. However, the developing theories provide a philosophical historical context for understanding mission statements and curricula as it exists today. Native scholar Taiaiake Alfred (2004) provides vivid detail on the importance of understanding how history affects Indian education today: "We have all emerged out of a shameful past, a history of racial and religious hatreds, or extreme violence, and of profound injustice. It is impossible to even acknowledge it truthfully. Our modern culture, for both the victims and the perpetrators, consists in a denial of the past and of its moral implications" (p. 90).

McKinley and Brayboy TribCrit Theory

McKinley and Brayboy (2005) directly apply critical race theory to tribal education. Calling the theory TribCrit, McKinley and Brayboy (2005) outline the following nine tenets of this emerging theory:

1. Colonization is endemic to society
2. U.S. policies toward indigenous peoples are rooted in imperialism, White supremacy, and a desire for material gain.
3. Indigenous peoples occupy a minimal space that accounts for both the political and racialized natures of our identities.
4. Indigenous peoples have a desire to obtain and forge tribal sovereignty, tribal autonomy, self-determination and self-identification
5. The concepts of culture, knowledge and power take on new meaning when examined through an Indigenous lens.
6. Governmental policies and educational policies toward indigenous peoples are intimately linked around the problematic goal of assimilation.
7. Tribal philosophies, beliefs, customs, traditions and visions for the future are central to understanding the lived realities of Indigenous peoples, but they also illustrate the differences and adaptability among individuals and groups.
8. Stories are not separate from theory; they make up theory and are, therefore, real and legitimate sources of data and ways of being.
9. Theory and practice are connected in deep and explicit ways such that scholars must work towards social change.

McKinley and Brayboy indicate that TribCrit encompasses the various issues that tribal communities encounter today, such as language loss, low graduation rates from colleges, and the political power struggles among local, state and federal authorities.

TribCrit addresses curriculum as an opportunity to merge “Indigenous notions of culture, knowledge and power with Western/European conceptions in order to actively engage in survivance, self-determination and tribal autonomy” (McKinley & Brayboy, 2005, p. 437).

TribCrit emphasizes a community-focused curriculum that does not devalue oral tradition. Stories told by elders are a commonality in American Indian culture as it recognizes social positions and relations. Bell (2003) notes that stories are overlooked indicators of race relations from a non-White viewpoint. Many times, this insider perspective provides a more in-depth understanding of Native American traditions and customs. Morris (1997) supported the passing down of stories in American Indian communities as relevant information to consider in research because it transmits a living and, more importantly, an unwritten knowledge.

Benham and Mann Language and Culture Model

Benham and Mann (2003) offer a language and culture model that focuses on the cultural practices and customs of Native Americans, particularly advocating language immersion at tribal colleges. To keep the culture alive, efforts must be made to keep the language alive and visible. Benham and Mann (2003) present empirical research documenting the student success at tribal colleges that incorporate language-immersion with a learning model “grounded in the principles of the native community” (p. 173). They have outlined the following three major principles when considering

American Indian education:

1. Learning that leads to sovereignty, engagement and empowerment begins with an individual's spiritual and cultural, emotional, physical and cognitive strength and self-esteem.
2. An individual's learning must embrace interrelated disciplines, including the humanities, professions, social sciences, and natural sciences; thereby, learning is balanced, equitable, and develops high ethical standards in natives for living in a contemporary world.
3. The learner, with a strong inner core, can then be challenged to design solutions or actions that address social, political, cultural and economic issues that affect wellness, the family and tribe/clans, and the land, water, and natural resources that sustain life. (Benham and Mann, 2003, p. 173)

The language and culture model begins with the individual's own personal strengths. This individual then reaches out to family and elders, then to tribal communities and, finally, to regional and national communities. The model balances the intellectual capabilities with native languages, arts and traditions, spiritual wisdom and health.

Iris HeavyRunner's Resiliency Theory

HeavyRunner's (2003) resiliency theory provides an uplifting, positive outlook on the future of higher education in Indian country. It is an outgrowth of the family education model (FEM) developed by four tribal colleges in Montana, which uses a family-centered approach to increase retention rates among students (HeavyRunner & Marshall, 2003). HeavyRunner believes that the FEM simply documented what tribal colleges have been doing since their inception, to promote the innate spiritual and

harmonic factors of Indian people. These are the same factors that are commonly found in the mission statements of tribal colleges and universities. Most importantly, resiliency focuses on personal attributes and strengths, dismissing traditional deficit models of educational accountability. Instead of viewing a student as “at risk,” the student is viewed as “at promise” (HeavyRunner & Marshall, 2003, From Resilience to Cultural Resilience section, para. 7).

What is important to HeavyRunner is specifically identifying the “cultural factors that nurture, encourage, and support Indian students, families and communities” (HeavyRunner & Marshall, 2003, From Resilience to Cultural Resilience section, para. 2).

HeavyRunner’s model is among the first indigenous models answering the increasing need to legitimize the practices and production of tribal colleges. Her curriculum includes elders, important stories, spiritual wisdom, availability of language classes, family involvement, partnerships with the greater community, educational bridge programs with high schools and flagship universities. How this model will propose to graduate competitive students is of significant interest.

Cajete’s Seven Foundations of Tribal Education

Much like Mann and Benham, Cajete (2005) believes that “the depths of relationships and the significance of participation in all aspects of life are the keys to traditional American Indian education” (p. 70). Living and learning are interconnected, and lead to higher self-awareness. As the learner acquires new knowledge through listening to elder stories or tribal teaching, he becomes more aware of the greater

environment. The learner over time becomes a participating member in society. To illustrate, Cajete (2005) provides seven “highly integrated forms of thought,” or foundations, that contribute to an indigenous education (pp. 73-76).

1. Environmental foundation: Understanding that the natural environment as more than providing food and resources is integral. For American Indians, the environment not only sustains life, it is life.
2. Mythic foundation: This is the tribe’s worldview through storytelling. Storytelling, often overlooked by researchers, passes down important knowledge from elders to the young.
3. Visionary foundation: The tribe’s practices, rituals and ceremonies lead to the spiritual experiences of the student. It is in this foundation that the student gains a deep understanding of his or her self.
4. Artistic foundation: A symbolic process allowing learners of native knowledge to express themselves. By allowing expression through art or other media, the artistic foundation connects the mythic foundation to the visionary foundation.
5. Affective foundation: The method is which group learning may occur. The affective foundation is when the learner shares his or her gained knowledge, and applies the new knowledge.
6. Communal foundation: In native communities, learning occurs everywhere at all times. Whether through family, extended family, clan or other social structure, the community gives life to education.
7. Spiritual foundation: While the other foundations provide learning through a community process of stories and connecting to nature, it is the spiritual foundation that allows the learner to use religious expression.

These four models attempt to theorize American Indian higher education by integrating other fields such as sociology and critical race theory in an attempt to

develop a worldview. However, as an evolving field, theory should not be seen as the norm as they do not account for the unique cultures and traditions of each tribe. Because of this, this study will concentrate on tribal college curriculum to determine how culture (and the other four concepts from the mission statements) will be engrained in the curriculum of the tribal college. While the models provide an understanding of American Indian higher education, it is generally agreed that American Indian higher educational curriculum is still lacking a theoretical basis that can be applied to all tribal colleges (Cajete, 2006).

Final Thoughts

A review of the literature provides an opportunity for one to reflect upon the current status of American Indian higher education. The existence of multiple tribes, the many different unique languages, customs and traditions of each of the tribes, presents a complexity in determining an overall appropriate foundational theory that addresses American Indian higher education. Yet, there seems to be one common thread that emerged in the literature: the impact of past federal efforts. These federal efforts, whether it was the forced move of Indian people to the reservation system or the language-loss due to government-controlled schools, created a scenario in which the United States government became a surrogate parent of American Indian tribes. In turn, tribes began to depend on governmental intervention on matters ranging from health to education. Over time, scholars agree that this dependency weakened tribal government but did not weaken tribal communities.

Tribal communities responded to these federal efforts by re-engaging their own sovereignty. Tribal sovereignty enables tribes to not only address economic and socio-legal issues on their own terms, but also allow for the building of their own colleges. Kalt and Singer (2004), and many other authors, believe that sovereignty is the key ingredient to the future success of native communities. The last thirty years has been a period of tribal self-determination as tribes emerge from past federal efforts - a resurgence that would not of been possible if tribes did not engage their sovereignty (McClennon, Tippeconnic Fox, & Lowe, 2003). The tribally-controlled college is, perhaps, the major indicator of a tribe using their own sovereignty to make a long-term investment in their people and community (Shanley, 2003).

Today, we are in a period of self-determination, where sovereignty enables tribes to address economic and socio-legal issues using their own resources. Kalt and Singer (2004), and many other authors, believe the sovereignty is the key ingredient to the future success of native communities. To do this, tribes need college graduates. The tribally-controlled college is, perhaps, the greatest indicator of a tribe using their own sovereignty to make a long-term investment in their people and community.

The future is very promising for American Indian tribes. Let me be clear – this dissertation focuses only if the five concepts that emerged from mission statements at tribal colleges are emphasized in the curricula of the colleges. However, the literature review suggests that these concepts, particularly economic revitalization and tribal community, may also potentially contribute toward tribal sovereignty. The five

concepts inferred from the mission statements – economic, cultural, tribal community, pedagogy and academic integrity – are what the colleges believe are necessary for Indian-controlled education. How this goal of integrating the five concepts into a curriculum while maintaining western approaches to academic standards is a continuing question not generally reviewed in literature. By understanding the emerging literature on tribal sovereignty, this study can add to that limited but developing body of scholarship of how curriculum is a potentially important ingredient in achieving tribal sovereignty.

CHAPTER 3

METHODOLOGY

A content analysis is the most appropriate method for an exploratory investigation of the 31 tribal college's mission statements and curricula. A form of qualitative methodology originally developed for anthropologists, called content analysis, uses an inductive approach in analyzing text documents allowing the researcher the ability to identify "patterns, themes and concepts of social realities" (Zhang, 2006, p. 4). The themes give information regarding how the writer or writers of the text interpreted society "in a subjective but scientific manner" (Zhang, 2006, p. 1). Content analysis allows me, as the researcher, to focus on the 31 tribal college mission statements and curriculum to determine if they are congruent in their priorities.

The Procedure

In June 2008, I obtained the mission statements of the 31 tribal colleges to conduct a content analysis to determine if any themes emerged. To increase the reliability of my findings, in December 2008, a second coder who has a twenty-year career in education conducted her own content analysis of the same mission statements. The themes that emerged were further broken into five concepts: economic initiatives, academic integrity, tribal community, pedagogy, and cultural initiatives. This initial study answered research question 1, thus setting the conceptual

framework for the dissertation. RQ2 and RQ3 will address how the tribal college's curriculum addresses the five concepts.

RQ2 and RQ3 are answered using a descriptive approach of describing how the tribal colleges carry out the five concepts that emerged from answering RQ1. Specifically, RQ 2 investigates how the five concepts are embedded in the curriculum of the 31 tribal colleges. RQ 3 asks how reflective the curriculum of each tribal college is of its mission statement. Figure 1 provides a visual chart of each research question and source data used to answer the question.

Participant Selection

Tribal colleges that are members of the American Indian Higher Education Consortium (AIHEC) and have gained an accreditation status were selected because they are more likely to be further developed as a degree granting college than other tribal colleges. According to their Web site, the AIHEC mission "is to support the work of the tribal colleges and universities and the national movement for tribal self-determination." The selection was limited to those tribal colleges that have gained an accreditation status. Table A1 in the appendix is a listing of the tribal colleges in the study. The websites of these colleges were investigated in order to obtain and download, mission statements and curriculum. The primary source documents used in this dissertation are the collection of mission statements, catalogues, course groupings and transfer agreements that were available on the tribal college's website.

Data Retrieval

Using a code-and-retrieve process as described by Coffey and Atkinson (1996), I conducted an inductive analysis of the mission statements of the 31 tribal colleges. As each statement was analyzed, I separated certain words, or phrases that seemed to emerge in the majority of tribal college mission statements. I labeled the separated words or phrases as 'key words'. These key words, by college, are displayed in Table A2 in the appendix. Table 1 shows a portion of Table A.2, illustrating the collection process for Dine College.

Table 1

Tribal Colleges Mission Key Words / Phrases

College	Key Words or Phrases in Mission Statements
Dine College	advance quality, language, history, preparation of employment, multi-cultural world, scholarly research

In the analysis of the mission statements, I inferred the five concepts collectively from the 31 tribal colleges based on frequency and appearance. While the key-words and phrases are from the tribal college mission statements, it is important to note that the five concepts do not represent any specific institution. A second coder who has a twenty-year career in education was given the exact instructions that I followed to retrieve the data from the mission statements. This coder was unaware of the five concepts that emerged from my findings. However, her findings did complement my findings, thus increasing reliability for answering RQ1.

