DISSERTATION

WEB-BASED DISTANCE EDUCATION AND NATIVE PROFESSIONAL COMMUNITIES: SOCIAL AND CULTURAL CONSTRAINTS

Submitted by
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In partial fulfillment of the requirements
For the Degree of Doctor of Philosophy
Colorado State University
Fort Collins, Colorado
Fall 2004

COLORADO STATE UNIVERSITY

OCTOBER 25, 2004

WE HEREBY RECOMMEND THAT THE DISSERTATION PREPARED UNDER OUR SUPERVISION BY SONYA JEAN LE FEBRE ENTITLED WEB-BASED DISTANCE EDUCATION AND NATIVE PROFESSIONAL COMMUNITIES: SOCIAL AND CULTURAL CONSTRAINTS BE ACCEPTED AS FULFILLING IN PART REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY.

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ABSTRACT OF DISSERTATION

WEB-BASED DISTANCE EDUCATION AND NATIVE PROFESSIONAL COMMUNITIES: SOCIAL AND CULTURAL CONSTRAINTS

The use of distance education is one means of increasing educational opportunities in rural Native communities. Studies indicate that educational outcomes can be similar for face-to-face courses and distance courses, although distance students are less likely to persist. Native American students tend to be unsuccessful in meeting their educational goals on mainstream campuses, primarily due to the cultural conflict they encounter. If distance and face-to-face courses from mainstream universities yield similar outcomes, Native American students can expect to perform poorly at each. This study used an anonymous survey to assess the level of cultural and social conflict experienced by working professionals in a Native setting taking an on-line graduate level course from a mainstream university. The reasons cited by potential students for taking or not taking the course were also examined to assess the obstacles to and motivations for participating in distance courses. Students reported experiencing no instances of cultural conflict. Most students (88%) cited lack of time and a busy schedule as the biggest obstacles they encountered. This was true of both students that finished the course and those that did not. Persistence was not high: 36 people expressed an interest in the course and ten registered. Of those ten, one dropped, three were non-starts (did not participate and did not drop), four received incompletes, and three finished. Of those that expressed an interest in the course but did not register, 75% reported lack of time and a busy schedule as reasons for not taking the course. These findings are in keeping with other studies of distance students. Of the total survey population (students and non-students), 92% said they would consider taking a distance course in the future and 71% said their employer would support their efforts to take a distance course. The ability to fit a course into a busy schedule was the most commonly cited reason for taking a distance course in the future (46%), followed closely by remote accessibility (42%). Affordability was the most commonly cited priority (67%), followed by the level of credit (54%; most are interested in graduate credit) and content (50%).

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ACKNOWLEDGEMENTS

I would like to thank my students as well as everyone who took the time to fill out my survey. Thanks also to my advisor and committee members, Dr. Bob Woodmansee, Dr. Larry Rittenhouse, Dr. Kathleen Pickering, and Dr. Omnia El Hakim. I am grateful for the financial help provided by the Colorado Agricultural Experiment Station, which funded my program of study, and Colorado State University's Division of Continuing Education, which allowed my students to take the course at reduced cost for the purposes of this study. I would also like to thank the participants of the Tribal College Natural Resource Instructors' Workshops for sharing their perspectives and insights.

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CHAPTER 1: INTRODUCTION

This dissertation investigates the appropriateness of using distance education to increase educational opportunities in Native communities. I am presenting this within the broader framework of increasing opportunities on reservations and thereby promoting self-determination. As such, I have included literature reviews on several related topics to provide context from which to draw inferences. In this introductory chapter I provide an overview of the current state of reservations, their infrastructure, economies, and educational and administrative challenges. I also summarize the discussions held among participants of the Tribal College Natural Resource Instructors' Workshops regarding mainstream distance education and tribal colleges which eventually led to this study. In chapter 2 I describe the importance of autonomous natural resource management from within the local cultural context in maintaining the cultural and religious freedoms of Native Americans. To achieve this tribes need more Native natural resource managers, a need which greater access to educational opportunities might help to fulfill. Chapter 3 explores the role that cultural conflict plays in Native American experiences of mainstream universities. I end with an overview of the research examining differences in Native American learning styles. This provides insight into the obstacles that might be mitigated by

distance education and those that might simply transfer to the new medium of instruction. Chapter 4 provides a brief history of tribal colleges and examines their current role in development. In chapter 5 I review the literature comparing distance and face-to-face education, and in chapter 6 I examine the adoption of the Internet in Native communities and schools. The premise and methodology of the study are described in chapter 7, the results are reported in chapter 8, and conclusions and recommendations are discussed in chapter 9.

Challenges Facing Native Communities

Native Americans and Alaska Natives comprise some of the most underrepresented ethnic groups in higher education in the United States, and consequently in much of the trained workforce. Compared to the U.S. population as a whole, many Native Americans are economically and educationally disadvantaged. In particular, American Indians living on reservations fall below the national average in terms of educational achievement, employment, and income (Table 1.1).

This is due in part to the remote nature of most reservations, their lack of resources, and poor infrastructure. The small and dispersed populations and the distance from sizable population centers increase the cost of developing and maintaining facilities. Reservations were generally established on lands low in productivity and lacking exploitable natural resources. Traditional means of

Table 1.1 U.S. Census Bureau (2000, page 149) data on education and employment for the total U.S. population, American Indian and Alaska natives, and selected reservations.

	Population 25 or higher that are high school graduates or higher (%)	Population 25 or higher with a Bachelor's degree or higher (%)	Population 16 and over not in labor force (%)	Individuals living below the poverty line (%)
Total U.S. population	80.4	24.4	36.1	12.4
American Indian and Alaska Natives*	70.9	11.5	38.9	25.7
Navajo Nation Reservation & off-reservation trust land	55.9	7.3	55.3	42.9
Paiute Reservation	51.2	4.7	47.3	57.1
Tohono O'odham Nation and off-reservation trust land	62.1	5.4	58.8	46.4

* Includes only those who designated a single race/ethnicity

accessing capital (loans and bonds) are almost non-existent on reservations where there is very little that residents can use for collateral: reservation land is held in trust by the federal government, and most of the housing is supplied by the Department of Housing and Urban Development (HUD). On many reservations infrastructure is poorly developed and maintained or non-existent. In 2002, $500 per mile was spent on roads in Indian Country, compared to $4000 to $5000 per mile for state roads (Hall 2003). A third of tribal homes do not have adequate solid waste management systems, 25% do not have phone service, 15% do not have access to electricity, and 8% do not have running water (on the

Navajo Nation 40% do not have access to water except what they haul). The lack of resources combined with the remote location make it very difficult to get a formal education or to enter into the cash economy in any robust way.

Compounding these problems are federal government interventions that are ineffective at best, detrimental at worst, and have undergone frequent and radical transformations in their approach. Federal Indian policy has alternated between forced assimilation and termination of tribes to promotion and protection of tribal sovereignty (Table 1.2). Interventions are often implemented without regard to local and cultural contexts. For example, TANF (Temporary Assistance for Needy Families) assumes that people are unemployed due to a lack of skills training, and so requires program participants to attend skills training sites. This assumption and its consequences removes people from the non-cash activities they were engaged in which contributed to their subsistence. The skills training they receive often proves useless as the lack of jobs on reservations is not addressed by the program (Pickering 2000a).

The economic situation for Native Americans off reservations is also difficult and exacerbated by experiences of alienation, cultural conflict, and racism. Many periodically leave the reservation in search of wage work in border towns and regional cities (Pickering 2000b). Their lack of higher education and racist attitudes towards them preclude them from qualifying for higher-paying employment. The jobs they take often pay low wages, tend to be temporary or

Table 1.2 Historical overview of federal Indian policy.

Date	Era
1820-1850	Indian Removal
Non-Indian desire for Indian-held land led to hostility between Indians and non-Indians. "All but a few remnants of tribes east of the Mississippi were moved to the West under a program that was voluntary in name and coerced in fact" (Canby 1988, page 16). The Bureau of Indian Affairs moved from the War Department to the Department of the Interior.	
1850-1887	Reservation Period
The federal government persuaded or coerced tribes to cede much of their land and reserve a smaller portion for themselves. Congress no longer recognized tribes as independent nations and treaty making ended. The federal government assumed judicial control of reservations and assigned agents and missionaries to administer them. They outlawed Indian religious dances and customs and established off-reservation boarding schools to educate children in mainstream values away from the tribal influence. There was no self-rule or American Indian authority on reservations.	
1887-1934	Allotments & Assimilation
Concern at the poverty Indians lived in and resentment at the large amounts of land in the West unavailable to non-Indians led to the General Allotment Act. The government allotted individual Indians small plots of land to cultivate in the hope that this would lead to self-sufficiency, assimilation, and the dissolution of tribes and reservations. Non-Indians often bought or leased allotted land at low prices and the federal government acquired "excess" Indian land for non-Indian settlement. The amount of Indian held land was reduced from 138 million acres in 1887 to 48 million acres in 1934.	
1934-1953	Indian Reorganization
The federal government reversed its policy towards tribes and now favored tribal persistence. Congress passed the Indian Reorganization Act designed to protect the remaining tribal land base. Tribes were encouraged to establish their own governments and laws; however, they must be based on the federal constitution and approved by the Secretary of the Interior.	
1953-1968	Termination & Relocation
Federal policy reverts to assimilation and tribal termination. Congress terminated sovereign nation status for successful tribes and sold the tribal lands. The Bureau of Indian Affairs offered grants to Indians that left their reservations for metropolitan centers. Legislation allowed states to assume civil and criminal jurisdiction on reservations without conferring with the tribe in question.	
1968-present	Self-Determination
The federal government abandoned termination and assimilation and reinstated tribal sovereignty and the trust relationship. States could no longer assume jurisdiction over tribes without tribal consent. The Education and Self-Determination Act provided a process through which tribes could take over administrative control from the BIA.	

Based on Canby 1988.

seasonal, have poor working conditions and long hours, and frequently conflict with cultural values or philosophies.

The lack of higher education among Native Americans means very few are in a position to help their own communities in a professional capacity or act as role models for future generations. This is not to denigrate the many learned people that are a product of Native communities: fluent speakers of Native languages, people with an in depth knowledge of traditional medicine or traditional ecological knowledge, spiritual leaders, repositories of cultural knowledge, historians, artists, and artisans, to name a few. However, in large part Native American communities must rely on people of other cultures to teach in their schools, manage their natural resources, provide their health care, and argue their cases in court. This dependency on outsiders, who have historically not had their best interests at heart and may not understand or respect their values, has contributed to the feelings of mistrust, helplessness, loss and despair that too often characterize Native American lives. Amartya Sen (1999) describes freedom as the ability to live the type of life a person chooses to live, whether that be as a traditional healer or a university-trained doctor. As a group, Native Americans have far fewer choices than the average American citizen, and so less freedom.

A Native American presence is sorely lacking in our public and private sectors. Participation by Native Americans in public life is necessary to create a just

society with equal representation of all its members. Additionally, involvement of people from different backgrounds in public life in significant ways will result in the generation of more and varied approaches to the challenges facing society as a whole.

> "None of us come into the world fully formed. We do not know how to... be a human being except through learning it from other human beings... My humanity is caught up in your humanity. When you are dehumanized, whether I like it or not, I too inexorably am dehumanized, I am diminished as a person." (Tutu 2003)

One way to increase the choices of Native Americans, and therefore their freedom, is to increase their access to educational opportunities. An education expands one's options when seeking meaningful employment in both Native and mainstream communities. Self-determination is the goal of most, if not all, tribes, and increasing the qualifications of tribal members furthers this goal. The federal government provides most of the services on many reservations: health care, primary and secondary education, the management and sale of natural resources. In 1975 the Indian Self-Determination and Education Assistance Act was passed in which "Congress stated its finding that federal domination of Indian affairs had deprived American Indians of leadership skills and had denied Indians an effective voice in planning and implementing programs" (Stuart 1990, page 1). This created a process through which a tribe may contract with the federal government to provide the social services granted them through treaty making. Tribes that have successfully contracted to run their own schools and health care services experience a sense of empowerment and pride. Although

the tribal service provider remains under the authority of the federal agency they have contracted with, to some degree the tribe can tailor the goods and services to reflect their cultural values, resulting in services that are more effective and better address the needs of the tribe. Tribes need members with professional qualifications (as defined by the U.S. government) and an understanding of the bureaucratic process in order to successfully contract with the federal government and assist their own communities by providing goods and services. Existing tribal entities, the government offices and colleges already in place, also seek to increase the qualifications of their staff.

Opportunities for higher education are few on the reservation, and American Indians who attend mainstream colleges and universities encounter social, cultural, and economic hardships. Tierney (1992) found that "The concerns of [students] seem to revolve around cultural and familial factors more than economic concerns" (page 82). Cultural conflict can take many forms. Racist attitudes and misperceptions of different groups of people are perhaps the most obvious forms. Presenting world views that are so ingrained they are considered the only possible viewpoint is less obvious but causes at least as much anxiety in those with the minority viewpoint. Possibly the most difficult to mitigate are the differing social expectations and the implication that the majority culture is somehow superior.

Tribal colleges have been able to minimize the cultural conflict experienced by

Native students by providing educational opportunities on the reservation and within the local social and cultural context; however they are typically only able to offer a limited curriculum due to their geographic isolation, modest budgets, and small student populations. The use of mainstream distance courses is one means of increasing educational opportunities on reservations. The benefit of distance courses is that students do not have to relocate to increase their educational opportunities. This may be more significant for American Indians, for whom a move to attend a university brings with it not only the general stresses, costs and inconvenience of moving, but also the difficulty of coping with cultural and social conflict on a daily basis.

Premise of the Study

This study, exploratory in nature, evolved from discussions at the 2001 and 2002 Tribal College Natural Resource Instructors' Workshops. These federally funded workshops were produced by Colorado State University for 12 years, with the goal of providing tribal college natural resource instructors an opportunity to develop both curricula and a professional support network with their peers. Independent of the workshops, Colorado State University faculty began to develop and teach on-line courses. They wondered if on-line distance courses could be used as a means of increasing curricula offerings on reservations, and discussed the idea with tribal college instructors at the workshops.

The instructors stressed that mainstream distance course offerings should not

compete with tribal college offerings. As most tribal colleges are two-year and capable of developing lower-division courses, it was suggested that offering upper-division and graduate courses might be more appropriate. However, the instructors felt most of their students lacked the academic preparation necessary to complete an upper-division course, as well as the study habits and self-motivation needed to succeed in a distance course. Their students did best when they received significant amounts of encouragement and feedback, and felt that their teacher really cared about them. This type of relationship is more difficult to create in an on-line setting when the pupil and instructor may never meet face-to-face, and the pupil must take the initiative to access the on-line course for any communication to occur.

In which institution the student enrolls would also become an issue. It is likely that both the tribal college and the mainstream college would want to count the student towards their full-time equivalents (fte's), upon which federal and state funding are based. Both institutions would benefit not only by reporting a higher number of students, but from reporting a higher number of Indian students. Mainstream institutions would like to be able to report more minority students and tribal colleges need to maintain an Indian majority student base to be considered eligible for federal monetary assistance under the Tribally Controlled Community College Assistance Act of 1978.

Increasing reservation access to graduate courses, which would otherwise be

unavailable, might be more appropriate. Like professionals in more urban locations, many tribal college instructors and tribal government employees would like to further their education and their careers by earning advanced degrees in their fields. Tribal colleges encourage their instructors to attain advanced degrees as this helps the college gain accreditation and the benefits that go with it: federal funding, credits that transfer to other schools, access to research and grant money, prestige. Tribal college students also benefit from having more qualified instructors. The instructors can develop new lower-division courses based on the graduate classes they take. Tribal government agencies also benefit from raising employee qualifications by increasing their capabilities and access to funding. The community as a whole benefits by retaining its talented and motivated tribal members who act as role models for others. Given the remote locations of many reservations, and that few tribal colleges offer graduate courses, distance education might be a desirable option for this group.

While a distance course will eliminate the need for reservation-based students to live in a foreign culture continuously, the student is still likely to encounter cultural and social conflict in the course content, teaching methodologies, and in their interactions with the instructor, fellow students, and administration. Using an anonymous survey, this study assesses the level of cultural and social conflict experienced by working professionals in a Native setting (tribal college and tribal government employees) taking an on-line distance course from a mainstream university. It also examines the reasons cited by potential students for taking or

not taking the course, in an attempt to assess the obstacles to and motivations for participating in distance courses.

Terminology

The terms "Indian," "American Indian," "Native American," and "Native American and Alaska Native" are used interchangeably throughout this document to refer to "persons having origins in any of the original peoples of North America, and who maintain cultural identification through community and tribal affiliation as American Indian or Alaska Native" (McAfee 1997, page 30). Likewise, the prefixes "Native" and "Indian" are used interchangeably. "Mainstream" is used to refer to white, middle- to upper-class, European-American culture.

