

Building Strong Communities Tribal Colleges as Engaged Institutions







Prepared by:
American Indian Higher Education Consortium &
The Institute for Higher Education Policy

A product of the Tribal College Research and Database Initiative

Building Strong Communities: Tribal Colleges as Engaged Institutions

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American Indian Higher Education Consortium

The Institute for Higher Education Policy

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I. Introduction

Serving and strengthening local communities is a fundamental part of the mission of American Indian Tribal Colleges and Universities.¹ Thirty-three Tribal Colleges in the United States and Canada were established over the last three decades as part of the American Indian self-determination movement. In recent years they have increasingly become the educational, social, and economic cores of the reservations and towns in which they are located. Tribal Colleges are true community institutions—they are involved in almost every aspect of local community life, ranging from the provision of public services to the nurturing of traditional cultural values and beliefs that help develop a social and economic vision for the future.

Tribal Colleges and Universities, like mainstream community colleges, are fully engaged in the communities they serve. Tribal Colleges are guided by input from local businesses, industry, government, organizations, leaders, and families; and in turn, they provide advice and assistance to communities on projects and programs. The relationship is reciprocal and mutually beneficial. Tribal Colleges, however, are involved in communities on a deeper level than most mainstream colleges, as a result of the integration of tribal culture into institutional life and the reliance of communities upon the colleges to devise innovative solutions to issues and concerns confronting them, many of them longstanding and critical. Tribal Colleges play a vital role in helping communities counter a legacy of misaligned federal government policies and mismanagement of tribal education, health, nutrition, agriculture, and natural resources.

Tribal Colleges provide a range of assistance to their communities. The colleges' recent establishment as land-grant institutions in 1994 has placed them at the center of efforts to disseminate agricultural and natural resource management

to Indian communities, through such mechanisms as direct technical assistance to local farmers and ranchers. Faculty at Tribal Colleges play an overarching role by serving as culturally supportive role models that inspire future success, an especially important role given the historically low levels of educational attainment for American Indians. Local traditions and values are reflected in Tribal College activities such as cultural seminars, language immersion programs, tribal archives, and other initiatives sponsored by the colleges.

This policy report explores the expanding role of Tribal Colleges and Universities in serving local communities and examines the challenges and successes in some specific areas of involvement. *Building Strong Communities: Tribal Colleges as Engaged Institutions* is the fourth in a series under the Tribal College Research and Database Initiative, a collaborative project of the American Indian Higher Education Consortium (AIHEC) and the American Indian College Fund. Over the last three years, the Initiative has collected data regarding student demographics and background, curricula, institutional environments, and community services in order to display the Tribal Colleges' challenges and success stories.

Five areas of Tribal College community engagement are highlighted in this report: pre-school and elementary and secondary education, health and nutrition activities, faculty role models, agriculture and natural resource management, and cultural and language preservation and development. In each section, the challenges faced by American Indian communities are outlined and the various ways that Tribal Colleges are helping to address these problems are described, with specific attention paid to programs that stand out as evidence of success within the community. The report concludes with a summary of how Tribal Colleges are engaged as community institutions and with

¹ The terms Tribal Colleges and Universities and Tribal Colleges are used interchangeably throughout this report.

specific recommendations for continued support for the colleges' efforts.

The information gathered in this report comes from a variety of sources, including the *Tribal College Journal*, higher education organizations such as the American Council for Education and the American Association of Community Colleges, and data from federal government agencies such as

the U.S. Census Bureau, the Bureau of Indian Affairs, the Department of Health and Human Services, the National Center for Education Statistics, and the Department of Agriculture. In addition, data collected through surveys, interviews, institutional membership reports, college websites, and other mechanisms for the Tribal College Research and Database Initiative were used. Input from Tribal College leaders also was a valuable part of the research for this report.

II. Involvement in Pre-school and K-12 Education

Leto tribal communities nationwide and to Tribal Colleges in particular. This interest is in response to the unfortunate history of forced assimilation and cultural suppression that took place in schools sponsored by the federal government and various religious denominations in the nineteenth and twentieth centuries. The schools actively sought to suppress all aspects of Native cultures, including language and religion, as a means to assimilate Native children into American society. The methods employed were often harsh and impersonal, without regard to the welfare of the children. For these reasons, Tribal Colleges and Universities are actively involved in the preparation of American Indian educators for pre-school, elementary, and secondary education, a point of pride for them. Teacher training is considered a critical need in Indian country, where Native teachers are underrepresented at all levels.