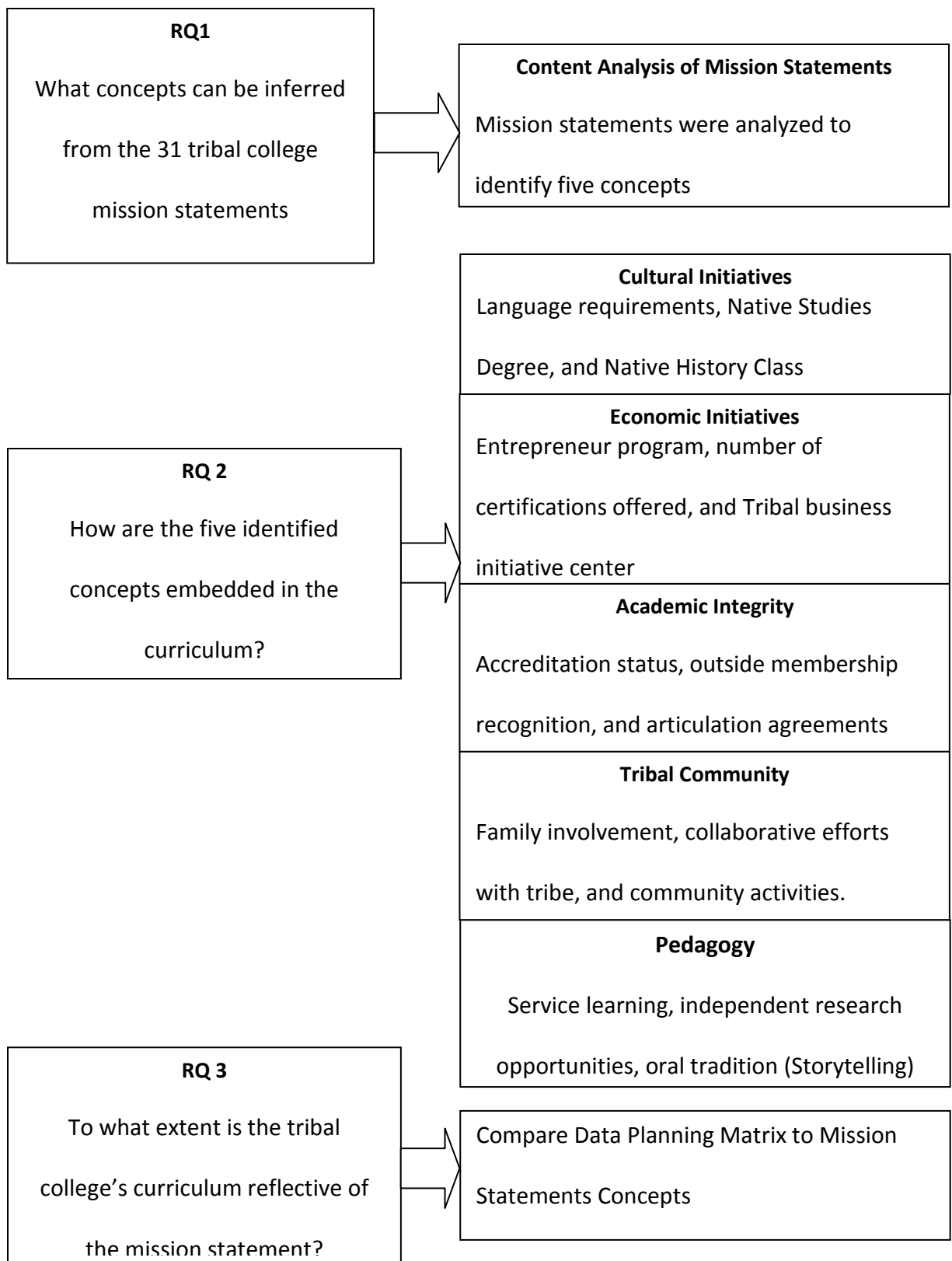


Figure 1. Research questions and instrumentation matrix.

To better illustrate how I accomplished the content analysis of mission statements, I will use the original mission statement of Dine College and the resulting inductive review of that mission statement. In 1968, the first tribal college, Dine Community College, published the following mission statement:

1. To provide academic foundations for students who plan to transfer to a senior college or university.
2. To provide vocational-technical training programs for students.
3. To provide adult education courses for individuals who desire to further their education.
4. To provide a program of community service and community development.
5. To provide assistance and consultation upon request to public churches and Bureau of Indian Affairs schools and other organizations in the area in which the College serves.
6. To foster in its Indian students the development and preservation of a healthy pride in their heritage.
7. To serve as a center for development of Indian cultures, with special emphasis on the Navajo (Stein, p. 32-33)

Key words in this mission statement would be transfer, vocational-technical training, community development, and pride. After conducting the same content analysis over 31 tribal colleges, I can begin to infer concepts from the key words. Boyer (2005) defined academic integrity as what is “expected to provide students with training for immediate employment, as well as academic preparation for continued learning at mainstream institutions.” It is reasonable to infer academic integrity from

transferability in parts one and two of the mission statement, where it specifies “transfer” and “vocational-technical training”. Similarly, economic initiative is inferred from Part 3 of the mission statement, where it specifies “community development”. Finally, the concept cultural initiatives are inferred from Part 6 and 7 of the mission statement, where it states “healthy pride in their heritage” and “development of Indian cultures.” While the example above reflects Dine Community College, my research into the mission statements of the other tribal colleges confirms that there is a common concept of meeting their community needs while preparing students to participate in greater society (McNeley, 2002).

Today, tribal college mission statements are still reflective of the unique philosophies and beliefs of the tribes while adapting to Western society (Wolanin, 1998). Following is the current mission statement of Dine College, which is typical of all tribal colleges (Dine College Catalogue, 2007-2008).

Diné College is a public institution of higher education chartered by the Navajo Nation. The mission of Diné College is to apply the Sá'ąh Naaghái Bik'eh Hózhóón principles to advance quality student learning:

- Through Nitsáhákees (Thinking), Nahatá (Planning), liná (Living) and Sihasin (Assurance).
- In study of the Diné language, history and culture.
- In preparation for further studies and employment in a multi-cultural and technological world.
- In fostering social responsibility, community service and scholarly research that contribute to the social, economic and cultural well being of the Navajo Nation.

Table 1 isolates the key words or phrases that were inductively inferred from the current Dine College mission statement. Using the most recent Dine College example

listed above, economic initiatives can be inferred from the key words “employment” and “multi-cultural world.” Academic integrity can be inferred from the key words “scholarly research” and “advance quality.” Cultural initiatives can be inferred from the key words “language” and “history”. The degree of ambiguity when using an inductive approach to select key words or phrases is explained below in data conceptualization.

Data Conceptualization

Miles and Huberman (1994) assert the importance of displaying the data in a meaningful manner. Because I was the sole researcher, being able to manage the data by producing an organized display is paramount to interpreting the data. Qualitative research, to an extent, allows for intuition in organizing the data into recognizable concepts (Strauss & Corbin, 1998). This is particularly true when developing theory or if there is not an existing theory to assist in verifying the concepts (Zhang, 2006). However, during the literature review, the key words and phrases that were prevalent in the inductive analysis of the mission statements seemed to relate to the themes in the literature review. As a result, the literature review was able to justify the grouping of key words and phrases into the five meaningful concepts. Table A.2, in the appendix, justifies each of the five concepts as an extension of existing scholarship. Table 2 displays a portion of Table A.2. It is an example of using the literature obtained in the literature review as validating culture as one of the five concepts. The first column is the concept being justified. The second column lists the keys words from all the mission

statements that relate to the concept. The third column is the literature that validates the concept.

Table 2

Mission Key Words and Literature

Concept	Key Words or Phrases from Mission Statements	Selected Scholarship from Previous Studies
Culture	Traditions, customs, diversity, culture, culturally relevant curriculum, preservation, language, arts, Indian Awareness, cultural leadership, uniquely appropriate, multi-cultural environment, history	<ol style="list-style-type: none"> 1. "More curricula based on tribal languages and cultures have been developed than ever before...Also, the National Science Foundation is supporting systematic reform efforts in science, math and technology that are integrating tribal languages and cultures in the curriculum." (Tippeconnic, 2000) 2. "Tribal colleges integrate cultural relevance into their developmental efforts, as tribal traditions and values permeate the curricula and learning styles of the colleges." (AIHEC, 2000) 3. "A primary goal of the tribal colleges was to help sustain the language and culture of their communities" (Boyer, 2002) 4. "These institutions have a mission to rebuild tribal cultures using curricula and institutional settings that are conducive to the success..." (Nichols, 2003)

Strauss and Corbin (1998) state that a central, highly-conceptual, concept will emerge to the researcher. It is the central, or core category, that “represents the main theme of the research” (Strauss & Corbin, 1998). While previous literature has suggested tribal colleges as being symbols of sovereignty, my research is concerned with how the tribal colleges’ curricula reflect its own mission statement. The literature review emphasized characteristics of maintaining tribal sovereignty, which paralleled the five concepts that emerged from the mission statements to a certain degree. At this point, I decided to determine if particular colleges’ mission statements emphasize a certain concept over others. Table 3 illustrates that Turtle Mountain College mission statement had four key words or phrases that were categorized under the concepts of academic integrity, two key words or phrases categorized as economic, and one key word or phrase categorized as culture.

Table 3

Mission Statement Concepts

Est.	Tribal College	Culture	Economic	Academic Integrity
1968	Turtle Mountain	x	xx	xxxx

Turtle Mountain College had four key words or phrases that relate to academic integrity, thus I assume that this particular tribal college values accreditation and articulation agreements with other state colleges to ensure transferability. It is at this

point I investigated the catalogue to determine if the curriculum supports the high value on academic integrity the colleges emphasize in their respective mission statements.

The second research question is concerned with how the five concepts are expressed, or embedded, in the written text (i.e. curriculum). At this point, I used selective coding, which is “the process of integrating and refining the theory” (Strauss & Corbin, 1998). My findings from RQ 1 suggest five interrelated concepts that influence the development of the tribal college curriculum. By intentionally searching for support of the five concepts in the curriculum, I gained new insight to the data analysis. As stated in the literature review, tribal college curriculum theory is in its infancy. In essence, the integration of my data may aid in the theory building process.

To accomplish this, I used the following data planning matrix (Table 4) as a guide to the remaining research as it gives detail to the subsections that is needed to fully answer RQ 2. Schramm (2003) recommends qualitative researchers to use his data-planning matrix as a tool to organizing and guiding the research process. To accomplish this, each of the five concepts was separated as demonstrated by Table 4 (Table 4 lists three of the five concepts). Each concept has three relevant questions, called indicators, which will be answered. The indicators purpose is to address how well each category is embedded in the curriculum; thus, fully answering RQ2. For example, it is widely accepted among higher education institutions that accreditation status is an indication of academic integrity. Similarly, associate degrees and small business centers are indicators of economic initiatives. Table 4 is the data planning matrix which outlines

three of the five concepts and the three indicators used to research how embedded each concept is in the curricula. Table A.4 in the appendix is the full data planning matrix that was used when investigating the tribal colleges curricula.

Table 4

Data Planning Matrix

How is culture embedded in the curriculum?			
What do I need to know?	Why do I need to know this?	What data is needed to answer?	Timeline
Is native language a requirement or an option?	Being familiar with the language is part of the Native identity.	Catalogue; Curriculum; website, degree requirements	2008 August - December
Is there a Native Studies Degree?	Availability of NS Degree demonstrates commitment to tribal customs and traditions.	Catalogue; Curriculum; website,	2008 August - December
Is there a Native History class requirement?	To clarify how the tribe views its own history.	Curriculum; website, degree requirements	2008 August - December
How are economic initiatives embedded in the curriculum?			
Are there associate degrees? If so, do associate degree plans match the local economy?	Clarifies if the tribal college understands community needs	Curriculum; catalogue; economic indicators from the local community (available from city websites, etc)	2008-2009 August - February
Is there an entrepreneur program?	To understand if tribal college recognizes entrepreneurship as a valuable resource to develop local economy	Curriculum; website, degree requirements	2008 August - December
Tribal business initiative center with Small Business Association	Clarifies if the tribal college and the local business community are unified	Curriculum; catalogue; website; agreements between college and local businesses	2008-2009 August - February
How is academic integrity embedded in the curriculum?			
What is the accreditation Status?	Accreditation status indicates if the degree program meets certain agreed upon standards by universities	Website and printed materials, academic pages	2008-2009 August - February

What type of membership organizations further validate academic programs?	To clarify if the tribal college readily seeks outside approval to further validate degree programs.	Catalogue; website; regional accreditation websites; American Indian education websites	2008-2009 August - February
Are there articulation agreements? If so, with whom and to what extent?	Will clarify if the tribal college seeks to ensure transferability.	Catalogue; website; other schools websites; regional accreditation websites;	2008-2009 August - February

Reporting the Data

My findings are presented in Chapter 5 separated by each tribal college and collectively on one spreadsheet. RQ1 data are reported on Table A.3, titled 'Mission Statement Concepts'. RQ2, which is 'How are the five identified concepts embedded in the curriculum?' was answered using the data planning embedding scale matrix. In other words, the data planning embedding scale matrix, is the actual research tool that was derived from Table 4. The matrix attempts to indicate how embedded the five concepts were in each of the tribal colleges' curricula. The data planning scale matrix was completed for each of the tribal colleges. Table A.5 is a copy of the tool.