CHAPTER 2: NATURAL RESOURCE MANAGEMENT IN INDIAN COUNTRY

Natural resources and natural resource management play a fundamental role in Native American culture and religion. In this chapter I build a case for the necessity of autonomous natural resource management within the local cultural context in preserving the cultural and religious freedoms of Native Americans. I outline the existing opportunities available to tribes for natural resource management training and describe their desire for even greater involvement.

Resource Diversity in Indian Country

The all-encompassing phrase "Indian Country" belies the great diversity of landscapes and cultures that compose it. More than 56 million acres of land are owned by or held in trust for Native American tribes in the United States (Bureau of Indian Affairs 1997). These lands occur in 35 of the 50 states, and range in elevation from sea level to over 12,000 feet (Durham 1999). Treaties protect Indian rights to hunt, gather, fish and trap on even more acres, both on and off reservations. A wide variety of ecosystems are represented, including everglades, deserts, coniferous and deciduous forests, prairies, and tundra.

Indian land supports many of the common uses found in the rest of the United States, such as ranching, agriculture, mining, logging and timber production, fishing, hunting, recreation, tourism, and scientific study. Natural resource rights also fulfill important spiritual and traditional roles that are vital to the retention of Native American cultures.

Necessity of Cultural Context

Native Americans' relationships with the land and its resources have shaped their cultures, religions, and traditions since time immemorial. Much more than just an economic base, natural resources are an integral part of their rich heritage. Therefore, management must be understood from a cultural context which recognizes this important role of natural resources in Native American life.

Perhaps the clearest example of the role cultural context has in defining management goals is that of traditional hunting, fishing, trapping and gathering. "To most people, hunting and fishing is [sic] a sport. To the American Indian it is a part of a religious custom . . . We did not believe in a church just one day; we believed in a church every day of the week and in every act that we did. And we have continued with that belief" (Theodoratus 1998). For many tribes, hunting and fishing were the means of survival and therefore became "the foundation of religion, culture, and tradition. Native people viewed their welfare as inextricably linked with the well-being of the natural world which sustained them" (McCorquodale 1997, page 570). Tribes often insisted on the retention of fishing,

gathering, trapping, and hunting rights when ceding land to the U.S. government, to ensure the perpetuation of traditional practices and Indian culture (Bureau of Indian Affairs 1999).

McCorquodale (1997) illustrated the significance of cultural context by comparing the management of recreational hunting with that of subsistence and ceremonial hunting (Table 2.1). Recreational hunting is based on the premise that wildlife belongs to all citizens and that everyone has the right to hunt. Management ensures that each individual is given equal opportunity to partake in the sport. As the prey base is not large enough to support unlimited hunting by all, the hunting season is limited and bag limits are imposed to ensure a sustainable yield. On the other hand, Native American hunting is carried out for subsistence and ceremonial purposes. The needs of the entire community must be met, not the individual. Not everyone has the right to hunt in this context. Hunters make up

Table 2.1 Management of recreational hunting vs. ceremonial and subsistence hunting

	Recreational Hunting	Ceremonial and Subsistence Hunting
Purpose	-Sport	-Survival -Perpetuation of traditional practices and culture
Premise	-Wildlife belongs to all -Everyone has a right to hunt -Opportunity-driven	-To fulfill the needs of the tribe for the products of the hunt -Need-driven
Goal	-Ensure each individual has equal opportunity to participate in sport	-Meet the ceremonial and subsistence needs of the tribe
Tools	-Bag limits -Limited season -Permit lottery	-Take only what is needed at present -Don't waste -Use every part of the animal

Based on McCorquodale 1997.

only a select fraction of the community, and may also hunt for those families who don't have a hunter, or are infirm, bereaved, or elderly. In this context, bag limits are not appropriate. Likewise, hunting seasons are inappropriate as traditional views oppose the stockpiling of game for future, undefined uses, and needs for game are spread throughout the year and may occur unpredictably, as in the case of funerals, weddings, and other special occasions. This difference in management goals and tools has led to misunderstandings and feelings of animosity on the part of recreational hunters, who assume that season length is a measure of tribal-harvest impacts.

Self-Determination and Natural Resource Management

With the arrival of Europeans in North America came extreme increases in population, limited availability of lands and resources for Indian use, and the creation of reservations with distinct boundaries. Native American lands began to be degraded and natural resources exhausted. For example, herders on Zuni Pueblo traditionally used large tracts of land for grazing their animals. The federal government fenced in the reservation in 1934, greatly restricting the amount of grazing land available to the herdsmen. The concentration of herds on the reservation resulted in decreased forage production, increased erosion, and conflicting land uses as grazing began to negatively impact the agricultural lands (Ford 1999).

Prior to the Indian Self-Determination and Education Assistance Act of 1975,

many Indian managed resources appeared to be mismanaged and degraded. This was not due to a lack of interest on the part of the Native Americans, but due to the overwhelming number of other problems compounded by a lack of funding and other resources. Tribes had to submit prioritized lists of programs to the BIA to be considered for funding, and social and health concerns usually took precedent over natural resource management issues (Durham 1999). The Indian Self-Determination and Education Assistance Act of 1975 gave Native Americans more freedom in the allocation of funds and many tribes have dedicated money to natural resource management at increasing rates. Many tribes are now funding and directing their own natural resource management programs, while attempting to integrate "tribal traditional and cultural ways with modern management principles" (Durham 1999, page 2).

Filling the Need for Native Managers

Indians require self-governance and the ability to manage natural resources within culturally appropriate contexts in order to maintain their cultural and religious freedoms. While contracting under the Indian Self-Determination and Education Assistance Act does not result in complete autonomy as the contracting agency is still bound by BIA rules and regulations to carry out BIA directives (Stuart 1990), it is a step in that direction. To achieve such a contract requires qualified natural resource managers. As the number of formally educated Native managers are lacking (Durham 1999), tribes may rely on the expertise of outsiders to fulfill the qualifications needed for a contract. This

compromises their self sufficiency and reduces the number of jobs that go to tribal members under contracting. Also, outsiders may require a higher rate of pay and thereby reduce the funding available to carry out the project (Stuart 1990).

The BIA offers services and training in natural resource management, forestry, timber production, water resources management, geographic services, and mineral and energy resources development and management. The BIA also provides access to training conducted by the Bureau of Land Management, the National Park Service, the U.S. Fish and Wildlife Service, the U. S. Geological Survey, the U. S. Forest Service, the Natural Resources Conservation Service, and the Environmental Protection Agency.

Still, many Native peoples feel the need for stronger Indian direction and involvement. Two organizations, The Native American Fish and Wildlife Society and the Intertribal Bison Cooperative, developed to share Indian knowledge and resources across tribes and to promote awareness of the natural resource issues particular to reservations. By collaborating efforts and agreeing on issues, Native Americans are also able to present themselves as a consolidated group with a focused agenda to state, federal and other partners (Durham 1999) and thus accord their concerns more recognition in the national arena.

Another strategy to promote Indian management of tribal natural resources is the

development of natural resource and ecology curricula at tribal colleges. Initially most tribal colleges focused on health (e.g., nursing) and childcare. As such, they have attracted a largely female student body. There are now efforts to expand curricula to many other areas, including natural resources, and to attract students from a wider portion of the population.

One of the more important functions of natural resources in Indian Country is its role in the retention of Native American cultures, religions, and independence. To accomplish this, autonomous management from within an appropriate cultural context is necessary. Many tribes are looking for ways to increase tribal college instructor qualifications and develop and expand tribal college natural resource curricula in an effort to produce more Native natural resource managers. This will lead to greater Indian management of Indian resources and thereby increase self-determination. Distance education might be one way to increase instructor qualifications. Tribal college curricula could potentially increase as well with instructor exposure to new coursework.

CHAPTER 3: NATIVE AMERICANS AND HIGHER EDUCATION

A much lower percentage of American Indians attend post-secondary or four-year institutions than the national average, and of those that do, a much higher percentage drop out or stop out (discontinue their studies for a period of time due to extenuating circumstances and re-enroll when they are able). They disappear from campus and no one knows where they went or even notices that they are gone (Tierney 1992). Common reasons for dropping out or stopping out cited by Native Americans and their teachers include inadequate schooling and poor academic preparation, low levels of socio-economic development, and cultural conflict (Cantrell 1992).

Astin (1977) identified several variables that he suggested contributed to attrition. Many Native Americans possess the characteristics identified by Astin as common to people of *any* race who are more likely to drop out: poor academic background and ability; parents that aren't formally educated; from small towns; not having developed good study habits; of different economic background as the other students; older; married; a poor undergraduate GPA; not participating in extracurricular activities; and low aspirations (Tierney 1992).

For the purposes of this study, we will focus on the cultural and social barriers to education. This chapter explores the role that cultural conflict plays in Native American experiences of mainstream universities. As it is expected that cultural conflict in a distance course will be limited largely to the coursework and virtual classroom interactions with the instructor and fellow students, I end with an overview of the research examining differences in Native American and mainstream learning styles.

Culture in Higher Education

Culture

> "represents a group's preferred way of perceiving, judging, and organizing the ideas, situations, and events they encounter in their daily lives... Culture also determines the guidelines individuals within groups use to select the specific information to which they attend as well as the interpretation given to that information." (Shade 1997a, page 5)

Cultural conflict, or culture shock, refers to the confusion, frustration, anxiety, and sense of isolation that ensues when one's perceptions of the ideas, situations, and events surrounding one are at odds with the rest of society.

That the transmission of culture and socialization are inseparable aspects of education is widely accepted (Fortes 1938; Thomas and Wahrhaftig 1971; Cantrell 1992; Tierney 1992; Townsend et al. 1999). "Education in the widest sense is the process by which the cultural heritage is transmitted from generation to generation" (Fortes 1938, page 5). Thomas and Wahrhaftig (1971, page 230) saw education "as part of the general human process of socialization whereby

young people are prepared to fit successfully into the internal environment of the community of their upbringing..." Tierney (1992, page 29) described education as "a ritual of transition which socializes the inductees into new roles in society."

In this context it is easy to see how American Indians entering a mainstream institution would experience cultural conflict on many different levels. The cultural heritage transmitted is not theirs, and may even be at odds with their cultural interpretation of the world around them. The community they are socialized to accept a new role in is not their community, and the role may not be an appropriate for their community. Furthermore, in promoting one groups' culture above all others, the effect is that of degrading minority cultures. This occurs on mainstream campuses, where not only are the majority of the students, employees and staff of the mainstream culture, but so are the mission, the hierarchy, the administrative procedures, the goals, the pedagogy, the research, the publications, the architecture, the food – in short, the entire system.

> "Many predominantly white institutions are also essentially white institutions. Their values, as played out in policies and practices, reflect those of white, middle- to upper-class, European-American culture, with an implicit, if unintentional, disparagement of the values and norms of other cultures." (Townsend et al. 1999, page 234)

Native Americans on mainstream campuses encounter cultural conflict on a daily basis in the personal, academic and administrative aspects of their lives (Cantrell 1992). Native Americans who attend a mainstream institution can expect to experience: the loss of their cultural support group and the empowerment that

ensues; the loss of a feeling of connectedness with others; exhaustion at attempting to accommodate the dominant culture; the loss of a sense of belonging and being important; loneliness and estrangement; and racist attitudes towards them and misunderstandings of their culture (Lazar 2001; U.S. Commission on Civil Rights 2003).

Unlike immigrants, who are often eager to fit in to their new community, involuntary minorities – populations that have become minorities due to conquest or colonization – may highlight experiences of cultural conflict as a means of reinforcing their cultural identity (Cantrell 1992). For them, assimilation is not a sign of success, but one of defeat.

> "Those in command operate in a field of power that allows them to impose a definition of the social world that reinforces their interests. The system operates to deny some individuals voice, and their awareness of their lack of voice convinces them either that they have none, or that they want no part of a system that seeks to silence them. Educational institutions, in particular, function to reproduce existing power relations by way of imposing definitions of knowledge that reaffirm the culture of the dominant." (Tierney 1992, page 38)

For Native Americans, this may be not only a painful reminder but also a continuation of the destruction their communities have experienced in their relationships with European Americans. Native Americans that do succeed in mainstream institutions often find they aren't accepted by either group: mainstream society still considers them Indian and therefore fundamentally different, while they are no longer considered Indian by other Indians (McAfee 1997).

To succeed in mainstream institutions, American Indians require understanding, assistance, and advocacy. This is usually not available, and students are left to either succeed or fail on their own. Tierney (1992) examined the efforts, or lack thereof, made at mainstream institutions to help American Indian students reach their academic goals. What follows is a synopsis of his observations. The few professors that attempt to provide extra attention or develop programs to help Indian students often find that their efforts aren't appreciated by their colleagues and the administration. It takes a considerable amount of time and effort – time and effort that is taken away from their research and writing responsibilities. The low salaries and large workloads at many institutions are disincentives for professors to involve themselves with minority issues. Many programs for minority students are provisional projects funded with grant money. The result is a succession of programs, none with longevity. Given their short and transitory nature, they often repeat themselves and lack the organizational memory and experience needed to evolve into useful programs tailored to serving a specific group of students in that specific institutional environment. Administrators with reputations for increasing their institutions' commitment to minority reform highlight the assumption that "the problem resides with Native Americans, and the solution lies with the administration" (Tierney 1992, page 110). The difficulty is seen as the inability of American Indian students to become integrated into the institution and "the solution lies in the development of ritualized activities that foster assimilation into the mainstream" (Tierney 1992, page 110). That American Indian students are disappearing from mainstream campuses as a

testament to their inability (or refusal) to assimilate is lost on these administrators.

Assimilation is not the only approach for mitigating the negative effects of cultural conflict. In a statewide study of Alaska Native values and opinions regarding education, one national expert commented:

> "the issues revolve around preparing students for college, not to disconnect children from their roots, but to prepare them to be disconnected in the college environment and survive." (McDowell Group Inc. 2001, page 10)

Huffman et al. (1986) noted that the most successful Sioux students were those that maintained their cultural identity and heritage. Astin (1982) found that minority faculty overwhelmingly credited family and community support and their strong cultural identity with their success.

> "...cultural conflict is a normal experience for native students in mainstream universities. It may well be a normal experience for all minority students. While ever minority cultures exist and flourish, it is neither possible nor desirable to make cultural conflict disappear. But it is possible for mainstream universities to do a better job than currently in assisting native students manage their cultural conflict so as to enhance their chances of academic success." (Cantrell 1992, page 227)

Native American Learning Styles

The study presented here explores using distance courses to increase the educational opportunities of professionals living and working on reservations. For these populations, it is expected that one benefit of taking a distance course while remaining at home is that the sources of social and cultural conflict in their daily lives will be greatly reduced. However, the student may still encounter

sources of cultural conflict in the course materials and in their dealings with their instructor and fellow students. What follows is a review of some cultural differences in learning styles that may lead to cultural conflict within the classroom (in this case a cyber classroom).

Many researchers have compared Native American styles of learning and interacting with those of the dominant culture (Cazden and John 1968; Cazden and John 1971; Philips 1983; Beaty and Chiste 1986; Diessner and Walker 1986; Martinez 1987; Moore 1987; Cantrell 1992; Bennett 1997; Kaulback 1997; Pepper and Henry 1997; Smith 1997; Smith and Shade 1997; Shade 1997a). These are, of course, broad generalizations. There are hundreds of culturally distinct tribes, and even within one tribe, preferred and effective learning styles will vary from individual to individual as well as with age and gender. Additionally, much of the research was conducted by mainstream researchers in previous decades. The studies and conclusions may reflect a cultural bias and/or outdated views. Nevertheless, comparisons of learning styles generalizable to Native Americans and Alaska Natives and to the mainstream culture may provide insight into the types of cultural conflict that is expected to occur in the classroom.

Worldview

American Indians try to live in harmony with nature, while the mainstream culture views nature as something to be controlled, harnessed, and manipulated

(Cazden and John 1971; Bennett 1997; Smith 1997). While Native Americans see themselves as a part of nature, common mainstream values view nature as something separate from humans, there for human consumption. Balance is important to Native Americans, while efficiency in exploiting the greatest possible amount of natural resources is valued by mainstream society.

Native Americans have a holistic view of the world (McAfee 1997; Pepper and Henry 1997; Smith 1997; Smith and Shade 1997). It is complex and interrelated; things are neither bad nor good, but exist in a delicate balance.

Ramifications in the Classroom:

Native American students are better able to grasp "the big picture" than their mainstream counterparts, and excel at holistic processing (Moore 1987; Pepper and Henry 1997). They may benefit from having the whole picture presented before it is broken down into parts. Standardized multiple-choice tests are biased against American Indians, both due to the content, which is presented from the mainstream perspective, and the American Indian learning styles.