Despite recognition of the failures of assimilationists beginning in the 1920s, policies controlling the schools and reservations were slow to change and continued to be determined by federal administrators (Boyer, 1997). Finally, beginning in the 1960s, federal policy made a gradual shift toward self-determination for American Indians, culminating with the passage of the Indian Self-Determination and Educational Assistance Act of 1975. Self-determination offered new opportunities for tribes in many aspects of daily life. In terms of education, tribes gained increasing control over pre-school, elementary, and secondary education, and cultivated a growing ability to tailor schools and programs to the needs of individual communities.

Today, nearly half of the American Indian students enrolled in publicly funded schools are still educated in schools where they comprise a significant proportion of the population.² In general, schools with high proportions of American Indian students are located primarily in rural areas and small towns, tend to have small enrollments, and are highly concentrated in the Southwest and Northern Plains regions of the United States (Pavel et al., 1997). Less than 10 percent of American Indian students in Academic Year (AY) 1993-94 were enrolled in reservation schools funded and/or directly managed by the federal government, commonly known as Bureau of Indian Affairs (BIA) schools, which tend to have virtually all American Indian enrollment. An additional 38 percent of American Indian students were enrolled in public schools with at least 25 percent Indian students.³

Tribes tend to have the most influence over reservation schools funded by the federal government but operated and managed by tribal governments or other tribal organizations through grants and contractual agreements, and control appears to be gradually shifting from the BIA to the tribes. In School Year (SY) 1999-00, 49,076 students in grades K-12 were enrolled in 185 BIA-funded elementary and secondary schools located on 63 reservations in 23 states. Of these 185 schools, 64 were operated by the BIA and 121 of them were run by tribes. Just five years ago, in SY 1994-95, tribes ran 98 schools, 53 percent of the total compared to 65 percent in SY 2000 (BIA, 2000a).

Despite this encouraging movement, educating American Indian students effectively to help increase their chances for advancement continues to be a challenge, particularly for federally run schools. The combination of size and rural location at schools with a high proportion of Indian students presents many difficulties in educating students, such as higher educational costs. High proportions of the student

² The remaining American Indian student population is educated primarily in publicly funded schools with lower proportions of Indian enrollment and is spread throughout the country.

On average, almost 57 percent of enrollments at these schools were American Indians.

bodies tend to be at risk for dropping out as a result of their social and economic backgrounds (Pavel et al., 1997). In addition, the legacy of misdirected federal policies toward American Indian education continues to have an impact on these schools. For example, because the type of education offered to American Indians in the past focused almost exclusively on vocational education, elementary and secondary schools have had to transition to more academic curricula, requiring substantial investments of money and effort. Finally, most teachers of American Indian students have been and continue to be non-Indian. Only 6 percent of all publicly funded schools in AY 1993-94 had an American Indian or Alaska Native teacher on staff (Pavel et al., 1997). These practices and realities have affected the educational success of American Indian children. In 1990, for example, only 66 percent of American Indians 25 years and older, had graduated from high school (Census Bureau, 1998). In SY 1998-99, 11 percent of students dropped out or withdrew from BIA schools (BIA, 2000b).

The historically high drop-out rates and low levels of educational achievement in these communities have prompted American Indian tribes to take more control of the education of their children over the past three decades. With Tribal Colleges at the forefront of these efforts, tribes have begun to concentrate on the educational development of children from birth to the college-going age, implementing programs and policies geared toward reversing the negative influences on youth. Tribes view the colleges as ideal places to implement these programs. Tribal Colleges have unique relationships with reservation communities, as they are located either on the reservation or within close proximity, allowing community members to easily access these services. Finally, most faculty, staff, and students at Tribal Colleges understand the legacies of federal policy in American Indian education and can contribute innovative solutions that integrate cultural traditions and values.

Educational programs either offered at Tribal Colleges or designed by Tribal Colleges target all stages of youth development and improvement. They encompass not only academic needs, but also physical, emotional, and spiritual needs. Examples include: providing improved pre-natal and parenting assistance through Head Start and Early Head Start; quality pre-school development activities; direct linkages with elementary and secondary schools in the areas of math, science, and technology, mentoring, and educational enrichment programs; involvement in TRIO and other early



Early Childhood Education at Blackfeet Community College

intervention programs; and preparing teachers and teacher aides—especially American Indians—who remain on the reservation and teach in local communities.