RQ 3 answers how the inductive analysis of the mission statements of each tribal college, answered in RQ1, is reflected in the curriculum of the tribal college, answered in RQ2. It is anticipated that tribal colleges that have mission statements emphasizing academic integrity will have academic integrity highly embedded in the curriculum. For a concept to be "highly embedded," each of the sub-questions (A, B, and C) must be

marked “high.” For a concept to be “minimally embedded”, each of the sub-questions (A, B, and C) must be marked “low.”

The individual results of Table 4 will be recorded in Table A.5 through A.9, analysis of the curriculum. Each table will report the findings of one of the five concepts. Collectively, the tables provide a complete review of the answer to RQ2.

Table 5 illustrates a small portion of Table A.5.

Table 5

Analysis of the Curriculum

Culture				
Year Est.	INDIGENOUS EDUCATION PROVIDERS	Language Requirement	Native Studies Degree	Native History Requirement
2002	Turtle Mountain	High. Medium or Low	High. Medium or Low	High. Medium or Low

RQ3 provides me with the opportunity to present the findings on how well the tribal colleges embed each concept in the curriculum. It is at this point that I hope to be able to draw implications regarding how well the curriculum can potentially be used as a vehicle for achieving tribal sovereignty. These findings, conclusions and suggestions for future research are presented in Chapters 4 and 5. Table 6 is an example of how the completed data, representing the findings from Tables A.5 through A.9, are presented in the findings.

Table 6

Tribal College Curriculum Evaluation Results

	Culture			Economic			Academic Integrity		
College	Mission	Highly	Minimally	Mission	Highly	Minimally	Mission	Highly	Minimally
Turtle Mountain	x			xx			xxxx		

Research in American Indian Communities

John Tippeconnic III discusses the challenge of researching tribal education: “we need to ask the right research questions and answer them using a combination of methods that include non-western approaches to conducting research. This will be difficult given the political nature of Indian education and the reluctance of the educational research community to consider different approaches to research” (Tippeconnic III, 2000). Roger Gonzalez cautions readers to carefully consider the validity of past research on American Indian communities, saying that ‘westernized’ approaches “treat American Indians as specimens” (Gonzalez, 2008, p. 323). Native scholar Angela Cavendar Wilson takes a more activist voice in supporting non-western methodologies of researching Indian issues by stating “A return to the roots of our traditions will help define a new liberatory framework for the future” (Wilson, 2004, p.70).

Native scholars are better prepared to understand the complexity of defining American Indian education as we understand the importance of using traditional knowledge and oral histories in our methodologies (Crazy Bull, 2007). Our knowledge, and belongingness, affords proper entry to these institutions, thus ensuring increased credibility of the findings (Zhang, 2006). Further, our acceptance provides the emic perspective, or a more meaningful view of the phenomena. Swisher (1996) emphasizes the importance of natives doing research in American Indian populations:

American Indian scholars need to become involved in producing research rather than serving as subjects and consumers of research. Measures such as these will ultimately introduce more accurate depictions of Indian experience and lifestyles into the classroom (Swisher, 1996, *Voices, Stories and Perspectives* section, para. 6)

To conclude, it is important to the reader to know that I am a member of the Osage tribe with extended family who are members of the Pawnee and Comanche tribes. Additionally, I have worked directly for the Assistant Chief of the Osage tribe in developing a strategic plan for the next 25 years. This experience, combined with my knowledge of tribal customs learned while growing up with my great aunts on a Comanche allotment in southwest Oklahoma, provides me the credibility to carry out this research.

CHAPTER 4

FINDINGS

The mission statements and curricula of 31 tribal colleges were critically analyzed to answer the three research questions. Answers to the three research questions are inferred from the content provided through the tribal college's websites and course catalogs. The chapter discusses the findings of each individual research question and concludes with a chapter summary.

At the start of this research, there were 33 tribal colleges that were to be investigated. These colleges were chosen by the tribal college's membership level with the American Indian Higher Education Consortium (AIHEC). Only tribal colleges that have met the regular member status with AIHEC were reviewed. Regular member status indicated the tribal college has met a certain criteria, including a tribal advisory board, charter, catalogue and regional accreditation. Additionally, the tribal college must allow a visit from the AIHEC to confirm what the college provided as justification for regular membership status.

While there is not a discrepancy in the number of tribal colleges investigated – 31 for research question one, and 31 for research questions two and three - there is a difference in which colleges were researched. This is due to the timing of the research. When I performed the analysis of mission statements in the summer of 2007, the AIHEC had 31 tribal colleges as regular members. By spring 2009, the number of regular

members remained consistent; however, the following colleges were no longer regular members: Comanche Nation and Wind River. Additionally, three colleges (Fon Du Loc, Navajo Technical, and Ogala Lakota) became regular members. Two colleges, Sinte Gleska and Little Priest, did not provide the information needed to answer research questions two and three. As a result, Sinte Gleska and Little Priest are not included in the final findings.

The reasons which provide insight on the shifting of colleges from the regular membership list is unknown. It does not necessarily mean the college did not meet certain requirements, as there is a large membership cost as well. For the purposes of this study, the three research questions will only include the spring 2009 analysis of tribal colleges that were at full membership levels as indicated on the AIHEC website.

Research Question 1

Research question one was *What concepts can be inferred from the 31 tribal college mission statements?* When investigating the mission statements using conventional content analysis, themes were induced from the raw data. Five concepts emerged: economic stimulation, academic integrity, culture, pedagogy and tribal community. The literature review provided sufficient evidence that the five concepts seemed to relate to an overall theme of promoting and ensuring tribal sovereignty. This literature, discussed in chapter 2, confirms this theme and provides further evidence of how tribes are using their colleges as a potential vehicle for tribal sovereignty.

The high number of tribal college mission statements that reflect concern for the economic contributions is indicative of the colleges' benefit to its region. This finding confirms earlier research (Fox, 2006; Stein, 2003; Boyer, 2003) that suggests tribal college mission statements emphasize their potential economic contribution. I was able to infer economic stimulation after words and phrases, such as opportunities, self-empowerment and career development, emerged. Academic integrity was the second highest inferred concept and it was described by words or phrases such as "educational excellence", "transferability of degree" or "scholarly research". Culture was the third highest inferred concept. Words or phrases that inferred culture were "preservation", "culturally relevant", or "language". Tribal community and pedagogy were inferred the least times from the mission statements. Tribal community was inferred from words or statements such as "provide for the community", "social needs of the community" and "community at-large". Pedagogy was inferred from words or statements such as "critical thinking", "student-learning", and "research."

Research Question 2

Research question two, *How are economic stimulation, academic integrity, culture, pedagogy and tribal community embedded in the curriculum?* was answered by using the Schramm matrix explained in chapter 3. To determine how embedded a certain category was in the curriculum, three questions (called indicators) were created for each concept. Each indicator had a high, medium or low embedding level in the curriculum. Table A.4 is the matrix that was used for this research. The three indicators

for each of the five concepts, including how the embedding level was determined, is provided in the matrix.

Table 7 provides an overview on how the findings for RQ 2 are organized. Table 9 lists each concept followed by the three indicators for each concept. The first concept is economics. The three economic indicators are the availability to earn an entrepreneurship degree, certification and availability of a tribal small business association (or related) office and does the college provide certificates to meet the regional economy. Each indicator has three levels: high, medium and low. The level indicates how embedded each indicator is in the curriculum. For example, nine tribal colleges have the degree indicator as highly embedded in the curriculum, meaning the colleges offer an entrepreneurship degree. Four tribal colleges have the degree at a medium level, meaning that the college only offers a concentration, but not an actual entrepreneurship degree. Seventeen colleges did not offer entrepreneurship as a degree or concentration.

There is a particular interest on how culture, or indigenous thought, resonates in the environmental sciences. This finding is discussed further in 'other findings', located toward the end of this chapter. In addition to the culture finding, the curriculum does not appear to emphasize economic initiatives. Below is a discussion of the findings of research question two separated by the five concepts and how embedded each concept was in the curricula.

Table 7

Embedding Level of Indicators for the Five Concepts in the Curricula

Economic Indicators	Highly Embedded	Medium Embedded	Low Embedded
Degree	9	4	17
Certification	7	18	5
SBA	6	2	22
Academic Indicators	Highly Embedded	Medium Embedded	Low Embedded
Accreditation	15	15	0
Outside Membership	10	6	14
Articulation	10	12	8
Cultural Indicators	Highly Embedded	Medium Embedded	Low Embedded
Language	10	16	4
Degree	25	2	3
History Requirement	19	10	1
Pedagogy Indicators	Highly Embedded	Medium Embedded	Low Embedded
Service Learning	4	7	19
Independent Research	0	12	18
Oral Tradition	0	5	25
Community Indicators	Highly Embedded	Medium Embedded	Low Embedded
Family	2	12	16
Collaboration	12	8	10
Participation	11	9	10

Culture: The Highest Embedded Concept

Culture was found to have the highest number of indicators embedded in the curriculum. Fueling culture were tribal colleges’ language revitalization efforts and the passing down of cultural history in various courses. The 3 indicators chosen to describe

culture's influence in the curriculum were 1) whether a tribal language requirement existed, 2) the availability of a native studies degree program and 3) the availability of a native history or related class credit requirement.

It is worth noting that many tribal colleges require students to meet a culture competency in addition to other educational competencies required for matriculation. For example, Fon Du Loc wrote in their 2008-10 catalogue that students "will be able to demonstrate knowledge of Anishinaabe traditions and culture, knowledge of his/her own traditions and culture" (*Fon Do Loc catalogue, 2008-2010, p.41*). Ogala Lakota requires all graduating students, regardless of degree program, to take and pass what they call "Lakota Student Requirement". This requirement, as stated in the 08-10 Academic Catalogue, specifies "As a tribally chartered college, OLC promotes the specific areas of Lakota history and culture as well as the general area of Indian studies. Every graduate is required to complete several courses from the Lakota Studies curriculum (OLC catalogue, 2008-2010, p.3). However, this cultural competency requirement emerged after catalogues were examined for this research.

Culture Indicator 1: Tribal Language Requirement

For this indicator to be highly embedded in the curriculum, tribal colleges must require one course in the native language regardless of the degree. 10 tribal colleges have a native language requirement for all students. For this indicator to be medium embedded, tribal colleges must have native language either as an optional requirement for any degree offered or a requirement for certain degrees offered, but not a

mandatory requirement for all degrees. 16 tribal colleges had native language at a medium embedment level. Only 4 tribal colleges did not offer a language requirement, thus scoring low embedment. Below is the first indicator question for the culture category.

Indicator 1: Is there a Native language requirement?

- a. High - Required for all degrees.
- b. Medium - Depends on the degree or is option
- c. Low - Not available

Tohono O’odham College was one of the few colleges that require students to take both tribal language and tribal history courses. Called the Himdag requirement, the college states that its mission ‘includes helping all TOCC students, regardless of background, to understand and appreciate Tohono O’odham college’ (Tohono O’odham College Catalogue, 2008-2010, p. 85). It is interesting to note that TOCC did not have culture emphasized in its mission statement, other than enhancing the Himdag requirement. Some colleges, such as the College of Menominee Nation, students may select either the tribal language requirement or tribal history.

Culture Indicator 2: Native Studies Degree or Equivalent

The availability of a native studies degree or related degree would demonstrate that this indicator would be highly embedded in the curriculum. Below is the Indicator Question 2 for the culture category.

Indicator 2: Is there a Native Studies or equivalent degree?

- a. High – Yes
- b. Medium – No degree, but a concentration
- c. Low – No concentration or degree

25 tribal colleges have native studies or equivalent degrees, making this indicator the most highly embedded of all indicators. Colleges in which this indicator had medium embedding mean that native studies is listed only as an option and not a full degree. Only two tribal colleges have native studies as medium embedment. Low embedding indicated the tribal college did not offer native studies as a degree or option. Three tribal colleges scored low embedding. They are Navajo Technical College, Tohono O’odham Community College and Turtle Mountain.

Culture Indicator 3: Native History Requirement

19 tribal colleges required all their students to take a native history course, indicating that native history as a cultural indicator is highly embedded in the curriculum. Colleges that had native history as an option or a requirement that is dependent on the degree would have this indicator embedded as at a medium level. In other words, these colleges would not require native history for all degrees. 10 colleges have native history requirement as medium embedment. Low embedding indicated no availability of native history courses. Only one college, United Tribes Technical College, did not offer a native history course. Below is Indicator Question 3 for the culture category.

Indicator 3: Is there a Native History requirement?