> "It has been stated that Indians tend to learn more holistically, are more intuitive and feeling, and deal much better with concrete information and experiences. Often test questions are very particularistic, theoretical and analytical and this leads many American Indian students to view them as absurd and meaningless. Feelings and intuition, highly prized in the Native community, when used can lead to incorrect responses." (Smith and Shade 1997, page 184)

Time

That Native Americans view time differently than the mainstream culture, and that this difference will affect learning styles has been noted by several researchers. How it differs is subject to some debate. Many have noted that American Indians do not tend to plan very far in advance, which may be seen as at odds with an uncertain world (Cazden and John 1968; Cazden and John 1971; McAfee 1997). Smith (1997) puts forth a common view that American Indians place the greatest importance on the present, then the past, and lastly the future, while the mainstream view looks first to the future, then the present, and finally the past. Cazden and John (1968) acknowledge this view, but noted that a lack of familiarity with the English future verb tense and other lingual differences may have unduly led to this assumption. Moore (1987, page 30) claimed the differences in time conceptualization are "difficult for non-Indians to understand, and too complex and varied to explain here." He went on to say that while the future was just as important to Native Americans, due to differences in conceptualization classroom motivations using the future would have different results on Indian and non-Indian students.

Native Americans do not tend to live "by the clock" as mainstream society does. American Indian functions rarely begin exactly when scheduled. "Indian time lacks the exactness of mainstream social standards" (Smith 1997, page 30). While being late for an appointment is considered disrespectful by the dominant culture, interrupting a meeting to make another is viewed as disrespectful by

Native Americans. "Patience, rather than action, is stressed" (Bennett 1997, page 137).

American Indians do not view the world as linear, as mainstream Americans do, but circular and reciprocal. A Native American story may seem to wander to a non-Native, for from a non-linear viewpoint, getting to the point is not important (Smith 1997).

Ramifications in the Classroom:

A Native student may be late for class, and this will be interpreted as disrespectful or lazy by the mainstream students/teacher. "Not living by the clock" can be expanded to "not living by the calendar." Cantrell's 1992 study of Native American university students revealed that they often had trouble meeting assignment deadlines. This was compounded by social and cultural demands – the necessity of attending a funeral or other ceremony, which may last several days, or attending to sick relatives. Given that many Native peoples are close to their extended families, and that the mortality rate is much higher on reservations, obligations such as this might occur with more regularity than one would expect of members of mainstream society.

Native students are taught to deliberate carefully before answering a question, which may work against them during a timed test (Smith and Shade 1997).

Cooperation vs. Competition

For Native Americans, getting along in a group is important (Smith 1997; Smith and Shade 1997), and collective good takes precedence over individual good. Individual competitiveness and aggressiveness, valued elements in mainstream educational settings, are not valued in Native societies (Bennett 1997). A group identity is stressed, rather than individuality, and sharing is valued above saving and accumulating for oneself (Bennett 1997; McAfee 1997). Instead of openly expressing disapproval, ridicule and ostracism are used to discourage unwanted behaviors (Smith 1997).

Ramifications in the Classroom:

In general, Native students enjoy working in groups and do so more effectively than their mainstream counterparts (Philips 1983; Pepper and Henry 1997). They do not like choosing a leader of the group or being a leader of a group (see also Autonomy vs. Authority), and are able to accomplish things in a cooperative group setting better and more efficiently than their mainstream counterparts (Philips 1983). As a group they will compete against other groups, and respond better to praise or blame attributed to the entire group, as opposed to singling out individuals (Philips 1983; Bennett 1997; Smith and Shade 1997). Native traditions, with their emphasis on sharing and group good, downplay individual knowledge in favor of group learning (Cantrell 1992).

The Northwest Indian College's Tribal Environmental and Natural Resources

Management Model (TENRM) has incorporated community into their program by use of a "cohort system" whereby a cohort of students enter the program together and progress as a group. This practice was adopted to increase retention:

> "Retention of students in the program is most improved when the students feel they are part of a cohesive learning community and understand that 'everyone does better when everyone does better.'" (Berardi et al. 2001, page 52)

Given their predisposition to not be aggressive, verbose, or draw attention to themselves, Indian students do not tend to volunteer answers and take the floor in the classroom. One American Indian university student related, "We are seen as not active in class, not talkative. They assume that we are therefore not listening or that we are stupid" (Cantrell 1992, page 192). Philips (1983) noted "the teacher defines the Indian children as noncomprehending, by her failure to ratify their efforts to get to the floor" (page 127), and

> "The teacher, then, must be seen as uncomprehending, just as the students are. And it is primarily by virtue of the teacher's position and authority that the students and not the teacher come to be defined as the ones who do not understand." (page 129)

Native students may withdraw from classes when they feel conflicted, instead of speaking out (Cazden and John 1971). Withdrawing may be a means of objecting (by non-compliance) or a result of feeling incapable of conforming to the cultural demands. Mainstream instructors and classmates would likely interpret withdrawal as indifference and lack of motivation, and might expect an

individual who was not happy or experiencing difficulty to ask for help.

Autonomy vs. Authority

Indian children experience a great deal of autonomy when they are growing up. They have freedom to explore and learn their own limits, and their viewpoints are acknowledged and respected (Moore 1987; Pepper and Henry 1997; Smith and Shade 1997).

Ramifications in the Classroom:

In most mainstream schools, the teacher assumes authoritarian rule. Students are not encouraged to speak or move without first getting permission form the teacher. Indian students prefer an informal setting, with freedom of movement and a say in classroom activities (Pepper and Henry 1997; Smith and Shade 1997). Indian students prefer instructional styles that emphasize teacher cooperation, as opposed to teacher dominance (Martinez 1987). Philips (1983) found that Indian students were more likely to participate when they were in control of their behavior. For example, they were more likely to seek help from the teacher when they were working individually, than when they were working in a group. Students did not perform as well when they were not in charge of the interaction (e.g., being called upon in class) or when they were asked to be in charge of other students' interactions (e.g., when asked to call on or correct other students).

Visual vs. Auditory

Indians tend to be visual learners (Moore 1987; Kaulback 1997; Pepper and Henry 1997). From a very young age they are taken most places with their parents, observe what adults do, and are encouraged to imitate them. Mainstream children rarely go with their parents to many adult situations, such as the workplace or to adult social gatherings, and hear about those settings instead of experiencing them first hand.

Native Americans do not like to do something until they are confident of their ability to do it well (Cantrell 1992). Instead of learning by trying (trial and error), they prefer to observe and perform once they are ready and confident of their abilities (watch then do) (Moore 1987; Pepper and Henry 1997).

They are skilled in nonverbal communication and in processing visual and spatial information, less skilled in processing verbal information (Diessner and Walker 1986; Pepper and Henry 1997). Indians tend to talk only when they have something to say, and then do not to elaborate unnecessarily (Smith 1997).

Ramifications in the Classroom:

Native students tend to perform better than mainstream students in tasks that involve visual abilities, observation and learning by imitation (Cazden and John 1971). They prefer to move from the practical to the theoretical, unlike mainstream teaching norms that go from theory to practice (Pepper and Henry

1997). Native students may experience "difficulty coming to terms with the impersonality of mainstream teaching and assessment techniques" (Cantrell 1992, page 182). In mainstream schools, information and knowledge are usually transmitted through lectures or readings, rather than visual or experiential learning experiences (McAfee 1997).

> "It would appear, then that many Native children, by virtue of their predisposition to a visual learning style, may be handicapped in their ability to succeed in school because schools and teaching methods tend to cater to the auditory learner." (Kaulback 1997, page 101; Pepper and Henry 1997, page 173)

Many Native students say they do not like being called upon in the classroom, but prefer to speak at self-determined times (see also Autonomy vs. Authority; (Philips 1983; Cantrell 1992). Additionally, their tendency to not say more than necessary may put them at a disadvantage in mainstream educational settings when they are expected to give an answer that "shows what they know" (Smith and Shade 1997).

> "Language development issues are different for Alaska Native students. One former teacher states, 'many times teachers that go into the village are saying the kids don't understand them. The kids pause, think, and process, and it is very difficult for them to speak smoothly. This is a cultural difference.'" (McDowell Group Inc. 2001, page 12)

Overall Effects

The cultural incongruencies between the Native cultural norms and the mainstream may result in Native students uncomprehending the mainstream

classroom, and the mainstream classroom uncomprehending the Native student. "It seems most likely that the Indian students are experiencing communicative interference on a number of different levels" (Philips 1983, page 127). This might also present an obstacle to Native students taking a distance course that is taught within a mainstream cultural framework.

CHAPTER 4: TRIBAL COLLEGES

Tribal colleges have been able to minimize the social and cultural conflicts experienced by Native American students by providing educational opportunities on the reservation and within the local social and cultural context.

> "Community responsibility for and ownership of schools are crucial for creating a positive learning environment that respects students' civil and educational rights" (U.S. Commission on Civil Rights 2003, page 87).

However, due to their geographic isolation, modest budgets, and small student populations they are typically only able to offer a limited curriculum. This chapter provides a brief history of tribal colleges and an overview of the challenges they face and the opportunities they provide.

History

Until the first tribal college, Navajo Community College (now called Diné College), was established in 1968, postsecondary educational opportunities did not exist on reservations. In 1961 only 66 American Indians had graduated from four-year institutions. By the 1972-73 academic year, 23,000 were enrolled in colleges and universities (Pavel et al. 1999). Funding made available by the Comprehensive Community College Act of 1969 inspired many tribes to establish colleges. Between 1978 and 1988, the numbers of Native Americans in

four-year universities and colleges dropped in South Dakota, North Dakota, Montana, and New Mexico, and there was a corresponding rise in the number of Native Americans in two-year colleges, especially tribal colleges (Tierney 1992). By 2003, 34 tribal colleges had been created (U.S. Commission on Civil Rights 2003).

Challenges

Tribal colleges were developed by and for tribes, and tribal leaders have had to rely on their own initiatives to build these institutions from scratch with very limited resources (Tierney 1992). Locating funding, qualified and committed staff and faculty, and facilities have remained constant struggles for most tribal colleges.

> "Administrators, faculty, and staff are generally underpaid compared to counterparts at other community colleges across the country, and they are asked to carry out a wide array of duties beyond their job description." (Pavel et al. 1999, page 143)

In the 1996-1997 school year the average salary for a full-time instructor (nine- or ten-month contract) was $23,964 at a tribal college, $43,730 at non-tribal two-year college, and $49,855 for faculty at all public institutions in the U.S. (U.S. Commission on Civil Rights 2003). Tribal colleges are funded by Public Law 95-471, the Tribally Controlled Community College Assistance Act of 1978, which authorized $5,860 per full-time equivalent (fte) student enrollment. Tribal colleges have never received anything close to this. In 1992 Tierney (page 114) reported that tribal colleges were receiving just $1900 per fte, while public

community colleges received $3553 per fte and public four-year institutions between $6,800 and $11,000 per fte. In 1999, Pavel et al. (page 145) reported that tribal colleges received $2,861 per fte, while in 2003, the U.S. Commission on Civil Rights (page 94) reported that tribal colleges received $2,900 per fte (just half the amount authorized 20 years previously), while non-tribal community colleges received an average of $7,000 per fte.

Employment at tribal colleges can be uncertain, and frequently teachers do not know if they will be rehired until the semester begins. There is generally a high turnover in instructors that are not from the reservation, who typically last no longer than a year or two, although there are exceptions (Tierney 1992; McDowell Group Inc. 2001). There can be frequent turnover in the college administration, as well. The great distances, sparsely distributed population, poor road conditions, limited communication, and sometimes harsh weather add to the difficulties. Despite this, tribal colleges are often some of the most stable institutions on the reservation (Pavel et al. 1999).

Many tribal colleges also struggle with identity: what does it mean to be a tribal college? There are no institutional role models or templates. The common, overarching goal of all tribal colleges is "to provide education and training commensurate with tribal aspirations for self-determination" (Tierney 1992, page 116). For many communities, this goal includes developing along culturally appropriate lines and promoting cultural values and activities, as well as

providing course credits that transfer to other universities and colleges and preparing students to succeed in a multi-cultural world (Tierney 1992; Pavel et al. 1999). Unfortunately, these goals are generally at odds with each other as accreditation standards have been developed along mainstream cultural values. To gain accreditation (and access to more funding) means to forego developing along cultural lines into something unique and appropriate. To forego accreditation means to forego the prestige and much-needed funding that goes with it. Also, without accreditation, tribal college credits will not transfer to mainstream schools.

Sources of Empowerment or Second Rate Education?

Tribal colleges are regarded by some as sources of pride, empowering institutions that validate the tribe's sovereign nation status in tangible ways by providing opportunities for self-directed community development along culturally appropriate lines. Tribal colleges are true community colleges, serving not only enrolled students but the community as a whole, and receiving the support and direction of the community in return (Pavel et al. 1999). Oglala Lakota College, for example, developed college centers in each of the reservation's nine districts. A board member from each district sits on the college's board of trustees. Non-student community members freely use these centers as information centers, asking questions "ranging from treaties to how to contact federal elected officials or agency directors. This interaction enhances the people's sense of being stakeholders in the college" (Dellinger 2001, page 15). Many tribal colleges have

open door policies that allow tribal members to use the computer facilities (Pavel et al. 1999). The communities are frequently involved in formal and informal decision-making and offer support by encouraging high school students to attend the college.

Other tribal members view tribal colleges as academically inferior schools serving students that are unable to attend more academically rigorous universities (Tierney 1992; Pickering 2000b). Like community colleges, tribal colleges are better able to serve students that don't possess the academic background needed to do well in a mainstream university. Class sizes are small and the students receive individualized attention. Successful instructors are patient, understanding of the students' extenuating circumstances, and willing to make every effort to see that the student eventually succeeds (Pavel et al. 1999). They assume many different roles, acting as instructor, counselor, advocate, and sometimes even chauffeur, driving long distances to collect students for school events. McGrath and Buskirk (1999) refer to this as social and emotional capital development, necessary in creating a community college that helps students manage powerful negative emotions, view the future in a positive light, and view themselves as being able to cope with events.

On average 67% of students at tribal colleges are women, 30 to 40% of the women are single heads of households working part-time, and many take four to five years to complete their two-year degree (Townsend et al. 1999). Most are

first generation students, essentially breaking family tradition by attending college. As such, they face more adjustments than children of college graduates, for whom college is expected. First generation college students cannot turn to their families, who are just as inexperienced in college life as they, for support and understanding (Terenzini et al. 1994). It is not uncommon for students to "stop out," or discontinue their studies for a period of time due to extenuating circumstances and re-enroll when they are able. This is such a common experience for Native students that Northwest Indian College has developed a non-abandonment policy that allows and encourages students to complete coursework however long it takes (Berardi et al. 2001). It is also common for students, many of whom lack a sound academic background, to repeat classes several times before successfully passing them. It can be especially frustrating to finally pass preparatory classes such as pre-algebra after several attempts, only to have their eligibility for federal financial aid terminated due to the number of years they have been in school, leaving them unable to proceed to the more advanced classes.

The few students who have transferred to four-year colleges from tribal colleges have found they are not prepared for the academic rigor of the mainstream institution or the feelings of isolation (Tierney 1992). This is not an experience of tribal college students alone; although two-year institutions are often portrayed as places for students to address their "academic deficiencies" before moving on to four-year institutions, "relatively few students who attend community colleges

actually transfer to a four-year institution and receive their degrees" (Tierney 1992, page 31). Agreements intended to facilitate the transfer of credits from community colleges to universities are often lacking or purely symbolic, and in many cases the courses offered at community colleges are vocational in nature and do not prepare students for four-year institutions or contribute to four-year degree requirements. Dougherty (1994) found that community college students in four-year colleges drop out at higher rates compared to other students. Some educators have described two-year institutions as places that "dampen down [student] desire" (McGrath and Van Buskirk 1999, page 15).

Unique Opportunities in Research and Education

Tribal colleges are able to offer courses not taught anywhere else, from religious studies to ethnobotany. Many require that students take a certain number of hours of the tribal language, as well as history and cultural studies (Pavel et al. 1999). Teachers are strongly encouraged or required to become familiar with local traditions by participating in ceremonies and community events and to learn the native language, if they don't speak it already (Tierney 1992; Dellinger 2001). The focus of the tribal college is the community, and every attempt is made to promote the values and norms of that culture by offering "curriculum that focuses on the group's heritage and developmental needs and using pedagogical processes known to be effective for the group" (Townsend et al. 1999, page 235).