Pre-school Programs and Early Childhood Intervention

Tribal College communities understand that improving educational attainment must begin in early childhood, particularly because of the social and economic hurdles these children must overcome. American Indians living on reservations have higher rates of poverty and unemployment in comparison to the U.S. population. For example, the unemployment rate of American Indians living on Tribal College reservations averaged 42 percent in 1995, compared to 6 percent for the U.S. population as a whole (AIHEC and The Institute for Higher Education Policy, 2000). American Indians also face higher rates of substance abuse and poor nutrition, as well as other health concerns, which frequently are related to the circumstances of poverty (see Chapter III). To address the effects of such disadvantages, Tribal Colleges are involved in special programs targeted toward Indian children at a very young age—before they enter the K-12 education system. Such programs combine early intervention practices with family support and provide American Indian children with greater access to educational opportunities and health care.

Currently, about 40 percent of the Tribal Colleges report that they are offering pre-school programs for their communities (AIHEC, 2000-2001).⁴ In addition, several of the colleges either operate or collaborate in running early intervention programs funded by the federal or local governments. Many

⁴ Data were available for 30 colleges.

of the colleges are involved in Head Start and its sister program, Early Head Start, both funded through the U.S. Department of Health and Human Services (HHS). These programs, which together serve low-income children from birth to age five, pregnant women, and their families, are focused on the healthy development of low-income children, particularly preparing them for success in school. Grants awarded to local public agencies, private organizations, Indian tribes, and school systems focus on the diversity of the community and can be used for a number of activities, including education and early childhood development, health-related services, nutrition, and parenting activities (HHS, 2000a). Much evidence exists to show the success of Head Start programs; for example, a 1997 study revealed that children in Head Start programs "acquired the early literacy, numeracy and social skills signifying readiness to learn in kindergarten; and that program quality is linked to child performance" (HHS, 2000c, p. 3).

Recognizing the unique capacity of Tribal Colleges in reaching the reservation communities, HHS funds Head Start and Early Head Start Partnerships with Tribally Controlled Land Grant Colleges/Universities to improve the long-term effectiveness of these programs in American Indian communities. In Fiscal Year (FY) 2000, seven Tribal Colleges—Bay Mills Community College, Blackfeet Community College, Oglala Lakota College, Dull Knife Memorial College, Southwestern Indian Polytechnic Institute, Little Big Horn College, and Fort Belknap College received funding under Head Start (Doan, 2000; HHS, 2000d).5 These colleges partner with a Head Start agency or grantee to provide culturally sensitive education and training to Head Start staff from those agencies. In FY 1999, \$133 million was appropriated to the American Indian Program Branch to fund Head Start projects; grant funding to the seven participating Tribal Colleges was over \$1 million in FY 2000 (AIPB, 2000; Doan, 2000). It is important to note, however, that the nature of discretionary grant programs for Head Start, while providing funds to successful grantees, limits the support for other needy Indian communities served by Tribal Colleges.

Direct Links to Elementary and Secondary Schools As American Indian children progress in the K-12 education system, Tribal Colleges continue to directly support students' academic development. Tribal Colleges maintain their connections to the academic progress of American Indian children by establishing direct links with schools in their

local communities, including federally operated, tribally managed, and public schools. Virtually all of the Tribal Colleges are working with local schools, providing direct services, operating programs, or developing articulation agreements, which enable students at the secondary school level to take coursework for college credit. (See Figure One.)

Many of these connections between Tribal Colleges and local schools occur through the Tribal College Rural Systemic Initiative (TCRSI), part of the Rural Systemic Initiatives in Science, Mathematics, and Technology Education Program funded by the National Science Foundation (NSF) and organized by Turtle Mountain Community College. TCRSI is comprised of schools and colleges located on 18 Indian reservations in North Dakota, South Dakota, Montana,



Students at Oglala Lakota College

Wyoming, Nebraska, and Minnesota. The Initiative promotes the teaching of science, math, and technology to American Indian students living in rural and economically disadvantaged regions in the nation. The intention is to increase the leadership and presence of future generations of American Indians in a world that is increasingly becoming more technological and reliant on professions requiring strong mathematics and science backgrounds. This collaborative effort, among other activities, focuses on both reforming entire systems of instruction by making them consistent with the cultural needs of students and transforming them to respond to the current and future economic needs of their regions (TCRSI, 2000a).