- a. High - Required for all degrees.
- b. Medium - Depends on the degree or is option
- c. Low - Not available

While reading the curriculum, it became noticeable that tribal colleges are interweaving indigenous knowledge with science and, to a lesser degree, public policy courses. This was most apparent in the course descriptions. For example, Sitting Bull College offers environmental issues as one of the courses in the environmental science program. Part of the course description state that students will learn about “environmental racism, old-growth forests, and Indigenous peoples fishing rights” (Sitting Bull College Course description, online access). The criminal justice degree at the same college offers Restorative Justice and Correctional Activities, where students will be given “Special emphasis to the issues of youth and adult offenders, recidivism, and the effective prevention and treatment of various social ills on Standing Rock and in other Native communities.” (Sitting Bull College Course description, online access).

Academic Integrity: The Second-Highest Embedded Concept

10 tribal colleges have academic integrity as highly embedded in the curriculum, thus making it the second highest embedded category. The indicators for academic integrity are: 1) accreditation status, 2) recognition from outside professional agencies, and 3) articulation agreements to ensure transferability.

Academic Integrity Indicator 1: Accreditation Status

For this indicator to be highly embedded, the tribal college's accreditation status must be readily available (on website or catalogue) with status updates. In most instances, the accreditation status was found in two areas: history of the college and in the introduction of the catalogue. 14 colleges not only listed the accreditation, but also status updates. Below is indicator question one for the academic integrity category.

Indicator 1: What is the accreditation status?

- a. High – Accreditation is readily available with status updates.
- b. Medium – Accreditation is available without status updates
- c. Low – No accreditation status listed or it is suspended

If the tribal college did not list a status update with the accreditation information, then it was marked as medium embedment. If there was no accreditation information available, or if accreditation was suspended, the college would be marked as low embedment. At the time of this writing, every tribal college had its accreditation as either high or medium embedment.

In chapter 5, my recommendations for further research re-evaluated the merit of this indicator, especially when used for AIHEC schools. Given that the scope of this study only considered full-member AIHEC schools, this question gave an artificial boost to the tribal colleges since option "C" would not be possible.

Academic Integrity Indicator 2: Outside Membership Recognition

The number of outside memberships and/or recognitions a tribal college maintains in relevant professional organizations is the second indicator used to determine how embedded academic integrity is in the curriculum. Examples of relevant professional organizations include the state's higher education associations, American Association of Higher Education, American Association of Community Colleges and related associations. The tribal college's membership in such organizations is indicative that the college wishes to be viewed as a legitimate educational organization when compared to other colleges and universities. Many of these organizations require colleges to maintain a certain level of credibility, such as accreditation status or other factors. Secondly, membership may indicate that the tribal college does not see itself as separate, but rather belonging and learning the best practices from other colleges. In other words, the tribal college wishes to be relevant as a provider of higher education. This information was usually found in the introduction of the catalogues, or not at all. Below is the Indicator Question 2 for the academic integrity category.

Indicator 2: What outside professional organizations recognize the school's curriculum?

- a. High - Curriculum is recognized by two or more outside professional organizations.
- b. Medium – Curriculum is recognized by one outside professional organization.

- c. Low – Curriculum is not recognized by outside professional organizations.

This indicator had the majority of tribal colleges meeting it at the lowest level. For this indicator to have high embedment, the tribal college must be recognized by two or more outside professional organizations. 10 tribal colleges met this indicator as high embedment. For this indicator to be medium embedment, the tribal college must be recognized by one outside professional organization. 6 tribal colleges embedded this indicator at the medium level. For this indicator to be low embedment, the tribal college must have no recognition by outside professional organizations. 14 tribal colleges embedded this indicator at the low level.

Academic Integrity Indicator 3: Articulation Agreements

The type of articulation agreements that a tribal college has established with four-year colleges or other state institutions is the third indicator for academic integrity. To have high embedment, the college must have state articulation agreements to ensure that general education requirements will transfer to a state institution. 11 colleges were found to have articulation agreements at high embedment. To have medium embedment, the college does not have state articulation agreements, but rather, independent articulation agreements. 12 colleges were at the medium embedment level. For low embedment, the college does not have any specified articulation agreement. 8 tribal colleges were at the low embedment level. Below is indicator question three for the academic integrity category.

Indicator 3: Are there articulation agreements to ensure transferability of credits?

- a. High – General Education requirements will transfer due to state agreements
- b. Medium – No state agreement, but independent articulation agreements exist.
- c. Low – No articulation or state agreements

Most of the articulation agreements were state agreements, such as Tohono O’odham participation in the Arizona general education curriculum. As a result, students who wish to transfer to the major Arizona four-year public institutions are guaranteed admission. Some colleges had specific agreements between a program, such as Sitting Bull colleges’ associates of science in nursing, and a four-year nursing college. Some colleges simply encouraged their students to work with their academic counselor. For example, Little Big Horn college asks students “to develop plans that are compatible with the institutions to which they plan to attend” (Little Big Horn catalogue, 2007-2009, p. 43).

Tribal Community: The Third - Highest Embedded Concept

10 tribal colleges had tribal community as highly embedded in the curriculum. This is the same number as academic integrity; however, 10 colleges had tribal community at the medium embedment level, while 15 colleges had academic integrity at the medium embedment level. The indicators for tribal community were: 1) family

involvement in academic events, 2) tribal college collaboration with the greater community, and 3) college / academic department participation in community events.

Tribal Community Indicator 1: Family Involvement in Academic Events

In Guillory and Wolverton's (2008) article, *It's About Family: Native American Student Persistence in Higher Education*, the authors suggested that the role of family, according to native students, is determining factor in their persistence as well as a barrier. However, the study did not investigate how, or if, the students' family is involved in academic events. Additionally, the study only considered select four-year state institutions, not tribal colleges. Below is the Indicator Question 1 for tribal community.

Indicator 1: Does the college actively involve family in academic events?

- a. High – Evidence is provided that the family is invited and a part of academic events
- b. Medium – Family is insinuated, but not actually involved or involved in co-curricular activities only.
- c. Low – No family involvement mentioned

Family involvement was the lowest embedded indicator for tribal community. For this indicator to have high embedment, the college must provide evidence that the student's family is invited and encouraged to be a part of academic events. Only two tribal colleges met this requirement. To have medium embedment, the family is insinuated as being welcome to academic events at the tribal college or co-curricular

events. 12 tribal colleges were at the medium embedment level. The majority of tribal colleges, 16, were at the low embedment level, meaning no family involvement was written in the catalogue.

Tribal Community Indicator 2: Collaboration with Greater Community

Collaboration with the greater community is the highest indicator for the tribal community category, with 12 colleges performing at the highest level. For the purpose of this research, collaboration is defined as a structured agreement between the college and an outside source, such as a company or public service / government agency. Below is the second indicator question for tribal community.

Indicator 2: Does the college actively collaborate with the greater community?

- a. High – More than three collaborations are recognized as part of the curriculum and leading toward a degree
- b. Medium – There is less than three collaborations recognized as part of the curriculum
- c. Low – There is no evidence of community collaboration

For the college to have high embedment, the college must have more than three collaborations as part of the curriculum. For the college to have medium embedment, the college must have one to three collaborations as part of the curriculum. 8 colleges had medium embedment. For low embedment, the college does not provide evidence that collaborations are part of the curriculum. 10 tribal colleges did not provide evidence of collaborations, thus performing at the lowest level.

Tribal Community Indicator 3: Participation in Community Events

While collaboration indicates a mutual agreement for a shared desired outcome, participation in community events is an indicator on how involved the tribal college is with interacting with the community it serves on an elementary level. Below is the Indicator Question 3 for tribal community.

Indicator 3: Does the college, or academic departments, actively participate in community activities?

- a. High – Evidence of participation in community events as part of the curriculum
- b. Medium – Evidence of participation in community events, but as a co-curricular activity.
- c. Low – No evidence of community events

A highly embedment means the college catalogue or webpage provides evidence in participation in community events as part of the degree program, including service learning or community service opportunities. 11 colleges had such evidence in the catalogue or webpage. Medium embedment means the colleges had evidence, but at a co-curricular level. For example, Leech Lake invites elders to attend college with one free course each semester and earn an honorary degree that is “analogous to the two year liberal arts program” (Leech Lake Catalogue 2008-2011, p.35). 9 colleges had provided evidence at the medium embedment level. Low embedment means there was

no evidence of participation in community events provided. 10 tribal colleges were at the low level.

Economic: The Fourth - Highest Embedded Concept

Five schools had economic initiatives as highly embedded in the curriculum, making economic concept the fourth-highest embedded concept. The three indicators used to measure economic initiative in the curriculum and webpage were: 1) availability of entrepreneurship as a 2 year degree, 2) a tribal business initiative center (usually associated with the small business administration), and 3) availability of certificates that meet the local economic needs.

Economic Indicator 1: Availability of Entrepreneurism Degree

Clement (2006) stated that tribal colleges have invested more resources to entrepreneurship, even suggesting the term “Indianpreneur” (p. 3). Below is Indicator Question 1 for the economic category.

Indicator 1: Is there an entrepreneur degree (Associate or higher)?

- a. High – Yes
- b. Medium – No degree, but a concentration
- c. Low – No concentration or degree

For this indicator to have high embedment, entrepreneurship must be a stand-alone degree program. 9 schools offered entrepreneurship as a stand-alone degree program. For medium embedment, entrepreneurship was only offered as a concentration. Only 4 colleges met medium embedment. Low embedment meant

there was no evidence of an entrepreneurship degree or concentration within a degree. 17 schools were found to have this indicator at the lowest embedment level. However, many of these schools offered certificates or continuing education in entrepreneurship and small business development. As a result, their findings are part of Economic Indicator Two, the availability of a tribal business center.

Economic Indicator 2: Tribal Business Center

Increasing the number of Indian owned businesses located on tribal land was integral for tribes to provide business and services for the people. For businesses to grow, many colleges have offered some variation of assistance, usually funded by the Small Business Association (SBA). Below is Indicator Question 2 for the economic category.

Indicator 2: Is there a Tribal Business Initiative Center associated with the Small Business Administration?

- a. High – Yes
- b. Medium – No, but indication is in strategic plan
- c. Low – Not available

For this indicator to have high embedment, the tribal college must have evidence of a tribal business center or assistance program to encourage small business development in the immediate community. 6 colleges did have such a program, many that were associated with the Small Business Administration program. For medium embedment, such a small business center does not have to exist, but was in the future

plans for the college. 2 colleges listed creating a center as part of its strategic plan. For low embedment, the college simply did not offer such an assistance program nor provided evidence in the strategic plans for one in the future. 22 colleges were at low embedment.

Economic Indicator 3: Provide Certificates to Meet Local Needs

Certificates, ranging from nursing aid to carpentry, imply that the graduate is available for immediate employment. It is a training program with the hope to increase immediate help for industries that are needed in the area. Below is Indicator Question 3 for the economic category.

Indicator 3: Does the college provide certificates that meet the local economic need?

- a. High –Offers over 10 different certificates that meet community needs.
- b. Medium – Offers certificates, but no indication on meeting community needs.
- c. Low – Does not offer certificates

For this indicator to have high embedment, the college must offer 10 or more certificates that met local needs. 7 colleges were found to have this indicator as highly embedded. For medium embedment, the college must offer certificates, but no indication is provided if the certificates met local needs. 18 colleges were found to have this indicator at medium embedment. For low embedment, the colleges did not offer

certificates. 5 colleges had this indicator as low embedment. Of the five colleges that did not offer certificates, two were four year universities (Haskell Indian Nations and the Art Institute), and three did not provide sufficient evidence to support the certification indicator.

Pedagogy: The Fifth - Highest Embedded Concept

There were no tribal colleges that had pedagogy highly embedded in their academic catalogue, making this concept as the least embedded. However, one of the more interesting findings was how some tribal colleges implemented service learning on their campus. The indicators used to measure pedagogy were: 1) service learning opportunities, 2) independent research opportunities and 3) evidence of oral tradition.

Pedagogy Indicator 1: Availability of Service Learning Opportunities

When service learning as an indicator was examined, I found that certain tribal colleges have developed very innovative strategies to integrate students in the community. 4 tribal colleges were found to have service learning highly embedded in their curriculum. To this indicator to be highly embedded, service learning was a requirement for graduation, regardless of the degree. For this indicator to have medium embedment, service learning was required for graduation for certain degrees, but not all degrees. 6 tribal colleges were found to have service learning at the medium embedment level. For this indicator to have low embedment, service learning was not required for graduation. 19 colleges had service learning at low embedment. Below is Indicator Question 1 for the pedagogy category.

Indicator 1: How is service learning embedded in the curriculum?