Tribal colleges also have unique research opportunities that are closely associated with their missions of cultural preservation and self-determination. Diné College developed the Navajo Place Names Project, a study that involved interviewing mono-linguistic elders about the place names for geographic features in the area. The project was carried out solely by college staff and is used in the college's language classes (Nakai 2001). College students are often involved in the research, and are able to gain experiences unavailable to undergraduate students at large mainstream campuses. Mortensen et al. (2001, page 29), in a survey of faculty from 19 tribal colleges, found that all but four of the colleges considered students

> "integral to the research process. Students were described as 'partners,' 'aides,' 'translators,' and 'research assistants,' doing work such as gathering data in the field, entering information on the computer, and presenting results at formal meetings. One researcher stated, '[w]e treat them like graduate students, and they often rise to the occasion.'"

However, due to the heavy teaching loads, poor infrastructure, and funding constraints, research can be a challenge to undertake at a tribal college.

Some cooperative relationships exist among tribal colleges allowing them to pool resources and increase curriculum offerings (by offering distance courses from one tribal college to another) while maintaining the autonomy and values important to the tribal colleges (Dellinger 2001). Some tribal colleges have also partnered with state universities to increase their undergraduate offerings and even offer graduate courses using distance education (Pavel et al. 1999). In 1994, Congress established 29 tribal colleges as land grant institutions,

increasing their access to federal funding. Since then, two more tribal colleges have been designated, bringing the total number of 1994 land grant institutions to 31. Initially, the 1994 institutions could not apply for extension funding directly, but had to work with one of the original land grant institutions established in 1862, which would then administer extension monies to 1994 institutions and consult on the projects. Although some positive relationships developed from these collaborations, this arrangement occasionally resulted in feelings of animosity between the 1994 institutions and the 1862 institutions. In some cases, the 1862 college would take half the funding in overhead. As a result, some tribal colleges felt that collaboration unfairly benefited the 1862 institutions, and they resented the paternal nature of the situation. In 1999, the administrative and consulting requirements were lifted, and since then other competitive grants have been developed which the 1994 colleges can apply for directly (Phillips 2003).

By increasing the qualifications of tribal college instructors and tribal government employees, tribal communities increase their ability to access funding from competitive grants such as these. This enables them to define the research objectives they wish to tackle, and the manner in which they will carry out the research. This might prove to be a motivating factor for tribal communities to encourage and support their members to pursue graduate coursework and degrees.

CHAPTER 5: DISTANCE EDUCATION

Much has been written about distance education, how it compares to face-to-face education and whether it is an appropriate medium for an advanced degree. In this chapter I present comparisons of distance students with traditional students and distance education with face-to-face education. I also examine how a sense of community is established in distance classes and how it lends to student learning and persistence. The chapter ends with a review of some strategies for on-line instruction and student development.

Distance Students' Time, Motivation, and Persistence

Distance students are typically older than students attending university, and often have jobs and families (Schuemer 1993). Adult working students with active lives have less time to study than full-time students. "Part-time nontraditional students may encounter a tremendous amount of stress due to the multiple life roles they have" (Denton 1991, page 37). Coldeway (1991) found that distance students did not study consistently and their study was frequently disrupted by events in their work or personal lives. He also noticed that attrition rates for distance courses were inflated by non-starts: students that enrolled in the course

but did very little or no work and did not officially withdraw. It appeared that the course itself had very little impact on the non-starts failure to participate.

Exactly what differentiates non-starts, non-completers, and failers from completers and passers of distance courses is subject to debate. Wilkes and Burnham (1991) and Schuemer (1993) observed that students that dropped out did not do so due to a lack of motivation, but due to lack of time coupled with the demands of home and work. On the other hand, Garland's 1993 study of the motivations for student withdrawal from distance courses found that a lack of time was a socially acceptable and simplified explanation of the difficulties the students were encountering. The real reasons included:

> "lack of prerequisite knowledge, with the course content itself in terms of both understanding and relevance, lack of support from peers and family, stress, poor marks, procrastination, a need for face-to-face interaction, adult pride, poor tutor feedback, weak goal commitment, a fear of failure, and other explanations." (Garland 1993, page 8)

Completers, however, reported encountering the same problems.

One can argue that we all have the same amount of time, and what differs is how we choose to spend it. Goal commitment and our skill at managing life events and outside matters that compete for our time and attention may be a more significant factor in whether or not a student completes a course than time constraints, which both completers and drop-outs find challenging (Laube 1992; Zimmerman and Martinez-Pons 1992; Bernt and Bugbee 1993). "Success depends on being successful at self-regulation, that is, being able to initiate goal-

directed behavior and bringing it to a successful conclusion" (Stein and Glazer 2003, page 9). A positive attitude, good time management skills, concentration, and diligence are some characteristics of completers.

Kemp (2002) found that life events did not influence persistence in a distance course and neither did external commitments (family, personal, home, community, financial) with the exception of work. Rather, students high in measures of resilience succeeded. These resiliency measures included the ability to develop and maintain healthy relationships, the ability to master oneself and one's environment, the ability to make things better, persistence at working through difficulties, and the confidence to make the most of bad situations. Interestingly, previous success in a distance course did not contribute to success. It is likely that different individuals have different levels of resilience and some will therefore cope better with life events than others. It could be not so much that life events and external commitments do not affect a student's ability to succeed, but that different students have different thresholds for how much they can handle.

Distance vs. Face-to-Face Classes

When they are motivated and have the study skills, distance students can perform as well or better than traditional students (Whittington 1987; Souder 1993; Aragon et al. 2002; Neuhauser 2002). Although students have a slight preference for face-to-face classes, their satisfaction levels in distance and face-

to-face courses do not differ and distance students appreciate the convenience of taking courses close to (or from) home, especially if it is their only option (Souder 1993; Schlosser and Anderson 1994; Allen et al. 2002). The frustrations encountered by distance students are similar to those expressed by part-time adult learners in traditional classrooms (Wilkes and Burnham 1991). Aragon et al. (2002) and Neuhauser (2002) found that students performed equally well in distance and face-to-face classes regardless of their preferred learning style, although upon completion of a course on-line students were more reflective and reported a higher preference for abstract conceptualization, while face-to-face students used more outside support materials and engaged in active experimentation more. These differences may have resulted from the students' adoption of learning strategies that matched the delivery format.

The delivery method of a distance course does not affect learning as much as the quality of teaching. "The question is not which medium works best, but what is effective instruction" (Whittington 1987, page 54). Wilkes and Burnham (1991) observed "Some researchers believe that motivated students learn from any medium and that, in many instances, students learn not from the medium or system used, but in spite of it" (page 43). Improvements in delivery technology will not necessarily correspond to improvements in teaching and learning. "Research suggests that effective distance learning is more the result of preparation than innovation" (Willis 1993, page 22).

Communication and Community

Holmberg (1987; 2003) developed a theory of distance education based on communication theory. He assumed that the basis of teaching is interaction, emotional involvement contributes to learning pleasure, and learning pleasure in turn supports student motivation. Garrison (1990, page 13) argued that

> "Education, whether it be at a distance or not, is dependent upon two-way communication. ...Simply accessing information is not sufficient. In an educational experience, information must be shared, critically analyzed, and applied in order to become knowledge."

Studies have shown that distance student involvement and the development of positive relationships with the instructor and fellow students lead to increased student satisfaction and enhanced persistence (Wilkes and Burnham 1991; Conrad 2002; Moore 2002; Stein and Glazer 2003).

Initially, students' sense of engagement with a class is most dependent on receiving clear and complete instructions from their instructors; however, the development of a community of learners should proceed immediately (Conrad 2002). Developing a sense of community among students is a more deliberate process in a distance course compared to a face-to-face class. Tu and McIssac (2002) identified three elements important in establishing a social presence among on-line learners: social context, online communication, and interactivity. Having a place to post autobiographies or introductions on the course site builds trust, develops social context, and increases students' "positive feelings towards the instructor and other students, their sense of community on-line, and their overall satisfaction with the course" (Woods and Ebersole 2003, page 106).

Informal, interested, and caring communication styles positively influence students' feelings towards others and promote exchanges that influence learning and "recognize the value of peer learning and experiential richness and envelop and acknowledge the contributions of group members" (Conrad 2002, page 208). Prompt responses to student questions or assignments also increase student motivation and performance (Willis).

In a face-to-face class the instructor is constantly receiving non-verbal feedback from the students. They easily notice who is paying attention, who is bored, sleeping, or frustrated, who is late or ill prepared. This type of feedback is lacking in a distance course and instructors must be proactive in their communication to seek out this information (Willis 1993; Conrad 2002; Kanuka et al. 2002). Communicating with students frequently to ensure they understand what is expected of them and are not having trouble enhances performance and persistence. By initiating informal and frequent contact and asking if there is a problem and offering help as soon as the instructor notices a lag in performance, the instructor can encourage the student to seek academic help when they need it. Academic help-seeking is a strategy used by successful students. While attitudes to help-seeking may have developed and become ingrained over long time scales, Newman and Schwager (1992, page 141) note that "...definite actions can be taken by the teacher so as to affect student perceptions of the classroom and thereby facilitate [students] seeking needed assistance." In a distance course where it is easy for students to feel isolated, they may not know

what forms of communication and help-seeking are appropriate, and modeling these behaviors early on can affect students' attitudes towards help-seeking.

On-line Teaching Strategies and Student Development

For adult distance students, especially those who have been out of school for sometime, developing confidence in their abilities as a student is important for success (Denton 1991; Morgan 1991). As students gain confidence, they become more selective in what they attend to while studying. Taylor and Morgan (1986, in Morgan 1991) identified three key areas in student development: confidence, competence, and control in learning. Acquiring confidence, competence, and control in learning allows a student to use what Ramsden (1988) describes as a "deep approach" to learning, characterized by an intention to understand, focusing on what is significant, relating ideas to everyday experiences, and having an internal emphasis.

Distance instructors can enhance and promote student development in a number of ways. Adult learners come to class with a wealth of life experiences. Recognizing these experiences and incorporating them into the academic environment builds student confidence and demonstrates how the course material relates to their lives (Denton 1991; Kanuka 2001), positively influencing interest, motivation, and deep learning. On-line group discussions are another way to explore topics more deeply and allow students the opportunity to relate their experiences and perspective to the topic at hand. Quickly returning

assignments with meaningful feedback is necessary to develop student confidence and alert students if they have missed a key point. Offering students choices (e.g., in presentation and discussion topics, formats, and timing) allows them to assume responsibility for their learning. Flexibility in the face of adult life constraints is also valued by students (Stein and Glazer 2003), and increases their sense of control over learning and of being respected by their instructor.

At the other end of the spectrum is the "surface approach" to learning, characterized by an intention to complete requirements, memorizing information in order to pass assessments, and treating the information as unassociated with one's daily life (Ramsden 1988). Distance courses are often composed of highly structured and ready-made lecture materials that do not adapt to the students' experiences and perceptions, or allow them any control. If not augmented with interactive and flexible components, these static course materials promote acceptance and memorization of the material instead of understanding (Schuemer 1993; Kanuka et al. 2002). Unfortunately, Kanuka et al. (2002, page 166) noted

> "Experienced distance education instructors tend not to design their courses with a great deal of flexibility – even though they acknowledge that the Internet communication technologies can support it."

It should not be assumed that surface learning is more typical of distance courses and a symbol of their inferiority, while deeper learning is more typical of traditional university courses. Ramsden et al. (1986) found that students in a

traditional on-campus university setting preferred surface learning strategies, and when asked to try strategies for deeper learning they recognized their effectiveness, yet quickly gave them up anyway. When faced with large amounts of material in many different subject areas and short-term tests and exams, surface learning may be an easier and more effective way of coping with the workload and maintaining grades.

Ultimately, it is up to the student to decide at what level they will attend to their studies, whether at a deep or surface level, and this will depend on "their self-defined goals and purposes for the tasks as well as their beliefs about the tasks and themselves" (Pintrich and Schrauben 1992, page 150). Strategies to engage students in a deep approach to learning do not always have the intended consequesces: "In fact, there is often a large mismatch between an author's assumptions and expectations and what students actually do with these teaching devices" (Lockwood 1991; in Morgan 1991, page 10). It is likely that students use both deep and shallow approaches to learning and switch between the two as their time constraints and interest vary. Given this, providing opportunities to engage students at a variety of levels may be the best bet:

> "Intrinsic goals, of course, lead to deeper levels of cognitive engagement, but lacking an intrinsic goal, it is important to be motivated extrinsically, to participate in the classroom and not be alienated from it." (Pintrich and Schrauben 1992, page 169)

It should be expected that not all students will be equally comfortable with the technology, especially older students (Allen et al. 2002). Encouraging students

to use the various features of the on-line course early on, in non-threatening ways, will help them to overcome anxiety they may have due to the new technology, lessoning their stress and instilling confidence (Willis). "Training students to use the medium comfortably is crucial to the success of collaborative learning" (Tu and McIssac 2002, page 135). It is also important to be understanding of and responsive to technical problems and questions, in order to avoid (or minimize) frustration with the method of delivery.

CHAPTER 6: THE INTERNET IN INDIAN COUNTRY

In this chapter I examine the adoption of and access to the Internet in Native communities, both of which have lagged behind the rest of the country. I end with a description of some ways in which Native communities are incorporating the Internet and distance education into their curricula.

Adoption of the Internet in Indian Communities

When the Internet was first gaining momentum, few traditional rural American Indian people had access. Indians based in metropolitan centers and on university campuses developed Native sites and participated in discussion groups such as TribalGov and TribalLaw. Those living on reservations felt the people representing Indians on-line were removed from the tribal mind-set. Two Horses (1998, page 31) described a

> "paucity of Indian participation in the Internet generally. This can be attributed primarily to two factors: first, Indian people simply do not have access to the Internet in significant numbers; and second, many Indian people have come to regard much of the online communication as unreal and disconnected, particularly from reservation life and issues."

Worse yet, "fake Indians" or "wanna-be's" published a number of websites

appropriating the Indian perspective (see also Jojola 1998; Warner 1998), creating "a climate of deep distrust among Indian people, particularly those exposed to the Internet" (Two Horses 1998, page 35).

Some felt that the Internet was at odds with tribal values and that "the pervasive universalism and individualism of the World Wide Web are antithetical to the particular localities, societies, moralities, and experiences that constitute tribalism" (Howe 1998, page 27). Others saw it as an opportunity, a tool that could be used to "preserve, maintain, and revitalize traditional languages and cultures" (Sanchez et al. 1998, page 1) while "frustrating the ends of assimilation" (page 2). "Native American societies have 'lived in two worlds' for hundreds of years and often see technology as just another impact that they must adjust to" (Ereaux 1998, page 131).

Internet Access in Indian Country

Access and participation have increased for tribal communities, although they still lag behind the nation. Telecommunications in Indian Country are less developed than elsewhere in the United States. Of rural Native American households, only 76.4% have access to a telephone, 26.8% have access to a computer, and 18.9% have access to the Internet, compared with the national averages of 94.1%, 42.1% and 26.2%, respectively (Davis and Trebian 2001). Telephone and Internet connections and electricity are often unreliable on reservations. Computer equipment may be second-hand and obsolete or almost so,

representing "only minor progress that still leaves poor communities behind the technological curve" (Davis and Trebian 2001, page 43). In 1999 only 76 of 185 BIA supported schools were connected to the Department of Interior Internet service (Casey et al. 1999). A court order on December 5, 2001 required all Department of Interior web servers be shut down in order to protect individual Indian trust data (Griles 2001). BIA schools been asked to disconnect from the DOI web service three times since 2001 leaving them without Internet connection and disrupting school curricula and administration for prolonged periods of time (Warren 2004). Environmental factors on reservations can also disrupt service. In a speech pathology distance training program on an Apache reservation in Arizona, daily lightening strikes during the summer monsoons caused voltage surges and interfered with microwave telephone transmission such that the on-line portion of the program was suspended for over a month (Culbertson and Tanner 1998). Sparse electrical supplies and even sparser electrical outlet stores made hooking up the computers a trial, and the lack of experience with a mouse and electronic communication were a challenge for the students.

The Internet and Education in Indian Country

Despite these obstacles, more and more sites are being developed by and for American Indians. Many tribes still approach the Internet with caution. Salish Kootenai College, for example, had open discussions about the cultural impact computers would have and their place in the school before they decided to go online (Ereaux 1998). Posting cultural, lingual, and tribal information while

restricting access is a strategy many tribes have adopted. "The goals are first, to make the technology widely available; second, to be sure that it contains tribally and culturally relevant material; and third, to restrict access" (Sanchez et al. 1998, page 8). Elders and tribal leaders act as the gatekeepers of Indian information and decide what should be shared on the Web and what should not (Warner 1998; Davis and McLeod 1999).

Most tribal colleges have websites, although in 1999 only 100 of 550 tribes had websites (Casey et al. 1999). A number of databases have been created for use by Native learners, such as the Alaska Native Knowledge Network (http://www.ankn.uaf.edu/). More schools in Indian Country are using the Internet in their classrooms and developing Internet based projects. Four Directions (http://www.4directions.org) is a program developed by the Pueblo of Laguna Educational Department with funding from a 1995 U.S. Department of Education Technology grant. The program had yearly summer institutes through 2001, developed school web projects, included on-line distance courses for teachers, and created databases of curriculum tailored to American Indian students (Roy 1998).