Seventeen Tribal Colleges participated in Phase I of the TCRSI (Weasel Head, 2000). (See Figure One.) All of these colleges worked with local elementary and secondary schools on a

The previous year, College of Menominee Nation, Fort Peck Community College, Leech Lake Community College, Northwest Indian College, Sitting Bull College, and Stone Child College were grantees.

Figure One: Selected Tribal College Linkages with K-12 Schools

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COLLEGE	RURAL SYSTEMIC INITIATIVE PARTICIPANT	ARTICULATION AGREEMENTS WITH SECONDARY SCHOOLS	OTHER LINKAGES WITH LOCAL SCHOOLS
Bay Mills Community College	°Z	Yes	
Blackfeet Community College	Yes: Browning High School, Browning Middle School, and Heart Butte	Developing technical program with local high schools	Works with the public school system and the immersion schools (Cuts Wood, Moccasin Flat, and Lost Child) in projects dealing with the restoration of plants and revegetation.
Cankdeska Cikana Community College	Yes: Four Winds High School, Four Winds Elementary, and Warwick High School		
College of Menominee Nation	0 2	Yes	Established the Wolf River School-to-Work Apprenticeship Program that includes College of Menominee Nation and nine area school districts; established a Workbased Learning Program with three area high schools where students attend school, work at various businesses and agencies, and take specific courses from the college in the areas of service (e.g., child care); established a Youth Options Program with the local high school, allowing students to receive dual credit for high school and college courses; established a pre-college program (similar to Upward Bound) with the University of Wisconsin, Marinette for middle school students at four area schools; and established a summer program for middle school students to explore careers in transportation with the Department of Transportation.
Crownpoint Institute of Technology	° 2	Yes	
D-Q University	٥N		
Diné College	<u>0</u>	° 2	Works with local schools, such as Shiprock School, in supporting the Native American Science Bowl; offers Summer Science Teacher Enhancement Workshops for local teachers; participates in a consortium of Tribal Colleges in providing a summer math and science camp for 8th and 9th grade Navajo students; links with 15 K-8 schools near the campus for its teacher education program.
Dull Knife Memorial College	Yes: Northern Cheyenne Tribal Schools, Ashland Public, and Lame Deer Elementary	Yes	The School-To-Work Career Enhancement System works with students attending schools on or near the Northern Cheyenne Reservation in improving their awareness of educational needs and career choices.

COLLEGE	RURAL SYSTEMIC INITIATIVE PARTICIPANT	ARTICULATION AGREEMENTS WITH SECONDARY SCHOOLS	OTHER LINKAGES WITH LOCAL SCHOOLS
Fond du Lac Tribal and Community College	Yes. Fond du Lac Education Division and Little Black Bear	Yes	Hosts summer programs on computer technology, women in science and math, career and work preparation, and environmental science for youth.
Fort Belknap College	Yes. Hays/Lodge-Pole and Harlem High School	No No	College math and science teachers provide professional development activities for local public school teachers and enrichment activities for local elementary school students; college education students student-teach in elementary schools in Harlem, Hays/Lodge-Pole, and the St. Paul's Mission Schools
Fort Berthold Community College	Yes. Mandaree, Twin Buttes Elementary, New Town, New Town Middle, New Town Elementary, and White Shields	Yes	
Fort Peck Community College	Yes: Poplar Middle School, Frazier School District, and Brockton	Yes	
Haskell Indian Nations University	° 2	Yes: Lawrence High School	
Institute of American Indian Arts	ON	ON	Works with students in grades 7-12 through its "Building Healthy Community Program"; provides services to youth ages 12-17 through its Native American Youth Outreach Program (NAYOP)
Keweenaw Bay Ojibwa Community College	<u>o</u>	0 Z	Works with local school districts in Copper County by offering Ojibwa studies programs through distance learning: offers a summer science program for students in grades three through seven.
Lac Courte Oreilles Ojibwa Community College	<u>0</u>	O _N	Offers a Youth Apprenticeship program that involves 17 high schools, where students take college courses and receive job training in Hospitality/Tourism and Information Technology; hosts a one-week program for 20 students in the second through fourth grade in ecology, nutrition, health, and Native American studies.
Leech Lake Tribal College	Yes: Bug-o-nay-ge-shig, Cass Lake-Bena, Deer River Schools, and Remer-Longville	Yes: 6 RSI High Schools	