- a. High – It is required for graduation, regardless of degree
- b. Medium – It is required for graduation based on degree
- c. Low – It is not required for graduation

2 colleges were able to demonstrate a thorough service learning requirement for students. The 08-09 Salish Kootenai College Catalogue states all graduates are required to complete service learning course “based on the belief that service to the community is a major component of citizenship.” Students must complete “30 hours of service to the community outside of regularly scheduled class time, with objectives and service activities tied to content within the discipline” (Salish Kootenai College Catalogue, 2008-2009, p. 16). The college has partnered with a variety of organizations to offer a variety of service-learning opportunities. Examples include prevention of diabetes with The Community Health and Development program to improving water quality with the Salish Kootenai extension program.

Perhaps the most innovative service learning projects are located at Northwest Indian College, near Bellingham, Washington. The college has embraced the oral tradition of learning and communication by utilizing “digital storytelling.” Students must document their service-learning projects using a variety of media, ranging from blogs to podcasts. The college believes that “Digital storytelling is important for service learning projects because it allows for students to capture and share their experiences in a rich and meaningful way that can be easily shared with others” (Northwest Indian College

Online, <http://www.nwic.edu/content/digital-storytelling>, 2006). The college then lists past and current service-learning projects of former students and classes, including building a community garden to honor elders and painting murals for local elementary tribal schools.

Pedagogy Indicator 2: Availability of Independent Research Opportunities

For this indicator to have high embedment, independent research must be required for graduation regardless of the degree. There were no tribal colleges that required independent research for graduation regardless of degree. For this indicator to have medium embedment, independent research must be required, but only as a degree requirement. 12 colleges had degree programs that required independent research. For this indicator to have low embedment, independent research is not required for graduation. 18 colleges had independent research opportunities at low embedment. Below is Indicator Question 2 for the pedagogy category.

Indicator 2: How is independent research embedded in the curriculum?

- a. High – It is required for graduation, regardless of degree
- b. Medium – It is required for graduation based on degree
- c. Low – It is not required for graduation

Pedagogy Indicator 3: Evidence of Oral Tradition

For this indicator to have high embedment, some classes had to be taught by elders and the learning is described as oral, even at a partial level. There were no tribal colleges that provided evidence of oral tradition at the high embedment level. For this

indicator to have medium embedment, some classes were either taught by elders or some learning was described as oral. 5 colleges had oral tradition at the medium embedment level. For this indicator to have low embedment, there was no evidence of oral tradition. 25 colleges had oral tradition at the low embedment level. Below is Indicator Question 3 for the pedagogy category.

Indicator 3: How is oral tradition embedded in the curriculum?

- a. High – Classes are taught by elders and learning is described as oral
- b. Medium – One of the two above
- c. Low – No evidence of oral tradition, and evidence of textbook requirements

While the indicator found that most tribal colleges did not have oral tradition, there was evidence not measured to suggest otherwise that was taken into account. For example, Lac Courte Oreilles Ojibwe Community College has an elder in residence program, where tribal elders “bring more Ojibwe knowledge into the everyday life of the college” (p. 116).

Research Question 3

Research question 3, *How reflective of the institution’s mission statements is the curriculum of the 31 tribal colleges?* was answered by comparing the data from the curriculum (organized on the Data Planning Matrix) with the key words from the mission statements of each tribal college. Since the question was phrased to determine how

reflective the curriculum is of the mission statement, the examination focuses on how well does the curricula reflect the five concepts that were determined by RQ1.

While economic revitalization to the surrounding community the tribal college serves is mentioned as a primary objective in the literature and is supported in the majority of tribal college mission statements, when examining the curricula of tribal colleges, it does not appear as strong. This divergence between mission statements and curricula in the economic category is a major finding. To a lesser degree, there is a divergence between pedagogy. The curricula do reflect culture and tribal community, but at a greater emphasis than the mission suggests. Academic integrity is reflected at the same level of the mission statement.

The possible causes of all divergences are examined in chapter 5. Table 8 relates how the mission statements compare to the curriculum. The overall ranking was determined by the total number of colleges that inferred and embedded each category, from highest to lowest. The first column is the rank hierarchy (highest to lowest) and the second and third columns illustrate how each concept was embedded in the mission statements and curricula. There are two numbers that follow each concept. The first number in parentheses is the number of colleges that inferred (or ranked) that particular category. The second number in parenthesis is the number of colleges that inferred (or ranked) the concepts at the high and medium level.

Table 8

Comparison of Concepts in Mission Statements and Curricula

	Ranking of Concepts Inferred from Missions	Ranking of Concepts Embedded in Curricula
Highest	Economic (5) (12)	Culture (19)(29)
Second Highest	Academic (4) (11)	Academic (10)(25)
Third Highest	Culture (3) (7)	Tribal Community (10) (20)
Fourth Highest	Pedagogy (0) (4)	Economic (5)(14)
Fifth Highest	Tribal Community (0) (2)	Pedagogy (0)(10)

Findings Separated by Tribal College

The findings are further organized by each tribal college to determine which, if any, college mission statements and curriculum appear to diverge and, thus, are not congruent. Mission statement findings and curriculum findings are organized by any divergences and convergences. What is discussed most will be the level, or reflection, of each concept in the curriculum. For example, a particular concept may be present in the mission statement and curriculum but is emphasized in the curriculum at a higher level. Put simply, the curriculum overemphasizes (or the mission statement underemphasizes) a certain concept. What is important is that the information indicates that the mission and curriculum at the tribal college are not congruent for that

particular category. Chapter 5 discusses the findings in context of the literature review. Tables A.5 through A.10 provides the reader the findings for each tribal college.

A convergence is when the mission statement and curriculum are in agreement. A concept that has high convergence indicates that the concept was inferred at a high level from the mission statement and was embedded at a high level in the curriculum. The convergence at the medium and low level may exist as well.

Though convergences of the five concepts exist between mission statements and curriculum for the majority of tribal colleges, most convergences indicate that the tribal college's curriculum emphasizes the concepts at a greater level than the mission statement. Such is the case with the culture concept, where 17 tribal colleges embed culture in their curriculum at the highest level. However, culture is the third highest inferred concept from the mission statements. Similar convergences exist in academics and tribal community. 12 tribal colleges embed academic measurements at a higher level in the curriculum rather than the mission statements, and tribal community, where 16 tribal colleges embed tribal community measurements at a higher level in the curriculum than the mission statement.

As mentioned, a major finding for research question 3 is the divergence of the economic concept. Mission statements emphasize the economic concept at a higher level than the curricula indicate. The curricula embedded the economic indicators at a rather low or medium emphasis level. Many colleges did not offer, or gave no evidence

to suggest, that there are small enterprise development activities to encourage economic growth.

Other Findings

There is sufficient evidence in the curricula to suggest that tribal colleges have devoted indigenous philosophy and values in the environmental sciences. What is important is how culture, as one of the 5 concepts, extends beyond the traditional history and tribal language courses and into the sciences, particularly in the environmental sciences.

Since this research was completed, Saginaw Chippewa Tribal College and Northwest Indian College have started environmental science programs (Northwest Indian College started a BS). Jessica Urbanec, as recently quoted in the summer 2009 *Tribal College Journal of American Indian Higher Education*, said that the new four-year Environmental Sciences degree at Northwest Indian College will “incorporate our cultural beliefs with all the sciences” (On Campus Section, 2009, p. 44, para. 2).

This finding has only recently generated interest in the popular media. A front page *New York Times* article dated on August 19th, 2009, states how the Southern Utes are using algae as a component to make fuel. While the article did not make a connection between tribal colleges and environmental science, the article does give credibility to tribes developing new strategies in environmental science and applying that strategy to modern societal problems.

This connection between environmental science and tribal colleges is made in the Winter 2008 edition of the *Tribal College Journal of American Indian Education*. One article in particular, titled “The Red Road to Green”, states that “stewardship of Mother Earth is a natural outgrowth of the TCUs’ missions and speaks to the worldview of most tribal peoples” (Pember, 2008, p. 17).

Also researched was an attempt to determine if there was a relationship between certain convergences and divergences and: 1) age of the tribal college, and 2) how long the tribal college has been accredited. No significant findings were claimed based on the age of the tribal college. While a majority of colleges that existed for twenty years or more had most of the divergences for all concepts, a skew was created because twenty-four of the thirty-one colleges were twenty years or older. Additionally, no significant findings were claimed based on the years accredited, as the results had a normal distribution forming a natural bell curve.

Chapter Summary

This chapter was organized using evidence provided by 30 tribal college websites and course catalogues to answer three research questions. A content analysis was used to infer concepts that emerged from the mission statements. These concepts were then measured using three indicators to determine how embedded, or emphasized, the concept was in the curricula. Finally, the data from mission statements and curricula was compared to determine if mission statements were reflective to the curricula. Significant findings include that for the majority of tribal colleges, a divergence exists

between mission statements and curricula. Mission statements emphasize economic revitalization and academic success while curricula emphasize culture, academic success and tribal community. Additionally, multiple colleges are fusing indigenous knowledge in environmental sciences. This is also seen in course descriptions as well as certain collaborations the college has formed with the greater community. It is perhaps this finding, which was not originally investigated for this research, as having the largest implications for interested parties.

CHAPTER 5

CONCLUSION

The purpose of this dissertation was to determine if an alignment exists between the five concepts of goals in tribal college mission statements and evidence from the curricula that indicates actions to achieve such goals. Such an alignment may provide additional evidence that tribal colleges offers practices in the curricula that foster the further development of tribal sovereignty. A divergence between mission statement and curriculum may indicative that the tribal college has become susceptible to distractions or other priorities that have not been documented in the literature.

There are three major findings as a result of this research. They are:

1. A high number of tribal college mission statements reflect the possible economic contributions the college potentially makes to the region it serves.
2. Tribal college mission statements emphasize economic issues more than cultural issues while the relationship is reversed when the curricula in tribal colleges is examined.
3. There is sufficient evidence in the curricula to suggest that tribal colleges are fusing indigenous thinking in the environmental sciences.

This chapter analyzes how the findings compare to the literature that was previously discussed, with a specific focus on Cajete. This focus on his work is integral, as Cajete has maintained the unique challenges of developing an appropriate pedagogy for tribal colleges. This discussion will frame the conclusions of this research, implications to tribal colleges and recommendations for future research.

Comparison of Findings to Emerging Theory

The study findings are largely consistent with the literature. Three of the five concepts identified are highly emphasized in the curricula: 1) culture (Cajete, 2005, 2006; McKinley & Brayboy, 2005; HeavyRunner & Marshall, 2003; Benham & Mann, 2003; Tippeconnic, 2000) which included indigenous requirements such as native language and history; 2) academic success (Gonzalez, 2008; Lee, 2007; Beaulieu, 2000) which included accreditation and transferability; and 3) tribal community (Cajete, 2005; Ortiz & HeavyRunner, 2003; Stein, 2003; Boyer, 2006; Guillory & Wolverton, 2008) which included family involvement and collaborations with outside entities. Of these three concepts, only academic success was in exact alignment with the mission statements. The largest misalignment was economic revitalization, which was not highly emphasized in the curricula as it was in the mission statements. In fact, in many examples, economic revitalization was localized within business programs and did not permeate the curricula at the same level as culture, academics and tribal community.

Since most research on tribal colleges concentrates on their role in increasing persistence rates, the extension of the literature on organizing and prioritizing American

Indian curricula is an important contribution of this study. In the literature review in chapter 2, Cajete's (2005) seven foundations of tribal education was outlined as a potential foundation for tribal education. Cajete isolated three of his foundations, the environmental, communal and affective foundations, as the "summer twin", or the external dimension of tribal education. When Cajete's three foundations are analyzed with the findings of this study – culture, academics, and tribal community as defining elements of tribal colleges' curricula - we potentially see a vision of what American Indian epistemology may resemble.

The environmental foundation "connects a tribe to its place, establishing the meaning of tribe members' relationships to their land and the earth in their minds and hearts" (Cajete, 2005, p. 74). Research question two presents considerable evidence that tribal colleges are concentrating heavily in environmental science programs. This is being accomplished through partnerships with the community, articulation agreements with masters programs, internships, independent research and various collaborations with other organizations. The communal foundation, as discussed by Cajete, reflects the tribal community, clan, and family as where learning occurs. The curricula provided strong communal evidence, where, not only do we see collaborations with the greater community and elder immersion programs, but also co-curricular strategies such as daycare, transportation assistance, and various services to counsel students on issues that are prevalent in tribal communities. The affective foundation links the environmental and communal foundations as it "established rapport with what we are

learning and why we are learning it” (Cajete, 2005, p. 75). Again, co-curricular activities, research and service learning help students at tribal colleges grasp what is the group meaning of the learning activities.

Cajete does not mention economic revitalization as a Foundation to tribal education. This seems to fit into an overall patterns regarding native scholarship. Though not the intent of this research, it is interesting to note that a majority of the authors who are not *self-identified* as native, such as Clement, Barden, Cornell and Kalt, tend to concentrate on economic revitalization and culture as necessary ingredients for future tribal prosperity. Self-identified native authors, such as Cajete, Mann and Mihesuah, are more concerned with ensuring that indigenous knowledge is kept alive and relevant in contemporary society.