Tribal colleges have begun developing on-line distance courses to reach rural Native Americans not currently served by tribal colleges, allowing them to "stay in their communities, surrounded by their cultural teachers, and access four year degrees from other universities, some of them tribal universities" (Ambler 1999,

page 7). Tribal college students benefit from the Internet by being able to meet scientists and experts that they would not otherwise. However, tribal colleges do not want

> "to be a conduit for curriculum produced by mainstream institutions. Tribal Colleges were created in large part because other institutions have failed to educate Indian students. Offering too much mainstream curriculum would degrade their ability to fulfill their missions." (Ambler 1999, page 7)

Salish Kootenai College (SKC) has been involved in distance education since 1981 and now offers distance degrees on-line (Stein and Jetty 2002). In 2002 they offered 152 on-line distance courses, and were in the process of developing 52 more. One lesson SKC has learned is to keep the technology simple. Video and audio simply make download times slow for students who are using old, slow connections. They have conscientiously kept their distance program apolitical by not duplicating coursework already offered by other tribal colleges, focusing instead on third and fourth year courses. To improve and increase distance educational opportunities for rural American Indians in Montana, SKC formed the Montana Consortium with two other tribal colleges, Fort Peck Community College and Little Big Horn College, and Rocky Mountain College, a private liberal arts school (Wetsit 1999).

The distance courses offered through the Montana Consortium encourage the inclusion of culture in discussions and

> "every effort is made to implement an aspect of culture(s), whether it is the students themselves bringing something into the class concerning their tribal culture(s) or teachers implementing it directly into the lesson plan." (Stein

and Jetty 2002, page 24)

It is important that tribally based schools do not just teach about culture, they teach though culture (McDowell Group Inc. 2001).

> "The Salish Kootenai College team said they want to define education in terms of traditional storytelling where context is more important than content. Using graphics, sounds, works, linking, and other tools supported by the Internet, they are building courses where ideas and information about subjects are integrated into stories designed to breathe life into the learning process." (Davis and McLeod 1999, page 12)

Instructors with the Montana Consortium employ cooperative learning models and peer support to humanize the students and instructors, and instructors are required to deliver on-site classes at least twice each academic term to bridge the geographic gap and further student/instructor relations (Ambler 1999; Wetsit 1999).

There has been little research examining Native American learning through an on-line format. "This technology requires highly motivated students who have strong writing ability. Will it exclude many of the students the tribal colleges want to serve?" (Ambler 1999, page 6). Some tribal colleges are adopting practices for their on-line courses that take into consideration the distance learner and Native American learning styles (Davis and McLeod 1999). Bay Mills College allows the student to identify their learning style and then sign up for on-line courses appropriate for their style. They are studying Native American learning styles to serve their population better. Leech Lake Tribal College is designing on-line courses that reduce the teacher's role as information-giver, instead promoting their role as mentors and guides that help students explore topics. A

literacy program developed on cultural teachings by and for the M'Chigeeng First Nations of Manitoulin Island, Ontario, will include an on-line component that develops self-management and self-direction in addition to literacy skills (Jones 2003).

CHAPTER 7: PREMISE AND METHODOLOGY

The objective of this study is to examine the social and cultural conflict experienced by tribal college and tribal government employees within the context of an on-line graduate level distance course offered by a mainstream university. It also examines the reasons cited by tribally based professionals for taking or not taking the course in an attempt to assess the obstacles to and motivations for participating in distance courses. The study is exploratory in nature and employs a qualitative study design.

Premise

This information will be useful in identifying constructive and realistic methods of improving educational outcomes for future students. It will also add to the body of knowledge regarding Native Americans and mainstream higher education, specifically distance education. It has been established that cultural conflict contributes to the distress that many American Indian students experience when attending mainstream institutions (Cantrell 1992; Tierney 1992), and it is expected that this would also be the case for American Indian students taking distance courses from mainstream universities. With a distance course, however, the cultural conflict would be limited to the course itself, and not

pervade every aspect of the student's life as occurs when a student moves out of an American Indian community to attend college. Currently, few studies have reported on the success or failure of mainstream distance course offerings in Indian Country. Given the rise in web-based distance education courses and degree programs, and as Native Americans comprise one of the fastest growing populations, this information could stand to affect a significant number of future students.

Methodology

Tribally based professionals were chosen as the target population for this study for several reasons. Some studies indicated that successful distance students generally have had previous academic success, are confident in their scholarly abilities and self-motivated, and have developed good study habits and time management skills (Bernt and Bugbee 1993), qualities more likely found in professionals seeking an advanced degree. Many tribal governments and tribal colleges encourage their employees to advance their education. Some of the benefits of an increasingly academically qualified staff are expanded professional capacity, increased prestige within the community, increased competitive advantage when applying for federal funding or contracts, and, for tribal colleges, gaining accreditation. Tribal colleges already serve the undergraduate populations on reservations more appropriately than a distance program from a mainstream institution could, providing a level of encouragement, tutoring and mentoring that is unattainable through a distance course, all within the local

cultural context.

I developed an on-line range ecology course (RS531: World Grassland Ecogeography) strictly based on a course taught on campus by Professor W. K. Lauenroth. The on-line course followed as closely as possible the content, grading, presentation, style, and delivery of the classroom version. I made some changes to the course to encourage student participation, focus the students' attention in the absence of verbal and nonverbal cues, and to provide an incentive to keep up with the course. These changes are outlined below.

In the on-line version of RS531 the students are allowed flexibility in their schedule. While they must read two lectures and complete one lab each week, just as they would do in the classroom, they are allowed a full week to complete all assignments and can do their work at any time during the week. In the classroom, the students must attend the lectures and labs at specified times.

To familiarize the students with the technology of the on-line classroom in a non-threatening manner and reduce anxiety early on, I assigned one assignment and one quiz the first week of class. The first quiz covered a paragraph-long reading on how to take a quiz on-line. Students could take the quiz as many times as they wanted. The purpose was to make them comfortable with the on-line quiz function. Students could contact the instructor and other students from within the course website via e-mail or by posting messages on an electronic bulletin board

viewable to everyone in the course. The first week's assignment was to post a message on the bulletin board introducing oneself to the class. As the instructor, I posted the first introduction as a model. Students received points for their introductions, ensuring an automatic success early on that would hopefully boost their confidence. In addition to familiarizing the students with the bulletin board function, this assignment also served to make the course interactive by developing relationships and an understanding and respect of the different backgrounds represented by the students. It was also designed to establish an informal and safe environment that encouraged participants to share their ideas and ask questions.

To help direct and focus student learning, each lecture began with a list of objectives and ended with a list of study questions. To encourage students to keep up with their readings, there was a timed lecture quiz each week that covered that week's readings. The intention of the weekly lecture quizzes was to encourage the students to keep up with the syllabus, making the course a priority even with their busy schedules. The quizzes consisted of five questions taken from the list of study questions at the end of each lecture. The quizzes were available from the Monday morning the lecture readings were assigned to the following Monday morning. A full week was given for all assignments, to allow the most flexibility for student schedules. In this way, students could work on the course during work hours, on work days after work or on breaks, or on the weekends, as best fit their circumstances.

The final substantial change dealt with the plant identification component of the course. In the classroom, students learn to identify plants by studying dried and pressed mounts of plant specimens. In the on-line version, students studied photographs of plants from the course website. They were not required to learn as many plants as the on-campus students (137 vs. 220) as there were not photographs available for each specimen. While in most cases, the photographs give a truer representation of the plants than dried and pressed mounts, the mounts are certainly better for conveying texture, the cross-sectional shape of stems, and scale.

The course was advertised to tribal college instructors and tribal government employees in the Winter 2002 edition of From the Eagle's Nest, a publication of the Native American Fish and Wildlife Federation (Appendix I). Advertisements were also distributed via e-mail to the Tribal Environmental and Natural Resource Educators Society and several other Native American professionals and tribal college instructors with a request that the e-mail be forwarded to anyone interested (Appendix II). Anyone who expressed an interest in the course was encouraged to attend, whether they were associated with a tribal government or tribal college or not, and sent additional information regarding the course (Appendix III). The course began in March of 2003 and lasted 16 weeks, ending in July of 2003. The course was worth three graduate level credits and cost $200.00, much less than the average cost of a graduate level distance course credit in ecology from Colorado State University at the time ($1,080.00). The

cost was reduced to make it more accessible to the target audience, and advertisement for the course stressed that the low cost was in return for student input into the course structure, content, and design.

Upon completion of the course and release of the final grades, the students were asked to take part in a survey in which they described any cultural or social conflict they experienced while taking the course, its effect on their performance, and how they dealt with it (Appendix IV). The survey questions pertaining to cultural conflict were based on Cantrell's 1992 study "Cultural conflict among Native American and Australian Aboriginal students in mainstream universities." The students were also asked to describe any other difficulties they encountered and how they dealt with those, as well as their motivations for taking the course. The survey questions were open-ended, designed to illicit in depth responses unbiased by preconceived notions on the part of the researcher (Appendix V). The survey was delivered on-line from the course website and responses were anonymous. Text boxes 50 lines long and 100 columns wide occurred after each question, allowing the student 5000 character spaces or approximately 1000 words. No student completely filled a text box, indicating they had ample room to type their answers.

Those who expressed an interest in taking the course but did not register will be referred to as non-students. I contacted non-students by e-mail and asked them to participate in a study regarding motivations for taking or not taking an on-line

course (Appendix VI). The survey questions were included within the text of the e-mail and also attached to the e-mail in two common document formats (Appendix VII). Two weeks after the initial e-mail contact I called non-students and asked them to participate either by responding to the e-mail or by answering the survey questions over the phone (Appendix VIII). I transcribed the responses of those who chose to answer over the phone as the interview took place.

I compiled the survey responses and scanned them for data in the form of words, phrases, and sentences that represented the students' perceptions. The data was then sorted into intuited categories based on the subjects and themes that emerged. The percentage of responses which mentioned a theme were then calculated for each question. Given the small sample size, no tests for significance or correlations were preformed.

Participation and performance are compared between those that received an incomplete in the course and completers. The grade at stopping point was calculated for each student by dividing the points earned by the total possible points at the time the student stopped participating. For completers, this is simply their final grade. The number of email messages sent to and received from the instructor, the number of messages posted on the bulletin board, and the number of times the main page was accessed by the student are used as indices of performance. These numbers were adjusted to facilitate comparison between the two groups by multiplying by the percent of the course completed (in

terms of time).

CHAPTER 8: RESULTS

Thirty-six individuals responded to the advertisement and expressed an interest in taking the course. Of those, ten enrolled in the course. One student dropped the course immediately. For the purposes of the survey, that student is considered a non-student, someone who expressed an interest in the course but did not take it. Of the nine students, eight completed the survey for a response rate of 89% (Table 8.1). Of the 27 non-students, 16 responded for a response rate of 59%, and an overall response rate of 67%.

Table 8.1 Survey response rate

	Total	No. of responses	Response rate (%)
Students	9	8	89
Non-students	27	16	59
Total	36	24	67

Responses to questions regarding student and non-student motivation and support are addressed first. Second, responses regarding difficulties and cultural conflict encountered in the course and how the students dealt with them are presented. Finally, participation and performance in the course is examined. Responses did not differ greatly between students and non-students for any of the questions, so only the total response rate is presented.

Motivation and Support

Of those interested in the course, 57% described themselves as Native American or American Indian, 39% were white, and 4% other (Table 8.2). One did not discernibly answer and so that response was thrown out leaving an N of 23.

Table 8.2 How would you describe your ethnicity?

	No.	%
Native American	13	57
White, non-Hispanic	9	39
Other	1	4

N=23

About half (46%) were tribal government employees and 38% were tribal college employees (Table 8.3). Private sector employees accounted for 13% and university students 17%. The occupation categories were not mutually exclusive, so totals exceed 100%.

Table 8.3 How would you describe your occupation?

	No.	%
Tribal government employee	11	46
Tribal college employee	9	38
University student	4	17
Private sector employee	3	13

N=24

Most people (79%) were interested in the course content (Table 8.4). Several (42%) mentioned that the knowledge would be useful in their line of work, whether that be as an educator or a natural resource manager.

> "I hoped to glean topics from the course to interject into courses I teach at a tribal college."

"Because we have a large reservation – landforms are 18 million acres, and I haven't been in a geography class in two decades. Words like ecology and sustainable hadn't been invented, so it would have been a nice update for me and to combine range and geography would have been education for me and self-improvement."

A few (13%) were interested in experiencing an on-line course as a student.

"To experience taking an on-line course and test its effectiveness for future coursework."

Table 8.4 Why were you interested in taking RS531: World Grassland Ecogeography?

	No.	%
The course content sounded interesting.	19	79
The subject matter would be useful in my job.	10	42
I needed the course credit for degree requirements.	5	21
I wanted to experience an on-line course.	3	13
The course was very affordable.	2	8
As it was on-line, I could easily access it.	2	8
Learning from the other Native peoples in the class would be an asset.	2	8

N=24

Lack of time was the most commonly given reason for not taking the course (75%; Table 8.5).

"I felt I couldn't make the time commitment given all my other responsibilities."

"My work load was too busy."

"I'm a supervisor and don't have time."

Table 8.5 Why did you not take the course after all?

	No.	%
Because I was busy and/or had scheduling conflicts.	12	75
Because of registration difficulties and/or delays.	5	31
Because I didn't meet the criteria.	1	6
Because of the cost.	1	6

N=16

Some people (13%) experienced registration difficulties or became frustrated with delays on the part of the university. As this was the first time the course was offered on-line, it had to be approved by the university curriculum review board before it could be offered. Approval took longer than anticipated and resulted in the course beginning later than initially advertised.

> "[I] didn't get enrolled in time. [I] was out of town when the course finally began after many delays and would have missed first three weeks."

The majority of the respondents (92%) would consider taking an on-line distance course in the future (Table 8.6).

Table 8.6 Would you consider taking an on-line course in the future?

	No.	%
Yes	22	92
No, I am too busy.	1	4
No, it is too isolating	1	4

N=24

It is interesting that the most commonly cited reason for not taking this class (Table 8.5) and the most commonly cited motivation for taking an on-line course in the future (Table 8.7) were both lack of time and a hectic schedule (75% and 46% respectively).

> "Yes, on-line I enjoy because I would have the opportunity to fit it into my hectic and unpredictable schedule."

> "Time is the most limiting factor for me so an online course may work best for me."

> "It also allows me to work on my own rather than follow a strict schedule. If I have free time at 11:00 pm, I can spend the time giving all my attention to coursework. It is also very casual and doesn't require me to do any more preparation than to go to my computer and login."

Table 8.7 What would be your motivation for taking an on-line course?

	No.	%
I would take a course if it fit easily into my schedule.	11	46
I would take a course if it were remotely accessible.	10	42
I would take a course to advance my career.	7	29
I would take a course to get graduate credit.	6	25
I would take a course to further my knowledge.	6	25
I would take a course to experience on-line education.	1	4

N=24

While it is true that a student can access the course offered in this study at any time of day or not, it is still a tremendous amount of work to meet the weekly deadlines. Students were expected: to complete weekly readings, labs, and quizzes; to participate in discussions; to research and prepare a student presentation; to complete a self-guided field trip and prepare a report; and take three exams. It is very difficult to complete a college course during the opportunistic moments that often present themselves late at night after a full day of work and family commitments when a student is already tired.

> "I can't imagine working and taking this course. I don't think I would have done as well as I did. The time probably wouldn't have been there and who wants to work all week and study every weekend?"

Nevertheless, that is just what some of the students managed to do, as will be discussed at the end of this section

Remote access is usually considered the primary advantage of distance courses. Almost half the respondents (42%) mentioned the ability to gain access to graduate level courses without leaving home as a reason to consider taking a distance course (Table 8.7).

"[The motivation would be] convenience, mostly. I live rurally and I would have to drive a good distance (40 to 60 miles or more) to take upper level courses."

"I need online courses because I want to further my education without leaving the reservation."

When asked what factors were important in selecting a course (Table 8.8), several respondents (54%) mentioned the need for graduate level credits. Affordability was also was mentioned by many (67%).

Table 8.8 What factors would be most important in selecting the course?

	No.	%
Cost	16	67
Credit offered and level (graduate v. undergraduate)	13	54
Content	12	50
Time commitment	7	29
Relevance to job	5	21
Technical support	4	17
Employer's support	2	8
Instructor's attitude	2	8

N=24

"Cost is definitely important. Cultural relevance, internet connection, consideration of time constraints, and we definitely need some PhD online courses to be available."

"I think cost would be most important, as I'm supporting a family while going to school. Transfer of credit would be another factor."