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COLLEGE	RURAL SYSTEMIC INITIATIVE PARTICIPANT	ARTICULATION AGREEMENTS WITH SECONDARY SCHOOLS	OTHER LINKAGES WITH LOCAL SCHOOLS
Little Big Horn College	Yes: Hardin High School and Lodge Grass High School	o Z	Developed a School-to-Work Partnership with Dull Knife Memorial College that serves both the Crow and the Northern Cheyenne Reservations, offering career fairs and workplace experiences and serving 7,000 students.
Little Priest Tribal College	ON V	No (in process of establishing)	Links with the Winnebago Public School concerning teacher education; connects to junior and senior high school students through a family and community violence prevention program.
Nebraska Indian Community College	No	Yes	
Northwest Indian College	No	Yes	Through its Talent Search project, works with 12 public and tribal high schools on six reservations throughout Western Washington; through the Upward Bound program, works with 6 local high schools; established class observations, practicums, and student teaching experiences with the Ferndale School District and Lummi Tribal School
Ogiala Lakota College	Yes: Shannon County: Wolf Creek, Rockyford, Batesland, Red Shirt, and Little Wound	Yes: Informally; has an early entry program	In collaboration with the Shannon County School District, students in the K-12 special education program intern at local public schools for two years.
Red Crow Community College		Yes	
Salish Kootenai College	Yes: Arlee, Charlo, Ronan, Pablo, Two Eagle River, Dixon, and St. Ignatius	Yes: informally; Two Eagle High School	Works with reservation schools through the Upward Bound Program; works with Two Eagle River School and Ronan Public Schools through the Gear Up Program.
Si Tanka College	Yes: Cheyenne Eagle Butte and Tiospaye Topa		Provides curriculum enhancement in the areas of math and science to local schools; conducting a survey with schools to identity certificate, degree, and training opportunities preferred by elementary and secondary schools near the Cheyenne River Reservation.

COLLEGE	RURAL SYSTEMIC INITIATIVE PARTICIPANT	ARTICULATION AGREEMENTS WITH SECONDARY SCHOOLS	OTHER LINKAGES WITH LOCAL SCHOOLS
Sinte Gleska University	Yes: St. Francis and Todd County	Yes: Informally	Has a direct link with the Todd County Middle School through the Family and Community Violence Prevention Program; assists local school districts with curriculum development assistance.
Sisseton Wahpeton Community College	Yes: Tiospa-Zina, Enemy Swim Day, Waubay, and Browns Valley	Yes	
Sitting Bull College	Yes: Cannonball Elementary, St. Bernards Mission, Standing Rock, Fort Yates, and McLaughlin	Yes	The Elementary/Special Education Department works with local schools in establishing practicum and classroom experiences; provides workshops for area teachers in reading, math, and technology; offers graduate courses for area teachers in special education, math, science, and reading.
Southwestern Indian Polytechnic Institute	O Z	Yes: Albuquerque Public School System: Bernalillo High School- Tohajiilee Community School (3)	Provides School to Work, Talent Search, Upward Bound, and NASA pre-college programs; offers a six-week intensive summer program in math and science and opportunities for students to enroll in college courses while in the 11th and 12th grade; has a teacher training program (ENACT) that helps provide services to BIA schools, day schools, public schools, and Head Start
Stone Child College	O _N	Yes: Box Elder High School and Rocky Boy High School	Recruits students from Box Elder and Rocky Boy School staff to become teachers.
Turtle Mountain Community College	Yes: Dunseith Day Elementary, Dunseith, Turtle Mountain, Turtle Mountain Middle	Yes: Belcourt and Dunguth, as well as RSI schools	
United Tribes Technical College	Yes: Theodore Jamerson, Jeanotte Myhre, Riverside Elementary	ON.	
White Earth Tribal and Community College	ON	ON	

number of projects and initiatives in the areas of math, science, and technology (TCRSI, 2000a; NSF, 2000) and were obligated to follow the NSF guidelines ("drivers").⁶ For example:

- ▶ More than 60 students in grades 3 through 12 from schools on the Crow Reservation in Montana participated in a technology camp called "Cyber Rez" held at Little Big Horn College. Students learned basic computer skills, how to use a scanner and digital camera, and various research techniques, including the use of the Internet and email protocol (LBHC, 1999).
- ➤ Si Tanka College in South Dakota organized a fourday workshop called "Ecology with Technology" for fifth- to twelfth-grade teachers interested in integrating ecology and technology in their classrooms (Si Tanka College, 1999).
- Ashland Public School and Lame Deer Elementary School in Montana have begun to implement "Connected Math"—one of the top math programs reviewed by the U.S. Department of Education—into their curriculum for sixth, seventh, and eighth graders. Dull Knife Memorial College and Black Hills State College are assisting both schools with the training and implementation of this curriculum (DKMC, 1999).