Conclusions and Themes of the Study

The findings of this study mirror a theme of legitimizing indigenous knowledge in relevant studies such as environmental sciences and political science, going beyond tribal history, language, and native studies degrees. Given the context of tribal colleges, the revitalization of indigenous knowledge in the environmental sciences is a logical strategy. Many tribal colleges tailor certain courses that reflect the personal relationships tribes have formed with nature. Academically, multiple tribal colleges formed relationships with environmental master degree programs and other science programs at major universities to ensure transferability. Additionally, tribal colleges

have started very innovative collaborations with the greater community, focusing on protection of land status, water rights and other environmental issues.

Theme 1: Collaboration with Greater Community

The tribal community category is driven by ongoing collaborations that are evident in the curriculum but not expressed in the mission statements. Many tribal colleges have formed structured partnerships or ongoing collaboration with other government, corporate or non-profit entities. For example, Salish Kootenai College (SKC) has initiated a variety of collaborations with the greater community through its extension program. The goal of the SKC extension program is to ‘advance land grant initiatives’, such as native plant growing techniques for restoration, weed control efforts, and other ecological revitalization efforts (SKC Catalogue 2008-2009, p.8).

An innovative model of outdoor classrooms is a collaboration between Blackfeet Community College and the National Science Foundation. The Field Monitoring Program is in response to determine if “changes in native plant communities over time” is an indicator of climate change (Blackfeet Community College Catalogue, 2008-2010, p. 25). The program also addresses native plant over-harvesting and native plants relationships to water.

The Blackfeet Community College and SKC initiatives are only a few examples of culturally-grounded, and very relevant, science research. Many of these programs are tied with internships, service learning and cooperative education opportunities for native students, increasing the student’s exposure to modern science in today’s society.

While these collaborations are highly embedded in the curriculum either as a degree requirement or as co-curricular activities, they are often not expressed in the mission statements. As a result, the tribal community category between mission statements and curricula are divergent.

Theme 2: Culture Matters More in Curriculum

While culture is inferred from the mission statements, it lives in the curriculum on multiple levels. A majority of the colleges require students to earn credit in a tribal language, tribal history, or related course as part of the curriculum. Additionally, the majority of the colleges intertwine indigenous thinking into traditionally western course descriptions. Northwest Indian College offers Technical Writing for Tribal Leaders (English 305), Rights of Tribes (Political Science 118), Plant Biology: Honoring the Gifts of Plants (Biology 202) and Animal Biology: Our Relatives (Biology 203). Sitting Bull College takes a less eye-brow raising approach by simply adding the following line in many of their course descriptions: Emphasis on Native American culture and heritage.

Not taken into account in this study are the arrays of co-curricular activities, where extended families participate in a variety of cultural activities and ceremonies on campus, and family-support programs such as child care or transportation services. While at first glance child-care and transportation services may not be a cultural factor, the reality is that the colleges are responding to a social need that has affected their community.

This theme of culture intertwined in the curriculum presents a rather curious complexity. Past scholarly work on federal Indian policy demonstrates how BIA controlled Indian schools arguably attempted to eradicate native people's wisdom and culture. Predominantly white institutions continued this minimization by using western methodology and standardization as tool to acculturate native people. As this study finds, tribal colleges emphasizes culture as a dominant theme to provide a safe place to continue their tribal wisdom, values and customs within a modern framework of education. As such, many would interpret tribal colleges as a resistance strategy to mainstream education. This cultural complexity, or paradox, may be best expressed by Lomawaima and McCarty (2002), who argued that the United States should "be a nation of educational opportunity for all, not merely a homogenizing and standardizing machine, unable to draw strength from diversity"(p. 281).

Theme 3: Efforts to Gain the Support of Elders

There is evidence to support that Tribal colleges are offer a great amount of generous support for community elders. For example, Leech Lake offers the Honorary Degree for Elders, in what the school believes is "an entirely new approach to academics and is intended to place greater emphasis on practical benefits for elders who wish to pursue life-long leaning aspirations, and to enrich the role of elders in contemporary society" (Leech Lake Catalogue 2008-2011, p. 35). Elders must complete 64 credit hours to qualify for this liberal arts degree.

Elders can have free tuition at Blackfeet Community College. Lac Courte Oreilles Ojibwe Community College (LCOOCC) 2008-2010, has implemented an elder-in-residence program. For one week each semester, “Elders visit classes, work with faculty integrating Ojibwe knowledge into the curriculum, and answer questions for students and staff” (LCOOCC Catalogue 2008-2010, p. 116).

Theme 4: A New Breed of Indigenous Degrees

The multiple culturally-grounded collaborations have already been addressed, but many of those programs are providing invaluable learning experience to tribal college science students. The availability of Environmental Science and other related degrees are fusing indigenous knowledge in modern circumstances. Fon Du Loc Tribal Community College offers Clean Air Technology certification. Fort Berthold offers associates degrees in agriculture, environmental science and water treatment technology. Haskell Indian Nations offers it’s only bachelors of science in environmental science, as well as associates of science in natural resources and natural sciences. The same is true for Sitting Bull College, which offers its’ only bachelor of science in environmental science, a degree that concentrates heavily on tribal rights and tribal law.

Implications

The findings suggest that indigenous knowledge and values, which have been housed in the minds of elders and relayed in Native American history and language courses, are being embedded in environmental sciences and similarly related science courses. This cross-over of indigenous knowledge into courses that are typically

fundamental in basic sciences in the undergraduate curriculum may present two implications for tribal colleges and mainstream universities: 1) an intellectual challenge to educators and advisors at mainstream universities and 2) the belief that American Indians are offering a new strategy to sustainability when, in fact, indigenous knowledge and respect of the environment was always a part of the context of native people.

While this study did not consider mainstream university environmental sciences course descriptions, it may be worthwhile to determine if native intellectual contributions are at risk of being minimized by science faculty or academic advisors at mainstream universities. Secondly, those who are unfamiliar with tribal circles may see this as a fresh or new approach to sustainability. Yet for most Native Americans, this marriage of environmentalism and intellectualism is not 'out of the box' thinking. Mary Ann Pember, in her 2009 article *The Red Road to Green: Tribal People's Worldviews Preceded 'Green' Trend* is one of the few authors, native and non-native, who expresses "Responsible stewardship of Mother Earth is a natural outgrowth of the TCU's missions and speaks to the worldview of most tribal peoples" (Pember, p. 17). While this study did not intentionally find a relationship between the environment and TCU mission statements, it is Pember's assertion that the relationship is grounded in the worldview of American Indians, which is commonly from the elders to the younger generations.

Though more abstract, an intriguing implication is the building of intellectual capacity in environmental justice. This implication has the potential to directly affect public policy. For example, maintaining tribal water rights (as well as other

environmental concerns) is currently one of the modern day struggles that tribes are encountering. This debate over mineral rights is politically reminiscent of the forced acquisition of tribal lands by the United States government. As tribal colleges continue to invest in environmental science programs, we can expect to see graduates who are able to decipher, promote and defend indigenous environmental rights. Additionally, many tribes governmental structure includes an environmental department that is responsible for the protection of the tribes' minerals and natural resources. Tribes have much to gain (and lose) in what many consider as the largest modern-day challenge to sovereignty. As more natives are attracted to studying the environmental sciences at tribal colleges, it potentially sets a future stage of educated natives who will contribute to tribal sovereignty in terms of environmental law and policy.

The priority of including indigenous teachings into western science curricula may also be a potential explanation on why the economic category is the highest inferred concept from mission statements but the fourth-highest embedded concept in the curriculum. However, it was the first two indicators of the economic concept (the availability of the tribal business centers and entrepreneur degrees above the certificate level) that the majority of tribal colleges could not meet or did not provide evidence in the website or catalogue of meeting at a higher level. Like all schools, tribal colleges have educational priorities and set resources available to implement these priorities. Additionally, the economic concept may be overplayed to a certain degree. However, it may be suggested that the two concepts are connected.

While the curricula of tribal colleges indicate that natural resource management is a current priority over economic concerns, there may very well be a long-term economic impact. The tribes' ability to retain mineral rights, whether through legislation or court rulings, can have significant impact on the community. Further, tribal colleges can provide new technology to ensure that the community has the skills and expertise necessary to care and maintain the regions agricultural interests.

Limitations

There are several limitations to consider when evaluating the contributions of this study. The first limitation was the tribal college website. The websites only provided as much information as the website owner allowed or was given. For example, a few of the colleges did not have course catalogues available online or had undated information. Additionally, it was not entirely possible to assume that lack of information, such as number of memberships the tribal college belonged to, meant that the college did not belong to such organizations. A second limitation was the age of the tribal colleges that were included in the study. While being a full-member of AIHEC was a requirement to be considered, the requirement inadvertently left out younger tribal colleges that are just starting the maturation process, thus limiting generalizability of the results.

Regarding the specific research question methodology, the content analysis of mission statements was member-checked by another educator over a two week period of time in December 2008. There is no reason to believe that this researcher was

improper or not truthful in her findings. In fact, since she is not native, there was not a tendency to force any preconceived ideas about native culture and tribal colleges. However, the Data Planning Embedding Scale Matrix that was used to answer RQ 2 had two reliability concerns. First, the academic integrity category first indicator, accreditation status, was impossible to rank. Since all the schools selected must have been accredited due to their highest status in the AIHEC, accreditation status may have provided a false boost in academic integrity. Secondly, oral tradition (an indicator for pedagogy) is difficult to locate in the curriculum.

As a result, the results of this study should be evaluated carefully. Actual campus visits and interviews with those who impact the curriculum would add a richness of future studies. Still, this study is one of the first to determine a relationship between mission statements and curricula, and provides opportunity for others to replicate and extend.

Recommendations for Future Research

This study opens the door for a variety of research to be completed in native education. As mentioned, very few studies have been completed that considered tribal colleges beyond institutions that maximizes the persistence of native students in higher education, but connects these institutions as tools for ensuring tribal sovereignty. While these relationships can be made, there is no prevalent theory that specifically guides curriculum development at tribal colleges. Present theory, such as Cajete's seven foundations, generally addresses indigenous thinking but does not address curriculum

development. There is a need for research that extends curriculum development at tribal colleges, perhaps linking it to existing framework of critical race theory or extending Brayboy's Tribcrit theory.

Furthermore, my findings suggest suggests that tribal colleges have implemented culturally-grounded strategies to infuse indigenous knowledge into relevant fields, most notably environmental science. This will have an impact not only on native society, but given the contemporary interest in sustainability, on greater society as well. These culturally-grounded strategies are not 'out of the box' thinking for tribal people. As tribal colleges continue research focusing on specific environmental topics, we can expect to see greater society accept indigenous knowledge as relevant to environmental stewardship and green technology. New research that tracks, or attempts to measure, how indigenous knowledge adds to the national, even global, agenda on environmentalism would be very intriguing. Such research can potentially classify how indigenous knowledge is received outside tribal circles. The Southern Utes bio-fuels project, which promotes algae as a source for alternative energy, is one indigenous example of a pioneering strategy toward environmentalism.

Additionally, the evidence of this study extends the existing framework regarding American Indian education by attempting to link tribal colleges' curricula to furthering tribal sovereignty. This is significant as it is an indication that tribes are addressing global issues using their own resources. Future studies should concentrate on the relationship between tribal colleges and tribal sovereignty. In terms of tribal

sovereignty, what can we expect to see as more students graduate from tribal colleges? In what ways would these graduates contribute to the local economy? While certain concepts relating to sovereignty, which were revealed through an inductive content analysis of mission statements, may not be carried out in the curriculum at the same emphasis level as they are in the mission statements, what is important is increasing our understanding on how these institutions contribute to the general principal of sovereignty.

Future research should be conducted at new tribal colleges that have formed in the last ten years to determine if their curriculum priorities mirror those tribal colleges who are more established. Such research can be informative as to determining if maturity of a tribal college plays a significant role in pedagogy. For example, would the curriculum of an established tribal college have the same influences as the curriculum of recently established tribal college? Websites should be used as a guide, as it would be helpful to establish dialogue with the actual educators. Additional studies can concentrate on how successful graduates of environmental sciences are in securing employment or graduate schools.

The five concepts that emerged in this study can be replicated and used as a starting point for future studies. This study did not go into depth on any of the concepts other than to see how embedded the concept is in the curriculum. Research on actual strategies used would be useful for educators at other campuses. Additionally, future

research may take a more activist tone that frames these grounded strategies through a de-colonization lens.

Chapter Summary

Paul Boyer (2003) and Wayne Stein (2003), in separate articles, shared a concern that tribal colleges may stray from their intended missions. Since their articles, research on American Indian students has focused heavily on how tribal colleges help remove barriers for native students attending college. Of that group, a handful of authors have exhibited an understanding of tribal sovereignty and have initiated a conversation about tribal colleges being created as a result of the tribe exerting its own sovereignty. That group of researchers is further reduced by a select few who dig deeper into truly understanding the reciprocal relationship between tribal colleges, tribal sovereignty and contemporary society. It is this group of mostly native scholars who believe tribal colleges are not just symbols of tribal sovereignty, but in fact, tribal colleges help ensure the future of tribal sovereignty. Though this dissertation did not study sovereignty, there is an underlining hope to instigate and promote further research that will contribute to that very limited body of native research.