The majority (71%) felt their employer would support their efforts to take an on-line course (Table 8.9). Of those with their employers support, some (17%) specified that the course must be directly applicable to their job or enhance their qualifications.

"As long as the course clearly enhances my ability to do my job I would have their complete support."

Table 8.9 Would your employer support your efforts to take an on-line course?

	No.	%
Yes	17	71
*Course must pertain to my job.**	4	17
No	2	8
Maybe, if demands were reasonable.	5	21

N=24

* These responses also counted as "yes" responses.

Others (21%) answered "Maybe, if demands were reasonable," a somewhat dubious answer that seems to imply there would be verbal support, but in practice the employee would not receive any tangible support from their employer, such as time off or paid tuition.

"Yes, provided it didn't interfere with getting my responsibilities at work completed."

"Yes, theoretically. Verbal approval and dollars in the mail are two different things. That's what happened this time."

"As long as it wasn't during working hours. [They] wouldn't pay for tuition unless [you] could show how it could benefit your work – not sure, might split cost if it benefited work."

Many respondents said their employer has an established policy outlining available support for employee educational advancement. The employer might provide a specified amount of paid time to take a course, allow the employee to use facilities to work on the course, and/or pay the tuition or reimburse the cost of tuition once the employee has achieved a passing grade (Table 8.10).

Table 8.10 How would your employer support you?

	No.	%
My employer would give me time off work.	11	46
My employer would pay my tuition.	8	33
My employer would provide facilities for me to work on the course.	5	21

N=24

"Yes, I could work at it during work hours, on computers, and tuition would come out of a project grant. The tribal government is very supportive of continuing education."

"Absolutely. Many staff are taking courses on-line now, some have graduated with a BS or pursued a MS. Financial support is contingent on the institution offering the course and the tribal colleges' available funding. We can take administrative leave during the day to work on the course at home or at work. There is a lot of flexibility. We're allowed six hours/week to take college courses in the policy manual."

"Yes, they liked trained employees. [My employer] would provide tuition and time off to work on the course."

"As long as the course clearly enhances my ability to do my job I would have their complete support."

While tribal colleges and tribal governments would like to increase the qualifications of their staff, this can be difficult to put into practice. Many employees perform multiple roles within their organizations and relieving them of their duties to attend a course may create hardship on the institution or the people it serves. Comparing individual answers to questions regarding when and where the student accessed the course with employer support highlighted this dilemma (Table 8.11).

Of the six students that said their employer would or might support their efforts to take an on-line course, only three were able to work on the course during

Table 8.11 "How did you access the course?" by "Would your employer support your efforts to take an on-line course?"

	Would your employer support your efforts to take an on-line course?		
	No	yes	Maybe
Total	2	4	2
I studied at work	0	2	1
I used a computer at school/work	1	2	2

N=8

working hours, and four used a computer at work. Although all of the tribal college instructors that took the course said their college supported their efforts to increase their education, and that it in fact benefited the colleges to have more instructors with advanced degrees, none were able to work on the course during working hours. Said one instructor (who did not study during working hours):

> "The faculty, staff and administration at this tribal college are very supportive of each other and especially in getting advanced degrees. The college plans to get four-year accreditation and needs more PhD on board."

Tribal governments are likely in the same situation. While both groups would like to increase the qualifications of their staff, excusing staff to take a course may compromise the running of the organization.

Students who could not work on the class during working hours found themselves working on it after work or on weekends, which requires a great deal of dedication and quickly becomes tiring (Table 8.12).

> "I accessed the course during breaks but occasionally I wasn't done when the break was. To compensate, I would work late. I also accessed the course from home in the evenings and on weekends."

> "Almost every night on personal time at home after regular work hours and after I had completed work at my second job."

"Free time – meaning only on Sunday evenings after my son and husband went to sleep."

"Weekends, nights, whenever I had a moment free."

Table 8.12 How did you most often access the course?

		No.	%
Where	I used my home computer.	8	100
	I used a computer at school/work.	5	63
When	I studied during my free time.	7	88
	I studied during working hours.	3	38

N=8

Only two respondents said that their employer would not support their efforts to take a course, and one of those was a contractor.

"They didn't this time. There was distinct prejudice against me taking this course. I was denied permission to take this class. I had to take it at my own expense and on my own time."

Two of the respondents discussed their communities' attitudes towards distance education. One feels their community is highly supportive of on-line education, the other feels that their community does not support on-line education as much as face-to-face classes.

"Information technology is taking on a new definition in rural communities and embraced more than in urban and suburban environments. The ability of the community to pursue information technologies is highly admired. [The community is] highly steeped in what on-line courses and technology can offer."

"We are given three hours per week to attend a course. Unfortunately, the tribe has not endorsed online or distance learning in the same way they have the traditional classroom experience. Online and distance learning is considered done on your own time, as is night courses. Only if it interrupts the work schedule and is related to the job do we get time off with pay."

In terms of family and community support (Table 8.13), responses ranged from strongly positive (62%) to strongly negative (17%). Positive responses mentioned increased qualifications and job opportunities as desirable goals, as well as personal fulfillment. Negative responses mentioned the educational goals taking time away from family responsibilities. This is not particular to distance students, but is probably exacerbated in students that work full time and take classes in their free time.

Table 8.13 Would your family/community support your efforts to take an on-line course?

	No.	%
Yes	15	62
Maybe. if demands were reasonable.	5	21
No	4	17

N=24

"My wife is insistent that I obtain my masters degree and education is encouraged in our tribal organization."

"Probably. Wife feels the more educated I am, the better off I am and I'll get a better job."

"Uh, no. This course took up so much of my time that my family and extended family got pretty upset sometimes."

"No, not much. It would take away from responsibilities – they wouldn't like it."

Difficulties Encountered

The biggest difficulty encountered by the students was balancing the time required to study for the course with their work and home life (88%; Table 8.14). Only one student did not mention scheduling as a source of difficulty, and that

student had such a poor Internet connection they were never able to access the course for any length of time and eventually gave up. Had they been able to participate in the course, it is likely they would also have experienced scheduling difficulties.

Table 8.14 What did you feel were the biggest difficulties you encountered in taking this course?

	No.	%
Balancing my schedule and the course load	7	88
Computer access	3	38
The level of computer skills required	3	38
The lack of a personal relationship with the teacher and other students	1	13

N=8

> "I have a LIFE! I mean, I would definitely not recommend this course to a working parent. The struggles of keeping up with a spouse, a child, and a job are definitely too much for the abundance of coursework... Perhaps it is not understood that people who live and work off campus have other priorities that must come before 'college life.'"

> "Taking a class over the computer is mostly self-motivating and requires tremendous discipline. It is extremely time-consuming and isolated."

Students who listed their occupation as "university student" said that while finding time to study was one of their biggest difficulties, the time required by the course was in keeping with what they expected from a graduate level course.

> "Time to study (but that should be expected when taking graduate level ecology courses) was the biggest hurdle for me, but I am a student and have set ample time aside to study."

Tribal college instructors are often heavily committed already (Tierney 1992; Nichols 2001). Because of the relatively small student populations and budgets

at tribal colleges, tribal college instructors typically take on many different roles to fill in the gaps and create a fully functioning college. "Economic factors are particularly relevant at the tribal college level where limited resources result in faculty and staff carrying multiple responsibilities" (Nichols 2001, page 110). Also, when tribal college students receive more attention and support from their teachers they perform better, and successful tribal college instructors provide that extra support (Ambler 1999). Therefore, it is likely that tribal college instructors have more responsibilities and spend more time interacting with their students than their mainstream university counterparts. Tribal government employees are likely in a similar situation.

> "I manage my time wisely, but my schedule was fairly full prior to enrolling in this course. I had trouble keeping up with the schedule."
>
> "Job workload too heavy to dedicate sufficient time to the class after work."

One student did seem to feel that the lack of time might have a cultural component to it.

> "This is also a cultural issue. As an American Indian, I would rather miss a weekly quiz than to miss a family/cultural function."

In general, American Indians do place more importance on familial and cultural events than non-Native peoples (Cantrell 1992). However, there is no evidence that the responses given by these students regarding demands on their time are any different from those documented by many other studies of distance students.

Computer access was also a source of difficulty for some students (38%):

"Field work and personal commitments took me to remote locations where Internet access was difficult if available at all."

"My difficulties were computer access and Internet service which is terrible; the reservation didn't even have a T1 line. It was on sometimes, down many times."

At least one student missed the interactive nature of a face-to-face course.

"I hated staring at the computer screen so much to learn about the natural world. While this format allowed me to take a course that would have been otherwise unavailable to me I felt isolated while doing it."

The students handled their scheduling difficulties as best they could (Table 8.15).

"I did what I could and submitted info even though I knew it was not up to my capacity."

"I handled the difficulties by letting some things go at work and at home. This caused a lot of stress in both areas."

"For me, I made this course a priority in terms of time. I scheduled work and other responsibilities around this course."

Table 8.15 How did you handle these difficulties?

Problem	Approach	No.	%
Hectic schedule	I didn't prepare well for class, skipped assignments or turned them in poorly done.	3	38
	I scheduled time for this course and made it a priority.	2	25
	I let things go at home or work.	1	13
Internet connection	I tried to find other facilities.	2	25
computer skills	I got help from friends.	1	13

N=8

Students who ran into difficulties with technical programs got help from friends.

When Internet access was a problem, the students tried to find other

connections.

"I just tried to get to other facilities, but the infrastructure on the reservation is not that strong and the nearest town is 35 miles away."

The conflicting demands on their time caused the students stress. Many were not able to complete all the assignments (25%) or the course (38%), and felt that their performance would have been enhanced if they had had more time to devote to their studies (Table 8.16).

Table 8.16 How might these difficulties have affected your study, your grades, or your ability to finish the course?

	No.	%
I didn't finish the course.	3	38
I didn't study as I should have/missed assignments.	2	25
I became stressed and thought of giving up.	2	25
This did not affect my grade.	1	13

N=8

"Not being adequately prepared caused me a lot of anxiety when taking the quizzes."

"I did not spend enough time on the subject. I speed-read everything and did not have time to slow down and enjoy all topics as I would have liked to. I know I would have done better on exams had I taken more time reading the materials."

Three students eventually stopped participating in the course; two due to their inability to fit it into their schedule and one due to a poor Internet connection that prohibited them from accessing the course reliably.

"The instructor was very easy to work with, and quite supportive, but unfortunately I ended up having to cut a number of commitments, and the class was one of them."

"My studying was relatively unaffected, it was mostly a problem of scheduling. I was eventually unable to finish the course."

"I'd get on-line, get to the assignment, get into it, and then I would be booted off and have to reenter the whole thing. To even do one thing probably took me all morning."

When asked what could be done to minimize the difficulties encountered by the students (Table 8.17), suggestions included reducing the work load (25%) and/or removing the time constraints (25%).

"Probably the only thing would be less coursework. That, or extending the length of the course."

"Having modular training, with no time limits except the completion date, would have eased my scheduling conflicts."

Table 8.17 What could have been done to minimize the difficulties?

	No.	%
The coursework could be reduced.	2	25
The time constraints could be removed.	2	25
I could have had access to a better computer/connection.	2	25
The course could have been timed to run during the school year.	2	25
The on-line lectures could be offered as a text.	2	25
Nothing, the course was well done.	1	13

N=8

The course began later than anticipated due to administrative delays, and as a result it did not end until early July. This increased the scheduling conflicts for the students who have a field season.

"I think if I were working on the class during the regular school year – this was the case early on and I did well then, but then it overlapped a little with the summer when I do a LOT of traveling. This is in no way the fault of the institution! I knew it would overlap some from the beginning, but I took it on anyway."

"If the class had started when scheduled or during the winter it would have

allowed me more time."

Two students mentioned that reliance on texts, instead of the Internet, as a medium for conveying course content would have made it more mobile and easily accessible.

"It took time (especially with my slow home computer) to open each attached page. I would have liked all the subject matter in a book that I could have picked up when waiting in traffic, etc. Also, the course content will be unavailable to me when my time is up for taking this course."

None of the students reported experiencing any cultural conflict (Table 8.18).

"No conflicts in that regard."

"There was no cultural conflict."

Many said they found the course open-minded and they enjoyed the different viewpoints presented among the students.

Table 8.18 Did you experience any instances of cultural conflict between your beliefs and values and those you encountered in this course? If so, tell me about them.

	No.	%
I didn't experience any cultural conflict.	8	100

N=8

"No [I didn't experience any cultural conflict]. I appreciated having a diverse set of opinions in course discussions and I think it added to the richness of the course. It is healthy to have differing opinions."

"It was no big deal. I found the course to be very considerate and VERY open minded."

"For me there was no conflict and I believe it added to the cultural richness of the course."

Cultural conflict might not be an issue for several reasons. Half (four) of the students self-identified as Native American or American Indian, three self-identified as white, non-Hispanic. One, ambiguously, said simply "American." As this was a graduate course offered to professionals, it would not be far fetched to assume that the Native American students had been exposed to the dominant culture enough already to have attained a level of biculturalism, the ability to function in both Native American and mainstream communities (McAfee 1997; Pavel et al. 1999).

> "Of course, my family is very education orientated whether that be western education or [tribal] education."

Although questions regarding background were not included in the survey, the first assignment in which students were asked to introduce themselves to the class revealed that this was true for most of them. Students had lived in large major metropolitan areas and overseas, completed degrees at mainstream universities, and worked for federal agencies. Additionally, that students remained in their familiar environments may have reduced the amount of culture shock experienced compared to full-time students attending a mainstream university.

Knowledge cannot be free of culture, and it is difficult to see your own culture until it is contrasted with another culture. To predict what might cause conflict for a person of another culture is difficult, even with some knowledge of the other culture (Harris 1974). Conflict might stem from the knowledge itself, or from the

way in which it is conveyed.

> "...In fact this was a bit easier than my classroom botany class, in which I was required to collect samples. Where I'm from, a person can't just go cut down a living thing without asking permission first, and laying tobacco down, at least. That can get spendy if you collect enough, and don't smoke! [I experienced] no conflict in this class – in the other class, I simply did what I had to do – bought the tobacco, and did my collecting."

Other than briefly recognizing the many indigenous botanical nomenclature systems in the introduction to the plant identification lab (in which students were required to learn Latin names), American Indian viewpoints were not included in the course material unless they were introduced by the students. The sharing of opinions on the topics at hand was encouraged, and this may have led students to feel comfortable when their views differed from those presented.

> "No [I didn't experience cultural conflict], it seemed very conscious in that way, particularly because of the instructor."

Although the students did not report experiencing any culture conflict during the course, one student mentioned that the inclusion of Native American perspectives in to the course would be a welcome addition.

> "How about more comparison between traditional management methods and current Western ideas of management? Fire played an extremely important role in Native American land management, for instance."

Participation and Performance

Of the ten students that enrolled in the course, only three completed the course (Table 8.19). One dropped immediately due to time constraints. Two students were non-starts; they did not participate in the course and they did not drop.

Table 8.19 Course enrollment and student status

	No.
Expressed interest	36
Enrolled	10
Dropped	1
Non-starts	2
Incompletes	4
Successful completers	3

Four students received incompletes. Of those, two stopped participating ¾'s of the way through the course, when their workload and travel increased. This coincided with the beginning of summer, which is a busy time for people working in natural resources. Two students completed everything except the lecture final exam.

To compare the performance levels of those that completed the course and those that did not, I calculated the grade at stopping point for all students (Table 8.20). For those that completed the course, this is their final grade. For those that received incompletes, this was calculated by dividing the number of points they earned by the number of points possible at the time they stopped participating. In order to measure participation between the groups, the number of times each student accessed the course's main page (hits), the number of postings the student made to the course's bulletin board (postings), and the number of e-mails sent to and received from the instructor (e-mail sent and e-mail received) were compared. The participation measures were adjusted for all groups by dividing by the percent of the 16-week course that the student completed (in terms of time). These adjustments facilitate comparison between

Table 8.20 Comparison of grades, participation, and percent of course completed for all students.