Tribal Colleges involved in Phase I of the TCRSI had five years to promote change in their communities, and some of these Tribal Colleges now are embarking on Phase II. ⁷ During Phase II, these Tribal Colleges will be using their experience gathered from Phase I to begin managing and controlling their individual efforts.

The success of the TCRSI is evidenced in the achievements of its students, and its impact is felt throughout all levels of education, from elementary school to college. Between 1995-96 and 1998-99, the math and science ACT scores of students attending Turtle Mountain Community Schools increased 11 percent and 10 percent, respectively. At the postsecondary level, a major difference in what students choose to study also is taking place. Prior to the TCRSI, many Tribal College students pursued degrees in the humanities and social

sciences. With the implementation of the TCRSI, and in collaboration with other similar math, science and technology funded projects, more Tribal College students are choosing to concentrate in math, science, and technology, creating a seamless path between exposure at the elementary and secondary school level and choice of degree in college. For example, one-third of the student body at Turtle Mountain Community College is majoring in the math and sciences, and adding those students who are pursuing degrees in technology increases the number to one-half (TCRSI, 2000b).

Other activities with local schools occur outside of the TCRSI framework. For example:

- ▶ Diné College is part of a consortium of Tribal Colleges funded by National Aeronautics and Space Administration (NASA) and coordinated by New Mexico Highlands University that offers a three-week science camp. The camp, "Naasgoo Iin Naalkaah," offers a Summer Mathematics and Science Program to 40 eighth- and ninthgrade Navajo students at the Fort Lewis College campus in Colorado. The camp is directed by a Math/Science Division staff member in coordination with the Navajo Nation Department of Youth (AIHEC, 2000-2001).
- ▶ White Earth Tribal College, the University of Minnesota, and the Circle of Life School developed a science, math, and engineering program aimed at increasing low test scores and boosting student achievement in the areas of math and science. As a result, the science and math test scores of the seventh through twelfth graders involved in the program showed a one and a half year grade-level increase between pre- and post-test scores, and delinquency and truancy rates also declined. Efforts to expand the summer program to a full-year program are underway (AIHEC, 2000-2001).
- ➤ The Institute of American Indian Arts (IAIA), through its Museum, initiated a three-part educational program that introduces Native cultures and contemporary arts to local students in grades 6 through 12. The program provides classroom teachers with a slide show and classroom-based activities, exploring American Indian con-

The six drivers that NSF obligates the Tribal College participants to fulfill are the following: standards-based math and science curricula, policies that support high quality math and science education, full use of resources appropriate to the tasks, broad-based support from parents and policymakers, enhancement of student achievement, and evidence of student achievement (Weasel Head, 2000).

In 2000, the Tribal Colleges that are Implementation grantees under Phase II include: Candeska Cikana Community College, Dull Knife Memorial College, Fort Belknap College, Little Big Horn College, Salish Kootenai College, Sisseton Wahpeton Community College, Sitting Bull College, Turtle Mountain Community College, and United Tribes Technical College. In 2000, the Tribal Colleges that are Development grantees under Phase II include: Blackfeet Community College, Fort Berthold Community College, Fort Peck Community College, and Northwest Indian College (Weasel Head, 2000).

temporary art through its history, culture, and freedom of expression. IAIA alumni and faculty work directly with these students during classroom visits where students create their own artwork. Since the program began, visitation to the museum has increased, and has fostered an appreciation and self-identification of Native culture and the arts in younger generations (AIHEC, 2000-2001).

► Keweenaw Bay Ojibwa Community College is working with American Indian teenagers through an afterschool computer club, in which students develop their own websites and communicate with youth programs from other tribal organizations over the Internet (AIHEC, 2000-2001).