For this study, a content analysis methodology was used to determine if certain concepts and purposes inductively emerged from 31 tribal college mission statements. Five concepts emerged which, as the literature review uncovered, have a relationship with tribal sovereignty. They were 1) academic integrity, 2) economic revitalization, 3) culture, 4) tribal community, and 5) pedagogy. A summative content analysis was then

performed on the 31 tribal colleges' curricula to determine if the curricula were reflective of the five concepts. If so, the study would provide evidence that tribal colleges have successfully reached beyond their role as providing education for those students who otherwise would not receive it, but that the college has emerged into a new framework of developing a curricula that may benefit future tribal sovereignty.

This new framework is open to challenges. Such a framework may be challenged by mainstream educators at predominantly white institutions, or even minimized in favor of western methodologies. Still, a powerful implication is that tribal colleges have extended their scope beyond institutions of hope for students who would not otherwise have the opportunity for higher education. Finally, given the current trend toward 'green' technology, tribal colleges are continuing to develop as institutions that can potentially have a considerable impact on public policy as well as preparing Native Americans to contribute to environmental justice issues and disputes.

APPENDIX
SUPPLEMENTAL TABLES

Table A.1

Tribal Colleges in This Study

College	Year Est.	Year Accrd.	Highest Degree
Bay Mills Community College	1984	1998	Assoc.**
Blackfeet Community College	1976	1985	Assoc.
Cankdeska Cikana Community College	1974	1990	Assoc.
Chief Dull Knife College	1975	1996	Assoc.
Dine College	1968	1976	Assoc.
Fon du Loc	1991	2003	Bach
Fort Belknap	1984	1993	Assoc.
Fort Berthold Community College	1973	1998	Assoc.
Fort Peck Community College	1978	1991	Assoc.
Haskell Indian Nations	1970	1979	Assoc/ Bach
Ilisagvik College	1986	2002	Assoc.
Lac Courte Oreilles Ojibwa Community College	1982	1993	Assoc.
Leech Lake Tribal College	1990	2006	Assoc.
Little Big Horn College	1980	1989	Assoc.
Little Priest Tribal College	1996	1998	Assoc.
Navajo Technical College	1994	2005	Assoc.
Nebraska Indian Community College	1972	1986	Assoc.
Northwest Indian College	1983	1983	Assoc / Bach*
Saginaw Chippewa Tribal College	1998	2007	Assoc.
Salish Kootenai College	1976	1994	Assoc / Bach
Oglala Lakota College	1971	1983	
Sinte Gleska College	1971	1983	Assoc / Bach / M
Sisseton Wahpeton College	1979	1990	Assoc.
Sitting Bull College	1973	1984	Assoc./Bach**
Southwestern Indian Polytechnic Institute	1971	1975	Assoc.
Stone Child College	1984	1993	Assoc.
The College Of Menominee Nation	1991	1998	Assoc.
The Institute of American Indian Arts	1962	1984	Assoc / Bach
Tohono O'odham Community College	2000	2005	Assoc.
Turtle Mountain Community College	1972	1984	Assoc./Bach**
United Tribes Technical College	1969	1982	Assoc.
White Earth Tribal and Community College	1997	2008	Assoc.*

Table A.2

Mission Key Words

College	Updated Key Words in Mission
Bay Mills Community College	Quality, research, community-based, culture, language
Blackfeet Community College	Transfer, appropriate association degrees, competence, quantitative reasoning, basic skills development, distance learning, culture
Cankdeska Cikana Community College	opportunities, culture and language, preservation, self-sufficiency and independence
Chief Dull Knife College	quality, educational and cultural leadership
Comanche Nation College	opportunities, higher education, traditions, customs, lower division programs
Dine College	advance quality, language, history, preparation of employment, multi-cultural world, scholarly research
Fort Belknap	NA
Fort Berthold Community College	quality, cultural, academic, vocational
Fort Peck Community College	occupational training, based on needs, potential employment, Indian awareness
Haskell Indian Nations	self-determination
Ilisagvik College	Preservation, higher education, arts and cultures
Lac Courte Oreilles Ojibwa Community College	provide for community, post-secondary, associate degree, continuing education
Leech Lake Tribal College	Higher education, culture
Little Big Horn College	Grants AA and AS, economic development, vocational, preservation, culture
Little Priest Tribal College	two year associate degree, language, culture, academic plan,, succeed at four year institutions, interface within a diverse world
Nebraska Indian Community College	Quality, life long learning
Northwest Indian College	Self Determination, knowledge
Saginaw Chippewa Tribal College	diversity, culture, independent
Salish Kootenai College	Quality, post-secondary, opportunities, culture
Sinte Gleska College	assess, uniquely appropriate, autonomy
Sisseton Wahpeton College	Quality, research,society at large, preparation for bachelors degree, learning opportunities
Sitting Bull College	Academic, technical, improving levels of education and training, culture
Southwestern Indian Polytechnic Institute	quality, self-sufficient, self esteem, culture
Stone Child College	High standards, post-secondary education, programs leading to a degree, quality
The College Of Menominee Nation	opportunities, careers in a multi-cultural world, research, culture
The Institute of American Indian Arts	Preservation, higher education, arts and cultures
Tohono O'odham Community College	strengthening communities, quality, research, developmental skills
Turtle Mountain Community College	Autonomous, general studies, undergraduate education, vocational, research, continuous improvement, culture
United Tribes Technical College	Vocational, educational services, multi-cultural environment, economic opportunity, self sufficiency, self-determination
White Earth Tribal and Community College	liberal arts, educational excellence, culturally relevant curriculum, partnership
Wind River Tribal College	Preservation, self determination, culture, language, self-sufficient

Table A.3

Missions Statement Concepts

Concept	Key Words	Condensed Literature to Support Concept
Economic	opportunities, strengthening communities, developmental skills, independent, partnership, human capital, self-sufficient, self-determination, industry, interface with diverse world, careers in a diverse world, continuing education, economic development, distance education, vocational, occupational training, based on needs, potential employment, self-empowerment, basic skill development, distance learning, technical, life-long learning, autonomous, economic opportunity, preparation for employment, improving levels of training, certificates	<p>"Tribal colleges and universities (TCU's) have taken aim against this chronic economic imbalance." (Fogarty, 2007)</p> <p>"Tribal colleges can educate today's political leaders and empower future leaders who can, in turn, build stronger, sovereign nations" (Boyer, 2004)</p> <p>"And, they are setting the stage for the ultimate reversal of the 'brain drain' when tribal members move away from home because there is no opportunity for them on the reservation" (Fogarty, 2007)</p> <p>"Because most reservation economies are stagnant, Tribal Colleges also actively seek to promote local economic development" (AIHEC, 1999)</p> <p>"tribal colleges have been looked as economic engines, a means of improving living standards for individual indians and communities" (fed, 2006)</p>
Academic Integrity	Higher education, lower-division programs, quality, research, liberal arts, educational excellence, two-year associate degree, academic plan, succeed at four-year institutions, high standards, post-secondary education, leading to degree, knowledge, preparation for bachelor's degree, learning opportunities, transfer, appropriate associates degree, competence, quantitative reasoning, educational leadership, academic, improving levels of education, general studies, undergraduate education, continuous improvement, educational services, scholarly research	<p>"Those who work in the tribal college movement still talk about feeling like second-class citizens in the American higher education community" (Boyer, 2002)</p> <p>"Increasingly, tribal colleges are becoming involved in conducting, directing and influencing medical and behavioural research at thier schools" (Hernandez, 2004)</p> <p>"Tribal colleges and universities must be accountable to not only accreditation agencies and federal and private funders. They also must be accountable to thier students and thier communities." (AIHEC, 2006) "Accreditation is emblematic of the sometimes problematic relationship of tribal colleges to the external community." (Putman, 2001)</p> <p>"the need for tribal colleges has been in question since thier very inception" (Brown, 2003)</p> <p>"the colleges have become centers for research and scholarship" (Stein, 2001)</p>
Culture	Traditions, customs, diversity, culture, culturally relevant curriculum, culturally diverse, preservation, language, arts, Indian Awareness, cultural leadership, uniquely appropriate, multi-cultural environment, history, creativity (?)	<p>"More curricula based on tribal languages and cultures have been developed than ever before...Also, the National Science Foundation is supporting systematic reform efforts in science, math and technology tghat are integrating tribal languages and cultures in the curriculum." (Tippeconnic, 2000)</p> <p>"Tribal colleges integrate cultural relevance into thier developmental efforts, as tribal traditions and values permeate the curricula and learning styles of the colleges." (AIHEC, 2000)</p> <p>"A primary goal of the tribal colleges was to help sustain the language and culture of their communities" (Boyer, 2002)</p> <p>"These institutions have a mission to rebuild tribal cultures using curricula and institutional settings that are conducive to the success..." (Nichols, 2003)</p>
Pedagogy	Student focused, holistic, self-esteem, critical thinking, individual, student-learning	<p>"...all tribes highly regarded the ability to use language thought storytelling, oratory, and song as a primary tool for teaching and learning" (cajete, 2005)</p> <p>"The colleges must converse with communities, elders, indiginous scholarsand students about how to forge a 'contemporary' theory for Indian education and how to develop curricula that reflect their educational processes and experiences" (Cajete, 2006)</p> <p>"Recent studies of American Indian educational programs that intergrate language and culture into the curriculum provide helpful pedogogical guidelines to teachers" (Banham and Mann,</p>
Tribal Community	personally fulfilling, enrichment, enrichment goals in a diverse community, accessible, community-based, outreach, leadership in Native Arts and Culture, provide for community, social needs for the community, community-focused, tribal community, society at-large, affordable	<p>"The success of tribal colleges in serving American Indian students and communities is remarkable when one considers the array of social and economic challenges confrnting those students and communities." (Martin, 2005)</p> <p>"Another important asset of tribal colleges is thier ability to provide personalized attention to their students, in order to overcome the economic and social barriers to postsecondary success the face." (AIHEC, 1999)</p> <p>"TCUs provide substance abuse counseling, nutritional counseling, and other services" (Winds of Change, 14th annual Guide)</p>

Table A.4

Data Planning Embedding Scale Matrix

College: _____ Date Evaluated: _____

Source: _____

This tool will assist in answering the RQ2: How are the three identified concepts embedded in the curriculum? This can be researched by completing a content analysis of catalogues and degree programs of the 31 tribal colleges using Schram's Data Planning Matrix.

1. How is culture embedded in the curriculum?

- A. Is there a Native language requirement?
 - a. High - Required for all degrees.
 - b. Medium - Depends on the degree or is option
 - c. Low - Not available

- B. Is there a Native Studies or equivalent degree?
 - a. High – Yes
 - b. Medium – No degree, but a concentration
 - c. Low – No concentration or degree

- C. Is there a Native History requirement?
 - a. High - Required for all degrees.
 - b. Medium - Depends on the degree or is option
 - c. Low - Not available

2. How are economic initiatives embedded in the curriculum?

- A. Is there an entrepreneur degree (Associate or higher)?
 - a. High – Yes
 - b. Medium – No degree, but a concentration
 - c. Low – No concentration or degree

- B. Is there a Tribal Business Initiative Center associated with the Small Business Administration?
 - a. High – Yes
 - b. Medium – No, but indication is in strategic plan
 - c. Low – Not available

- C. Does the college provide certificates that meet the local economies needs?
 - a. High –Offers over 10 different certificates that meet community needs.
 - b. Medium – Offers certificates, but no indication on meeting community needs.
 - c. Low – Does not offer certificates

3. How is academic integrity embedded in the curriculum?

- A. What is the accreditation status?
 - a. High – Accreditation is readily available with status updates.
 - b. Medium – Accreditation is available without status updates
 - c. Low – No accreditation status listed or it is suspended

- B. What outside professional organizations recognize the school's curriculum?
 - a. High - Curriculum is recognized by two or more outside professional organizations.
 - b. Medium – Curriculum is recognized by one outside professional organization.
 - c. Low – Curriculum is not recognized by outside professional organizations.

- C. Are there articulation agreements to ensure transferability of credits?
 - a. High – General Education requirements will transfer due to state agreements
 - b. Medium – No state agreement, but independent articulation agreements exist.
 - c. Low – No articulation or state agreements

- 4. **How is tribal community embedded in the curriculum?**
 - A. Does the college actively involve family in academic events?
 - a. High – Evidence is provided that the family is invited and a part of academic events
 - b. Medium – Family is insinuated, but not actually involved or involved in co-curricular activities only.
 - c. Low – No family involvement mentioned

 - B. Does the college actively collaborate with the greater community?
 - a. High – More than three collaborations are recognized as part of the curriculum and leading toward a degree
 - b. Medium – There is less than three collaborations recognized as part of the curriculum
 - c. Low – There is no evidence of community collaboration

 - C. Does the college, or academic departments, actively participate in community activities?
 - a. High – Evidence of participation in community events as part of the curriculum
 - b. Medium – Evidence of participation in community events, but as a co-curricular activity.
 - c. Low – No evidence of community events.