% completed (time)	grade overall (%)	grade at stopping point (%)	hits		postings		e-mail sent		e-mail received		reason for stopping	biggest difficulty	requested schedule changes	choices made out of 3
			actual	adjusted	actual	adjusted	actual	adjusted	actual	adjusted				
Completes														
100	93	93	551	551	36	36	36	36	31	31	-	schedule	1	3
100	85	85	449	449	11	11	19	19	35	35	-	schedule	3	0
100	76	76	628	628	44	44	36	36	37	37	-	schedule	6	3
average		85		543		30		31		34				
Incompletes														
97	73	78	317	327	12	12	12	12	32	33	family emergency /schedule	schedule	1	2
97	61	70	433	446	36	37	40	41	41	42	technical difficulty /schedule	isolation	2	2
69	46	87	118	171	46	67	15	22	30	43	schedule	schedule	1	0
56	35	63	178	318	11	20	13	23	27	48	schedule	schedule	3	0
average		75		316		34		25		42				
Non-starts														
0	0	0	40	-	4	-	12	-	24	-	schedule	schedule	3	0
0	0	0	24	-	1	-	3	-	19	-	Internet connection	Internet connection	1	0
0	0	0	0	-	0	-	0	-	0	-	schedule	schedule	0	0

those that completed the course and those that stopped participating. It assumes that the level of participation and the grade point average for those that received incompletes would not have changed, but would have remained constant over time. This is somewhat artificial, as level of participation in the course and grade point average are usually not static over time, perhaps even less so for distance students (Coldeway 1991). A student determined to raise their grade with the final, for example, might access the course more often, send more e-mail to the instructor asking for clarification, and significantly raise their grade. There were no class discussions the week of the final, so the number of postings that week would be lower.

In keeping with findings by Garland (1993), the students reported experiencing the same difficulties (a busy schedule and lack of time), regardless of whether they completed the course, received an incomplete, or were non-starts (Table 8.20). All the students requested schedule changes to compensate for their busy schedules, usually when they were required to leave town. Only the student that could not access the course due to their Internet connection did not mention lack of time and scheduling as a difficulty. Those that were able to complete the course despite these obstacles may have been more motivated and/or possessed better time management skills.

The average adjusted hits for those that received incompletes are lower than the average number of hits of those that completed the course, indicating that the

completers accessed the course more often (Table 8.20). The average grade at stopping point is ten points lower for those that received an incomplete compared with completers. I believe these differences are both related to the lack of time and effort, rather than lower levels of academic preparedness. When these students did put the time in, they performed as well as the completers.

The amount of contact initiated by those that completed the course and those that received incompletes is not strikingly different (Table 8.20). This is in keeping with findings by Laube (1992) and Stone (1992), who found that persistence was not enhanced by contacting students and that students who contacted the instructor frequently did not necessarily persist. Likewise, Tu and McIssac (2002, page 140) noted that while persistence increases with social presence, and social presence positively influences interaction, "frequency of participation does not represent high social presence." The average adjusted number of postings to the message board is higher for those that received incompletes than for completers, while the average adjusted e-mail sent to the instructor is higher for the completers. While most students used the bulletin board for group discussions and e-mail for questions about grades and due dates, one student who received an incomplete preferred to use the bulletin board for all communication, only using e-mail to respond to e-mail received. This counts in part for the higher average number of adjusted bulletin board postings and lower average adjusted e-mail sent by those who received incompletes. Those that received incompletes received slightly more e-mail from

the instructor than those that completed the course (Table 8.20). The extra e-mail may have expressed concern and/or encouragement in response to the students' lowered levels of participation early on and at the time of stopping.

Pintrich and Schrauben (1992, page 176) stressed the need in distance education to "...allow individuals to feel autonomous and self-determining by providing them with some choice and control." Although opportunities for choosing a topic and time to present were provided to students, few made decisions regarding this and several asked to just be assigned topics and dates. Each student had three opportunities to choose a topic and time to present, resulting in 27 opportunities for the entire class of nine. Only 10 of these 27 choices were made by the students, and the rest were assigned as the due dates neared and time was running out. On average, those that did make choices did complete a greater percentage of the course (100% to 97%) than those that did not make choices, suggesting that the amount of responsibility a student accepts may be an indication of their goal commitment.

Providing opportunities to engage students at a variety of levels may be the best strategy.

> "...Good classroom management may foster adoption of an extrinsic goal orientation and endorsement of classroom norms...that at least leads to some cognitive engagement. Intrinsic goals, of course, lead to deeper levels of cognitive engagement, but lacking an intrinsic goal, it is important to be motivated extrinsically, to participate in the classroom and not be alienated from it." (Pintrich and Schrauben 1992, page 169)

Some students contacted the instructor to apologize for not being able to

accomplish a task as well as they thought they should, on time, or at all, indicating that they were at least extrinsically motivated to please the instructor.

> "I wanted to work harder because I knew that the instructor was putting just as much in as me."

I believe some students did not have or allow the time needed to indulge an intrinsic motivation.

> "I never felt like I had the time I wanted to put into the course. My work always felt rushed and cursory."

Although information may be presented and assigned in a distance course, the instructor cannot know if the students have attended to it. In a face-to-face course, important points may be verbally repeated, and the instructor can scan the faces to note who appears to be paying attention and taking notes, and address (or not) those that are otherwise engaged or absent. For example, one student felt expectations and grading systems were clearly presented, and appreciated the weekly quizzes that motivated students to keep up with the syllabus.

> "I appreciated the course having weekly deadlines, because it would be easy to let things slide and then be buried in the workload... The course requirements and structure were all very well organized and articulated. I felt like I knew exactly what was expected of me and what my deadlines were."

Another student did not seem to realize that students received points for the weekly quizzes, despite this being mentioned in the introduction and described in the detailed section on grading.

> "Perhaps the quizzes should have added to our final grade, such as equaling one exam. This for taking the trouble of studying for and taking them each week."

CHAPTER 9: CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Social Constraints

Both completers and non-completers cited lack of time and a busy schedule as the biggest obstacles to performing well and completing the course. This is in keeping with studies by Ross and Powell (1990), Coldeway (1991), Wilkes and Burnham (1991), Bernt and Bugbee (1993), and Willis (1993).

Of those that registered, less than half completed the course. Previous studies indicate that goal commitment is the reason some students persist and others do not (Laube 1992; Zimmerman and Martinez-Pons 1992; Bernt and Bugbee 1993; Kemp 2002; Stein and Glazer 2003). Although many of the students indicated that they were interested in the course because it pertained to their job, none mentioned that successful completion of the course would lead to an increase in pay, which would be expected to be a motivating factor. As the course was not part of a certificate-granting program, per se, the perceived intrinsic benefit of completing it may have been low, also contributing to lowered motivation.

Strong goal commitment requires more than just motivation. The skills necessary to see something through and bring it to conclusion are also required. A distance literacy program developed by a First Nations community in Ontario identified self-management and self-direction as skills that a learner needs and that would benefit their community in achieving its educational goals (Jones 2003). It is possible that these skills are lacking in many Native communities, although it is impossible to say if this was a contributing factor for the students in this study, as measures of self-management and self-direction were not taken.

In Kemp's 2002 study of resistance and resilience, with the exception of work, life events and external commitments were not significantly correlated with completion of a distance course. The population sampled is not identified except for age (35 to 40) and gender (75% female). It is conceivable that these results might indirectly be a measure of the cultural values and practices of the student sample. Life events and external commitments other than work may take greater precedence over education for involuntary minorities, especially when the education is not particularly relevant to the student's existence and does not engender as much dedication as family and community (Tierney 1992). Furthermore, individuals experiencing a greater number of life events and external commitments would require higher degrees of resistance and/or resilience to cope. Statistics of Native Americans in Indian Country indicate that this group experiences higher levels of traumatic life events. Rates of suicide, injury, alcoholism, domestic abuse, unemployment, and poverty are much higher

for this group than the national average (U.S. Commission on Civil Rights 2003). Additionally, due to the small population size and low budgets, tribal professionals must often fill many roles. Finally, rural American Indians often experience frequent turmoil in their working lives, and many change jobs frequently (Pickering 2000b).

When the students participated, they performed well, indicating that academic preparedness was not a problem for this group. With the exception of the non-starts, there was no difference in participation between those that completed the course and those that did not. This is in keeping with Laube's finding (1992) that student-initiated contact was not correlated with persistence.

For those that initially expressed an interest in the course but then did not register, 75% mentioned lack of time and a busy schedule as a reason for not taking the course. Interestingly, the ability to fit a distance course into a busy schedule was the most commonly cited reason for taking a course in the future (46%), followed closely by remote accessibility (42%). Most of those surveyed (92%) would consider taking a distance course in the future. The most commonly cited priority in a distance course was affordability (67%), followed by the level of credit (54%; many are interested in earning graduate credits) and content (50%). As this course was offered at a discounted rate ($200 vs. $1080) we don't know if the true cost would have been a deterrent to registration. For comparison, Table 9.1 lists some tuition costs for Colorado State University and

Table 9.1 Comparison of tuition and fees to Colorado State University and some tribal colleges for the 2003/2004 school year.

Institution	Tuition (per credit hour)	Fees
Colorado State University, on-line	$165 to $260 (undergraduate) $185 to $360 (graduate)	
Colorado State University, live videotape	$336 (undergraduate) $436 (graduate)	
Colorado State University, on campus	$161.55 (undergraduate, resident) $743.32 (undergraduate, non-resident) $186.09 (graduate, resident) $775.30 (graduate, non-resident)	$36.40 (5 ch or less) $403.20 (6 ch or more)
Bacone College	$350	
Bay Mills Community College	$85	$55 (11 ch and less) to $100 (12 ch and over)
Blackfeet Community College	$45	$105
College of Menominee Nation	$148.50	$15
Diné College	$25	$10
Leech Lake Tribal College	$100	$25 plus $6/ch
Lower Brule Community College	$68	$45-$60 plus $2/ch
Northwest Indian College	$73.50 (resident) $199.50 (non-resident)	
Oglala Lakota College	$65 (tribally enrolled) $80 (others) $100 (graduate)	$20 plus $4/ch
Salish Kootenai College	$64 (American Indian) $79 (descendent) $105 (non-Indian resident) $279 (non-Indian, non-resident)	$80 plus $14/ch (up to 12 ch)
Sinte Gleska	$75 (undergraduate) $95 (graduate)	$90 + $3/undergraduate ch or $4/graduate ch

ch=credit hour

selected tribal colleges for the 2003/2004 school year. All figures come from the institutes' websites.

The majority said their employer would support their efforts to advance their formal education (71%). Of the four students that said their employer would support their efforts to take a distance course, two studied during work and two used a computer at work, indicating that although a policy is in place outlining employer support, it is not always put into practice. It may be more difficult to allow time off for an employee of a tribal government or tribal college, as employees often fulfill multiple roles.

While tribally based professionals and their employers would like remote access to graduate level courses and degree programs, cost and time considerations are likely to remain obstacles. Tuition cost and content will determine whether they enroll, and the amount of time they put into the course will be an important deciding factor in how well they do. Some tribal colleges are now developing graduate programs, and it will be interesting to see if these draw working professionals located on different reservations. Course offerings from a tribal college might be more affordable and use examples more relevant to the student audience, compared with offerings from a mainstream university. Tribal colleges can also more easily tailor the curricula to reflect the issues and knowledge relevant to tribal life. Natural resource courses might focus on the expertise needed to manage tribal lands within the tribal and federal constraints, for

example. Should a mainstream institution decide to develop a distance program targeted towards reservation-based students, it is important to collaborate with the perspective clientele throughout the development process. The approach should not be what institutions will do for minorities, but that they will work with minorities "towards a participatory goal of emancipation and empowerment" (Tierney 1992, page 42).

Cultural Constraints

The tribal college and tribal government employees reported that they did not experience cultural conflict while taking this graduate level ecology course from a mainstream university. Because all classes, instructors, students, and disciplines are different, it is difficult to generalize this finding beyond this class. For example, subjects such as U.S. history or law might be more offensive to Indian students and therefore benefit more from the deliberate inclusion of Native perspectives. A graduate-level course such as the one taught in this study, that relies heavily on real world examples and invites discussion about the shortfalls of theories or contradictory study results, may be more in keeping with Native American cultural styles of learning, such as moving from a holistic view to an explicit one, and viewing the world as complex and interrelated. Perhaps most significantly, many of the students either were of the dominant culture or had previous successful experiences in mainstream environments, and would therefore have accomplished a working level of biculturalism. Undergraduate students who have had fewer experiences in mainstream society might benefit

more from the inclusion of Native American perspectives in the course content: "...students are more likely to thrive in environments that support their cultural identities while introducing different ideas" (U.S. Commission on Civil Rights 2003, page 87). However, unless cultural teaching methods are also employed the course will remain essentially white.

Cultural conflict also did not appear to be a concern of the tribal college and tribal government employees who expressed interest in the course but did not take it. It is possible that self-selection was at play in this regard, both on the part of the course and the students. People for whom cultural conflict would be a concern may not have expressed an interest in the course, or may not have even heard of the course. The course was advertised through a pan-Indian professional publication and the Internet; both mediums unlikely to reach rural people who have not been exposed to the dominant culture.

Recommendations

Tribal Employers

Given that a lack of time and busy schedule are the greatest obstacles to distance students who often work full time and have families, perhaps the most effective way an employer could offer support would be to allow the student some time during working hours to take the course. In addition to alleviating the difficulty students find in balancing their professional and private lives with the

additional demands of school, support of the employer in this way will motivate the student to develop structured study habits. If the student's success in the course also benefits their employer and community (group good rather than individual good), that might also be a motivating force.

Distance Course Designers/Instructors

Develop personal and caring relationships with students and encourage them to do the same with their fellow students. Contact students before there is a problem; do not assume they will come to you with their difficulties. The findings of this study are in accordance with Laube (1992) who found that student initiated contact had no affect on student persistence. On the other hand, the students often indicated that they felt remorse at "letting the instructor" down when they were unable to complete an assignment on time. This indicates they understood I cared about their success in the class and that was a motivating factor for them. Acknowledge that your viewpoint might not be the only one, and encourage the students to share theirs. Remain open to different ideas and perspectives. Respect that adult students lead complicated lives and play multiple roles. Allow for schedule changes due to these outside factors, but keep the students on track by establishing a new deadline with the student. Do not forgo deadlines altogether.

Instructors of Diverse Populations

Shade (1997b, page 221) presented recommendations for changing classrooms so that all students are able to reach their maximum potential. These included:

- Viewing students, not as empty vessels, needing to be molded and filled, but as fully formed individuals with their own outlook and expectation of what school and learning will be like.

  > "...educators must realize the possibility that individuals respond differently than they expect because the [student's] 'vision' of what is being asked is being interpreted from their cultural perspective. This is also true of words being used and behavior being demonstrated."

  Talking with the students to make sure they understand the teacher and vice versa, and asking for interpretations of events and tasks are some ways to make certain the instructor and student reach a working understanding of each other.

- "A shift in the perception of the role of the teacher from being the controller to being the guide." The teacher and students form a learning community in which the teacher entices the student to become interested in the information and helps them discover how the learning is relevant to their life.
- "A change in the goals and outcomes of instruction from one which focuses on acquisition of facts to one which facilitates the development of thinking and reasoning and teaches students the joys and process of learning." Instead of rote memorization, ask the students to explain a concept in their own words.
- "A modification of the curriculum from being European-dominated to one which is inclusive of all groups who are a part of this society." The instructor should be careful, however, when presenting other perspectives, unless they

have an intimate knowledge of them or an authentic source. Even then, do not expect the example to hold true in all cases, especially for a group such as Native American and Alaska Natives, with the great number of culturally distinct tribes and wide range of lifestyles (e.g., urban vs. rural). Even within one tribe, individuals will have different, sometimes conflicting, understandings of the world (Davis and McLeod 1999). Traditional knowledge has been integrated in Native schools serving Native populations with positive results as measured by improvements student performance (Lipka and McCarty 1994; Nee-Benham and Cooper 2000). However, some people feel traditional knowledge will lose its meaning if presented out of the cultural, social, and/or environmental context within which it evolved (McCorquodale 1997). Additionally, in some cases local knowledge was not traditionally shared with strangers, except in certain situations. Another fear is the creation of a few cliché or token examples. Compounding the issues is the current legal climate surrounding patents and intellectual property rights. These issues are now being debated in Indian Country but there has been no consensus on the most appropriate way to share local or indigenous perspectives and knowledge without losing proprietary rights. It is most appropriate for Native Americans to determine how their culture and knowledge shall be used and shared. In the mean time, minority students do not need mainstream instructors to tell the students who they are, just to acknowledge that they are.

Acknowledge that examples, viewpoints, or policies may be particular to the dominant culture. This allows room for other viewpoints, whether or not they are expressly stated. Encourage students to use examples from or apply knowledge to their own life experiences. Be aware that calling for minority students to present the class with their cultural group's perspective may not be the best method of including diverse perspectives in the classroom. In Cantrell's 1992 survey of indigenous university students, many said they felt uncomfortable when called upon in class to present the "Indian" perspective. They wished to be seen as individuals, not representatives of a number of diverse cultures. Also, they did not enjoy being called on in class or singled out (Theodoratus 1998).

- Use a wide variety of teaching strategies

> "which enhance the student's learning styles and encourage their involvement in the material... There are individual and group differences on how they wish to have material presented, the extent to which they seek help or will use resources, and how they will reconstruct the idea so that it has meaning for them."

Designing Curricula to Meet Tribal Needs

Tribal institutions would benefit from their employees increasing their qualifications without leaving their communities. Distance education might be useful to meet these ends, provided the students are motivated and supported adequately. One possible way to motivate students, employers, and communities alike would be to develop curricula that are directly relevant to the needs of tribal institutions. For example, tribes who are seeking to manage their

own forests through the Indian Self-Determination and Education Act of 1975 might desire a suite of distance courses that lead to a federally recognized certificate or degree in forestry management. The courses would not necessarily need to come from the same institution. Some of the curricula packages might be more generic and relevant to a number of operations (such as business and administration) and some might be more technical, such as the forestry management degree used in the example. By developing a suite of courses that meet the federally mandated professional qualifications required for contracting under the Indian Self-Determination and Education Act 1975, the usefulness and impact of the courses, both perceived and actual, would be high, and this might lead to increased community and employer support and personal motivation. It could be that several people in an office would be taking courses at the same time to fulfill slightly different roles in the intended contract. The result would be a cohort of learners, similar to that being used by Northwest Indian College to improve student retention (Berardi et al. 2001). This would have the added benefit of increasing motivation and support, and appealing to the Native tradition of valuing the group. The expected result would be increased rates of course completion.

In closing, it should be noted that unsolicited attempts by mainstream universities to offer distance courses via tribal institutions may be met with skepticism and distrust. Many Indians resent the paternal nature of the mainstream/Indian relationship which has rarely benefited tribes and flies in the face of self-

determination. Indian initiative must be behind development attempts in Indian Country. "Empowerment is not given; it is taken" (Tierney 1992, page 149).

APPENDICES

APPENDIX I: COURSE ADVERTISEMENT IN "FROM THE EAGLE'S NEST"

From the Eagle's Nest

Published Quarterly by the Native American Fish & Wildlife Society Volume 15 Winter 2002

founded on generosity and sharing with each other is what we do best. Dave Conner said that when he received the Chief Sealth award, it renewed his commitment and he wasn't going to just rest on his laurels. (However, after all the pumpkin pie he had at Thanksgiving, he has a few more laurels than he did at Halloween).

ON LINE CLASS FOR NATURAL RESOURCE EMPLOYEES

The Rangeland Ecosystem Science Department at Colorado State University is offering an on-line version of RS 531, World Grassland Ecogeography. CSU is evaluating this course to be offered to federal and tribal government employees this spring.

In exchange for their anonymous input into the course structure and design, federally and tribally employed natural resource technicians, managers and researchers may take RS531 for a one-time only discounted price.

Course Description: Distribution, climate, and structure of the world's major grasslands with emphasis on North America.

3 credit hours (2 lecture, 3 lab hours per week).

Prerequisite: one course in plant identification.

If you are interested in learning more, contact: Sonya LeFebre's e-mail: slefebre@ _____ or Bob Woodman see at: bobw@ _____ at the Dept. of Rangeland Ecosystem Science, Colorado State University, Fort Collins, CO 80523-1478. Phone: (970) , FAX: (970)

APPENDIX II: COURSE ADVERTISEMENT DISTRIBUTED BY E-MAIL

From: Sonya Le Febre < slefebre@xxx.xxxxxxxxx.edu>
Subject: Graduate Course Offer
Date: 1/2/2003

The Rangeland Ecosystem Science Department at Colorado State University has recently developed an on-line version of RS 531, World Grassland Ecogeography. We would like to evaluate this course by offering it this spring. In exchange for their anonymous input into the course structure and design, tribally employed natural resource technicians, managers, instructors and researchers may take RS531 for a one-time only discounted price of $200. The course will be delivered on-line. In exchange for the low rate, we will be asking for feedback regarding the course structure, content, delivery method, etc. If you are interested in taking RS531 please respond before February 15 to Sonya LeFebre, email: slefebre@xxx.xxxxxxxxx.edu, phone: (555) 555-5555, fax: (555) 555-5556.

Sonya J. Le Febre
Department of Rangeland Ecosystem Science
College of Natural Resources
Colorado State University
Fort Collins, CO 80523-1478
phone: (555) 555-5555
fax: (555) 555-5556
email: slefebre@xxx.xxxxxxxxx.edu
Tribal College Natural Resource Instructors Workshop, and TENRES:
http://www.cnr.colostate.edu/outreach/tenrec

APPENDIX III: ADDITIONAL INFORMATION SENT TO INDIVIDUALS EXPRESSING INTEREST IN THE COURSE

The Rangeland Ecosystem Science Department at Colorado State University has recently developed an on-line version of RS 531, World Grassland Ecogeography. We would like to evaluate this course by offering it to federal and tribal government natural resource program employees this spring. In exchange for their input into the course structure, content and design, federally and tribally employed natural resource technicians, managers and researchers may take RS531 for a one-time only discounted price of $200.

RS531 is a 3 credit graduate level course. It lasts 16 weeks. The course will begin March 3' 2003. You will need Internet access to take the course (either a broadband connection or modem speed of at least 28.8 kbps is highly recommended). There will be no set meeting times - you can log on to the Internet and read the lectures when it is convenient for you, however you will be expected to keep up with the syllabus (e.g., complete two lectures, one plant identification lab, one plant ID, and participate in recitation each week). Tests and quizzes will be accessible for a few days – you must take them within the designated time frame.

If you are interested in learning more, please contact: Sonya Le Febre, Department of Rangeland Ecosystem Science, Colorado State University, Fort Collins, CO 80523-1478. Phone: 555-555-5555 Fax: 555-555-5556 E-mail: slefebre@xxx.xxxxxxxxx.edu.

Brief Course Description
RS 531 World Grassland Ecogeography
3 credit hours (2 lecture hours, 3 lab hours per week)
Prerequisite: one course in plant identification
Course description: Distribution, climate, and structure of the world's major grasslands with emphasis on North America.

The lectures address the following questions:

- ◊ What are the important rangeland ecosystems in the western United States and the world?

- ◊ Where are they?
- ◊ Why do they occur?

The plant identification lab addresses the following questions:

- ◊ What are the important plants species in rangeland ecosystems in the United States?
- ◊ What are their characteristics?
- ◊ Can I (the student) identify them?

Recommended Texts

-Stubbendieck, J., S. L. Hatch and K. J. Hirsch. 1997. North American range plants. Fifth Edition. University of Nebraska Press, Lincoln.
-Bailey, R. G. 1998. Ecoregions: The ecosystem geography of the oceans and continents. Springer, New York.

APPENDIX IV: CONSENT FORM FOR STUDENT SURVEY

Message no. 321
Sent on Wednesday, July 30, 2003 1:19pm
I would like to ask for your participation in a survey. The goal of this survey is to assess the level of cultural and social conflict experienced by working professionals in a Native setting (tribal college and tribal government employees) taking an on-line distance course (RS531: World Grassland Ecogeography) from a mainstream university. It also examines the reasons cited by potential students for taking or not taking the course, in an attempt to assess the obstacles to and motivations for participating in distance courses. Your responses will help this study, whether or not you are Native or a tribally-based professional. The survey will take approximately 20 minutes to complete. This research is being done through the Forest, Rangeland, and Watershed Stewardship Department at Colorado State University.

If you would like to review the findings of this study, you may indicate so on the survey. The findings will then be sent to you via e-mail or regular mail for your review, and you will be invited to send in your comments. No names will be included in these findings.

Participation in this study is voluntary. You may discontinue the survey at any time. There are no known risks to involvement in this study. Names will not be attached to any of the study results, nor will your comments here affect your grade in any way. There are no direct benefits to participating in this survey, but I hope this information will be helpful in assessing the merit of web-based distance courses as a means of providing education opportunities to tribally-based professionals and your participation is greatly appreciated. If you have any questions regarding this survey or no longer wish to participate, please don't hesitate to call me at (555) 555-5555 or Dr. Bob Woodmansee, the primary investigator, at (555) 555-5557. Questions about subjects' rights may be directed to Celia S. Walker at (555) 555-5558

APPENDIX V: ON-LINE STUDENT SURVEY

Thank you for taking part in this survey. The goal of this survey is to assess the level of cultural and social conflict experienced by working professionals in a Native setting (tribal college and tribal government employees) taking an on-line distance course from a mainstream university. It also examines the reasons cited by potential students for taking or not taking the course, in an attempt to assess the obstacles to and motivations for participating in distance courses. This information may be used to assess the merit of web-based distance courses as a means of providing education opportunities to tribally-based professionals. Your responses will help this study, whether or not you are Native or a tribally-based professional. Your participation is greatly appreciated!

Question 1
How would you describe your ethnicity? (E.g., Native American; Black, Non-hispanic; Hispanic; White, Non-hispanic, etc. List all that apply.)

Question 2
How would you describe your occupation? (E.g., tribal college student, tribal college instructor, tribal college administrator, tribal government employee, private sector employee, etc. List all that apply.)

Question 3
Why were you interested in taking RS531: World Grassland Ecogeography?

Question 4
What did you feel were the biggest difficulties you encountered in taking this course?

Question 5
How did you manage or handle these difficulties?

Question 6
How might these difficulties have affected your study, your grades, or your ability to finish the course?

Question 7
What, if anything, could have been done to minimize the difficulties?

Question 8
Did you experience any instances of cultural conflict between your beliefs and values and those you encountered in this course? If so, tell me about them.

Question 9
How did you manage or handle this cultural conflict?

Question 10
How might this conflict have affected your study, your grades, or your ability to finish the course?

Question 11
What, if anything, could have been done to minimize this cultural conflict?

Question 12
Would you consider taking an on-line course in the future? If no, why not? If yes, what would be your motivation for taking an on-line course?

Question 13
If you answered yes to question 12, what factors would be most important in selecting the course? (E.g., cost, subject, undergraduate v. graduate level, computer access, support of employer, etc.)

Question 14
Would your employer support your efforts to take an on-line course? Explain.

Question 15
Would your family/community support your efforts to take an on-line course? Explain.

Question 16
How did you most often access the course? (E.g., home computer, work computer, library, school computer lab, etc. You may list more than one answer.)

Question 17
When did you most often access the course? (E.g., in your free time, during working hours, evenings, weekends, etc. - list all that apply.)

Question 18
How can this course be made better? Please feel free to type in any feedback you have (things you liked, things you hated, things that could be better, comments about course structure, content, grading, exams, readings, etc).

Question 19
Do you wish to be notified of the findings of this survey? As this survey function is anonymous, if you do wish to hear about the findings you will need to contact me (via WebCT, my regular e-mail: slefebre@xxx.xxxxxxxxx.edu, or by phone: 555-555-5555) and let me know that you wish to hear the findings and provide me with an address where I can send them.

a. Yes, I will get in touch with Sonya letting her know that I wish to hear about the findings and where she can contact me.

b. No.

Your participation is appreciated. Thank you!

APPENDIX VI: CONSENT FORM FOR NON-STUDENT SURVEY

Dear ____:

I would like to ask for your participation in a survey. The goal of this survey is to assess the level of cultural and social conflict experienced by working professionals in a Native setting (tribal college and tribal government employees) taking an on-line distance course from a mainstream university. It also examines the reasons cited by potential students for taking or not taking the course, in an attempt to assess the obstacles to and motivations for participating in distance courses. Last spring you expressed an interest in taking an on-line course (RS531: World Grassland Ecogeography) offered through Colorado State University. I am interested in learning why you were interested in the course, and why you decided not to take the course after all. Your responses will help this study, whether or not you are Native or a tribally-based professional. The survey will take approximately 20 minutes to complete. This research is being done through the Forest, Rangeland, and Watershed Stewardship Department at Colorado State University.

If you would like to review the findings of this study, you may indicate so on the survey. The findings will then be sent to you via e-mail or regular mail for your review, and you will be invited to send in your comments. No names will be included in these findings.

Participation in this survey is voluntary. You may stop the survey at any time. There are no known risks to involvement in this study. Names will not be attached to any of the study results. There are no direct benefits to participating in this survey, but I hope this information will be helpful in assessing the merit of web-based distance courses as a means of providing education opportunities to tribally-based professionals and your participation is greatly appreciated. If you have any questions regarding this survey, please don't hesitate to call me at (555) 555-5555 or Dr. Bob Woodmansee, the primary investigator, at (555) 555-5557. Questions about subjects' rights may be directed to Celia S. Walker at (555) 555-5558.

The survey is attached as a Word Document, a .PDF file, and pasted in this message box below. Please send your completed surveys to me, Sonya LeFebre, either via e-mail (as an attachment or reply to this message and type your responses directly into the e-mail text) to slefebre@xxx.xxxxxxxxx.edu, or print out a copy and mail to this address: Sonya Le Febre, Dept. of Forest, Rangeland, and Watershed Stewardship, Colorado State University, Fort Collins, CO 80523-1472. Once received, responses will be stripped of any identifying information (name, employer, etc.), entered into a database, and the original response destroyed to ensure your anonymity.

Your participation is greatly appreciated. Thank you,

Sonya Le Febre
Research Assistant

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Tribal College Natural Resource Instructors Workshop, and TENRES:
http://www.cnr.colostate.edu/outreach/tenrec

APPENDIX VII: NON-STUDENT SURVEY

Thank you for taking part in this survey. The goal of this survey is to assess the level of cultural and social conflict experienced by working professionals in a Native setting (tribal college and tribal government employees) taking an on-line distance course from a mainstream university. It also examines the reasons cited by potential students for taking or not taking the course, in an attempt to assess the obstacles to and motivations for participating in distance courses. This information may be used to assess the merit of web-based distance courses as a means of providing education opportunities to tribally-based professionals. Your responses will help this study, whether or not you are Native or a tribally-based professional. Your participation is greatly appreciated!

1. How would you describe yourself? Check all that apply:

Ethnicity	Employment
☐ Native American	☐ tribal college student
☐ Black, Non-Hispanic	☐ tribal college instructor
☐ Hispanic	☐ tribal college administrator
☐ White, Non-Hispanic	☐ tribal government employee
☐ other (please describe): _____	☐ other (please describe):_____

_____ _____

2. Why were you interested in taking RS531: World Grassland Ecogeography?

3. Why did you decide not to take the course after all?

4. Would you consider taking an on-line course in the future?
   - If no, why not?

   - If yes:
     - What would be your motivation for taking an on-line course?

     - What factors would be most important in selecting the course (e.g., cost, subject, undergraduate v. graduate level, computer access, support of employer, etc.).

5. Would your employer support your efforts to take an on-line course? Explain.

6. Would your family/community support your efforts to take an on-line course? Explain.

7. Do you wish to be notified of the findings of this survey? (If yes, provide a mail or e-mail address where findings may be sent.)

Thank you for your help. Your participation is appreciated,

Sonya

APPENDIX VIII: SECOND CONTACT FOR NON-STUDENTS

Researcher: Hello, this is Sonya Le Febre calling from Colorado State University. Am I speaking to _____?

Participant: Yes.

Researcher: Two weeks ago you were sent a survey through your e-mail. I know that you are very busy, but your participation in this survey will help me immensely. It is very short, and will probably take you less than 10 minutes. Can I tell you a little about it?

Participant: I guess so.

Researcher: The goal of this survey is to assess the level of cultural and social conflict experienced by working professionals in a Native setting (tribal college and tribal government employees) taking an on-line distance course from a mainstream university. It also examines the reasons cited by potential students for taking or not taking the course, in an attempt to assess the obstacles to and motivations for participating in distance courses. Last spring you expressed an interest in taking an on-line course (RS531: World Grassland Ecogeography) offered through Colorado State University. I am interested in learning why you were interested in the course, and why you decided not to take the course after all. Your responses will help this study, whether or not you are Native or a tribally-based professional. The survey will take approximately 20 minutes to complete. This research is being done through the Forest, Rangeland, and Watershed Stewardship Department at Colorado State University.

If you would like to review the findings of this study, you may indicate so on the survey. The findings will then be sent to you via e-mail or regular mail for your review, and you will be invited to send in your comments. No names will be included in these findings.

Participation in this survey is voluntary. You may stop the survey at any time. There are no known risks to involvement in this study. Names will not be

attached to any of the study results. There are no direct benefits to participating in this survey, but I hope this information will be helpful in assessing the merit ofweb-based distance courses as a means of providing education opportunities to tribally-based professionals and your participation is greatly appreciated. If you have any questions regarding this survey or no longer wish to participate, please don't hesitate to call me at (555) 555-5555 or Dr. Bob Woodmansee, the primary investigator, at (555) 555-5557. Questions about subjects' rights may be directed to Celia S. Walker at (555) 555-5558.

Do you have any questions about this process?

Participant: No.

Researcher: Are you willing to participate in this study?

Participant: I guess so.

Researcher: Great. How would you like to answer the questions? I can mail, e-mail, or fax them to you and you can write your responses, or you can answer them over the phone right now. This will take less than ten minutes.

[*The survey questions asked were identical to those sent out via e-mail. See Appendix VII*]

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