- 5. **How is pedagogy embedded in the curriculum?**
 - A. How is service learning is embedded in the curriculum?
 - a. High – It is required for graduation, regardless of degree
 - b. Medium – It is required for graduation based on degree
 - c. Low – It is not required for graduation

 - B. How is independent research embedded in the curriculum?
 - a. High – It is required for graduation, regardless of degree
 - b. Medium – It is required for graduation based on degree
 - c. Low – It is not required for graduation

 - C. How is oral tradition embedded in the curriculum?
 - a. High – Classes are taught by elders and learning is described as oral
 - b. Medium – One of the two above
 - c. Low – No evidence of oral tradition, and evidence of textbook requirements.

Table A.5

Economic Indicator Findings

Year Est.	INDIGENOUS EDUCATION PROVIDERS	Economic	Entrepreneur Degree	Number of certificates offered	Business Center with SBA	Embedding Level
1984	Bay Mills Community College		Low	Med	Low	Low
1976	Blackfeet Community College	x	High	Med	Med	Med
1974	Cankdeska Cikana Community College	xxx	Low	Med	Low	Low
1975	Chief Dull Knife College		Low	Med	Low	Low
1968	Dine College	x	Med	Med	Low	Med
1991	Fon Du Loc		Med	Low	High	Med
1984	Fort Belknap	x	High	Med	High	High
1973	Fort Berthold Community College	x	Low	High	Low	Low
1978	Fort Peck Community College	xxx	Low	High	High	High
1970	Haskell Indian Nations	x	High	Low	Low	Low
1986	Ilisagvik College		High	High	Med	High
1982	Lac Courte Oreilles Ojibwa Community College	x	High	Med	Low	Med
1990	Leech Lake Tribal College		Low	Low	Low	Low
1980	Little Big Horn College	xxx	High	Low	Low	Low
1996	Little Priest Tribal College *	x	NA	NA	NA	NA
1994	Navajo Technical College	xx	Low	Low	High	Low
1972	Nebraska Indian Community College	x	Low	Med	Low	Low
1983	Northwest Indian College	x	Low	Med	Low	Low
1971	Oglala Lakota College	x	Low	Low	High	Low
1998	Saginaw Chippewa Tribal College	x	Low	Low	Low	Low
1976	Salish Kootenai College	x	High	Med	High	High
1979	Sisseton Wahpeton College	xxxx	Low	Low	Med	Low
1973	Sitting Bull College	xx	Med	Med	High	Med
1971	Southwestern Indian Polytechnic Institute	xx	Low	High	High	High
1984	Stone Child College		Low	Med	Low	Low
1991	The College Of Menominee Nation	xx	Low	Med	High	Med
1962	The Institute of American Indian Arts	x	Low	Low	Low	Low
2000	Tohono O'odham Community College	xx	Low	Med	Low	Low
1972	Turtle Mountain Community College	xx	High	Med	Low	Med
1969	United Tribes Technical College **	xxx	High	Med	Low	Med
1997	White Earth Tribal and Community College	xx	Med	Med	Low	Med

* website maintained by students

** Low means no info available

Category Level	
xxx	5
xx	7
x	13
None	6

Embedding Level	
High	5
Med	9
Low	15

Table A.6

Academic Integrity Indicator Findings

Year Est.	INDIGENOUS EDUCATION PROVIDERS	Academic Integrity	Acceditation Status	Outside Membership organization recognition	Articulation Agreements	Embedding Level
1984	Bay Mills Community College	x	Med	Low	Med	Med
1976	Blackfeet Community College	x	Med	High	High	High
1974	Cankdeska Cikana Community College		Med	Low	High	Med
1975	Chief Dull Knife College	x	Med	Low	Low	Low
1968	Dine College	x	High	High	High	High
1991	Fon Du Loc	x	Med	Low	High	Med
1984	Fort Belknap	xx	Med	High	Low	Med
1973	Fort Berthold Community College	xx	High	Low	Low	Low
1978	Fort Peck Community College		High	Med	Med	Med
1970	Haskell Indian Nations		Med	High	Med	Med
1986	Iiisagvik College	x	Med	Low	Med	Med
1982	Lac Courte Oreilles Ojibwa Community College	xx	Med	Low	Med	Med
1990	Leech Lake Tribal College	x	High	Med	High	High
1980	Little Big Horn College	x	Med	Low	Low	Low
1996	Little Priest Tribal College *	xxx	Med	NA	High	NA
1994	Navajo Technical College	x	High	Low	High	High
1972	Nebraska Indian Community College	x	High	High	Med	Med
1983	Northwest Indian College	x	High	High	Med	High
1971	Oglala Lakota College	xx	High	Low	Low	Low
1998	Saginaw Chippewa Tribal College		Med	Low	High	Med
1976	Salish Kootenai College	xx	High	High	Low	High
1979	Sisseton Wahpeton College	x	Med	Med	Low	Med
1973	Sitting Bull College	xx	Med	Low	Med	Med
1971	Southwestern Indian Polytechnic Institute	x	Med	High	High	High
1984	Stone Child College	xxxx	High	High	Med	High
1991	The College Of Menominee Nation		High	Med	High	High
1962	The Institute of American Indian Arts	x	Med	Low	Low	Low
2000	Tohono O'odham Community College	x	High	Med	High	High
1972	Turtle Mountain Community College	xxx	High	Low	Med	Med
1969	United Tribes Technical College **	x	High	High	Med	Med
1997	White Earth Tribal and Community College	xx	High	Med	Med	Med

* website maintained by students

** Low means no info available

Category Level	
xxx	4
xx	7
x	15
None	5

Embedding Level	
High	10
Med	15
Low	5

Table A.7

Culture Indicator Findings

Year Est.	INDIGENOUS EDUCATION PROVIDERS	Culture	Language Requirement	Native Studies Degree	Native History Requirement	Embedding Level
1984	Bay Mills Community College	xx	Med	High	Med	Med
1976	Blackfeet Community College	x	High	High	High	High
1974	Cankdeska Cikana Community College	xxx	Med	High	High	High
1975	Chief Dull Knife College	x	High	Med	Med	Med
1968	Dine College	xxx	Med	High	High	High
1991	Fon Du Loc	x	Med	High	High	High
1984	Fort Belknap	x	Med	High	High	High
1973	Fort Berthold Community College	x	Med	High	Med	Med
1978	Fort Peck Community College	x	Low	High	High	High
1970	Haskell Indian Nations		High	High	High	High
1986	Ilisagvik College	xxx	Med	High	Med	Med
1982	Lac Courte Oreilles Ojibwa Community College		Med	High	High	High
1990	Leech Lake Tribal College	x	Med	High	Med	Med
1980	Little Big Horn College	xx	High	High	High	High
1996	Little Priest Tribal College *	xx	NA	NA	NA	NA
1994	Navajo Technical College		High	Low	High	High
1972	Nebraska Indian Community College		Med	High	Med	Med
1983	Northwest Indian College		Med	High	High	High
1971	Oglala Lakota College		High	High	High	High
1998	Saginaw Chippewa Tribal College	xx	Med	High	High	High
1976	Salish Kootenai College	x	Med	High	High	High
1979	Sisseton Wahpeton College	x	Med	High	High	High
1973	Sitting Bull College	x	Med	High	Med	Med
1971	Southwestern Indian Polytechnic Institute	x	Low	High	Med	Med
1984	Stone Child College		Med	Med	Med	Med
1991	The College Of Menominee Nation	x	High	High	High	High
1962	The Institute of American Indian Arts	x	Low	High	High	High
2000	Tohono O'odham Community College		High	Low	High	High
1972	Turtle Mountain Community College	x	High	Low	Med	Med
1969	United Tribes Technical College **	x	Low	High	Low	Low
1997	White Earth Tribal and Community College	x	High	High	High	High

* website maintained by students

** Low means no info available

Category Level	
xxx	3
xx	4
x	16
None	8

Embedding Level	
High	19
Med	10
Low	1

Table A.8

Pedagogy Indicator Findings

Year Est.	INDIGENOUS EDUCATION PROVIDERS	Pedagogy	Service Learning	Independent Research	Oral Tradition	Embedding Level
1984	Bay Mills Community College	xx	Low	Low	Low	Low
1976	Blackfeet Community College		Low	Low	Low	Low
1974	Cankdeska Cikana Community College		Low	Low	Low	Low
1975	Chief Dull Knife College		Low	Low	Low	Low
1968	Dine College	x	Med	Med	Low	Med
1991	Fon Du Loc		Med	Med	Low	Med
1984	Fort Belknap		Low	Low	Low	Low
1973	Fort Berthold Community College		Low	Low	Low	Low
1978	Fort Peck Community College		High	Med	Low	Med
1970	Haskell Indian Nations	xx	Low	Med	Low	Low
1986	Iliisagvik College		Low	Low	Low	Low
1982	Lac Courte Oreilles Ojibwa Community College		Low	Low	Med	Low
1990	Leech Lake Tribal College		Low	Low	Low	Low
1980	Little Big Horn College		Low	Low	Low	Low
1996	Little Priest Tribal College *	xx	NA	NA	NA	NA
1994	Navajo Technical College	x	Med	Low	Low	Low
1972	Nebraska Indian Community College		Low	Medium	Low	Low
1983	Northwest Indian College		High	Low	Med	Med
1971	Oglala Lakota College		Med	Low	Low	Low
1998	Saginaw Chippewa Tribal College	x	Low	Low	Low	Low
1976	Salish Kootenai College		High	Med	Low	Med
1979	Sisseton Wahpeton College	x	Low	Med	Low	Low
1973	Sitting Bull College		Med	Med	Low	Med
1971	Southwestern Indian Polytechnic Institute		Low	Med	Med	Med
1984	Stone Child College		Low	Med	Med	Med
1991	The College Of Menominee Nation	x	High	Low	Low	Low
1962	The Institute of American Indian Arts		Med	Med	Med	Med
2000	Tohono O'odham Community College	xx	Med	Med	Low	Med
1972	Turtle Mountain Community College	x	Low	Low	Low	Low
1969	United Tribes Technical College **		Low	Low	Low	Low
1997	White Earth Tribal and Community College		Low	Low	Low	Low

* website maintained by students

** Low means no info available

Category Level	
xxx	0
xx	4
x	6
None	19

Embedding Level	
High	0
Med	10
Low	20

Table A.9

Tribal Community Indicator Findings

Year Est.	INDIGENOUS EDUCATION PROVIDERS	Tribal Community	Family involvement	Community Collaboration	Participation in community	Embedding Level
1984	Bay Mills Community College	x	Low	Low	Low	Low
1976	Blackfeet Community College	x	Med	Med	Med	Med
1974	Cankdeska Cikana Community College		Med	Med	Med	Med
1975	Chief Dull Knife College	x	Low	Low	Low	Low
1968	Dine College		Med	Med	High	Med
1991	Fon Du Loc	x	Low	High	High	High
1984	Fort Belknap		Med	High	High	High
1973	Fort Berthold Community College		Med	Med	Med	Med
1978	Fort Peck Community College		Med	High	High	High
1970	Haskell Indian Nations		Med	High	Med	Med
1986	Ilisagvik College		Med	Low	Med	Med
1982	Lac Courte Oreilles Ojibwa Community College	x	High	Med	High	High
1990	Leech Lake Tribal College		High	Low	High	High
1980	Little Big Horn College	xx	Low	Med	Low	Low
1996	Little Priest Tribal College *		NA	NA	NA	NA
1972	Nebraska Indian Community College		Low	Low	Low	Low
1994	Navajo Technical College	x	Med	Low	Low	Low
1983	Northwest Indian College		Low	High	Low	Low
1971	Oglala Lakota College	x	Low	Med	Med	Med
1998	Saginaw Chippewa Tribal College		Low	Low	Low	Low
1976	Salish Kootenai College		Med	High	High	High
1979	Sisseton Wahpeton College		Low	Low	Low	Low
1973	Sitting Bull College		Low	High	Med	Med
1971	Southwestern Indian Polytechnic Institute		Low	High	High	High
1984	Stone Child College		Low	Med	Med	Med
1991	The College Of Menominee Nation	x	Med	High	Med	Med
1962	The Institute of American Indian Arts	xx	Med	High	High	High
2000	Tohono O'odham Community College		Low	High	High	High
1972	Turtle Mountain Community College		Low	Low	Low	Low
1969	United Tribes Technical College **		Low	Low	Low	Low
1997	White Earth Tribal and Community College	x	Low	High	High	High

* website maintained by students

** Low means no info available

Category Level	
xxx	0
xx	2
x	9
None	20

Embedding Level	
High	10
Med	10
Low	10

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