Child Development Program at Cankdeska Cikana Community College

Finally, many Tribal Colleges work closely with local high schools to enable students to earn credit and facilitate their transition to the college after graduation. Tribal Colleges recognize that raising the aspirations of high school students to attend college and facilitating the transition is important at the high school age, particularly for American Indians who experience high drop-out rates. Therefore, 60 percent of the colleges have articulation agreements with secondary schools, and several more either are in the process of developing such agreements or have informal arrangements with local schools (AIHEC, 2000-2001).8 For example, in AY 1998-1999, the College of Menominee Nation in Keshena, Wisconsin offered a Youth Options Program, which allows Menominee Indian High School juniors and seniors to attend college while earning dual credits for college and high school coursework. Sixteen students were enrolled in the Carpentry/Electrical Program and four were in the

General Education Courses. Next year, Business and Administrative Assistant programs are scheduled to be offered (AIHEC, 2000-2001).

Early Intervention and Youth At-Risk Programs In addition to establishing academic linkages, Tribal Colleges continue to work with children on an emotional level as they progress through the elementary and secondary education system through intervention programs for at-risk students. Tribal Colleges offer support services and programs for adolescents that work on building self-confidence and self-perception, encouraging goals and aspirations, and planning for future education. For example, land-grant funding for Haskell Indian Nations University in Lawrence, Kansas, in collaboration with Kansas State University, has enabled the development of a program targeted on the atrisk youth of eight local American Indian communities, including four reservations and four urban centers. The project supports programs offered by the communities, in addition to hosting its own activities, such as tutoring, mentoring, and meetings. The program is targeted toward youth who are at risk for alcohol abuse, poverty, and dependency. In summer 1999, these students participated in an educational tour of Kansas that focused on the rich history of and substantial contributions made by American Indians (CSREES, 2000b; AIHEC, 2000-2001).

The support that these programs provide can be critical as children make the transition between high school and college. Many Tribal Colleges are involved with TRIO programs, a series of outreach and support programs under the U.S. Department of Education that aim to help low-income and first-generation students enter postsecondary education, successfully graduate from college, and pursue further education beyond the baccalaureate degree. Currently, there are over 1,900 TRIO programs in the United States serving close to 700,000 students from age 11 to 27. About 5 percent of the students enrolled in all TRIO programs are American Indian (COE, 2000).

Many Tribal Colleges offer TRIO programs to their students and local school-age children living on the reservation, including the following:

► Talent Search targets educationally and economically disadvantaged students from the sixth through twelfth grade who show great potential to succeed in college. The program assists students with academic and

⁸ Dates were available for 28 colleges.

- career counseling, assistance in filling out admissions forms, and preparing for college entrance exams. In addition, the program encourages students who have dropped out of high school to return to school. In FY 1999, three Tribal Colleges (Cankdeska Cikana Community College, Northwest Indian College, and Southwestern Indian Polytechnic Institute) participated in the Talent Search Program, receiving an average award of \$233,536 (USDE, 2000b).
- ▶ Upward Bound helps high school students from lowincome families prepare for college by providing them with instruction in reading, writing, study skills, and other academic assistance. All Upward Bound programs must include math, laboratory science, composition, literature, and foreign language instruction. In FY 1999, six Tribal Colleges (College of Menominee Nation, Diné College, Haskell Indian Nations University, Northwest Indian College, Salish Kootenai College, and Southwest-

- ern Indian Polytechnic Institute) participated in the Upward Bound Program, receiving an average award of \$223,856 (USDE, 2000c).
- ▶ Student Support Services aids students in persisting to completion of their degree through tutorial and mentoring services, assistance in locating financial aid for undergraduate and graduate study, and career information. In FY 1999, 14 Tribal Colleges (Blackfeet Community College, Dull Knife Memorial College, Fond du Lac Tribal and Community College, Fort Belknap College, Fort Peck Community College, Lac Courte Oreilles Ojibwa Community College, Northwest Indian College, Oglala Lakota College, Salish Kootenai College, Sinte Gleska University, Sitting Bull College, Stone Child College, Turtle Mountain Community College, and United Tribes Technical College) participated in the Student Support Services Program, receiving an average award of \$200,845 (USDE, 2000a).

PROFILE

Oglala Lakota College's Program for Youth Opportunity

On the Pine Ridge Reservation in South Dakota, unemployment rates, welfare participation, and drop-out rates are high while college enrollment rates are low for American Indians. In an attempt to improve these circumstances, Oglala Lakota College, in collaboration with the Oglala Sioux Tribe, the SuAnne Big Crow Boys and Girls Club, the Oglala Sioux (Lakota) Housing, and the Oglala Nation Education Coalition, recently received a grant through the U.S. Department of Labor to work with youth on the reservation. The grant was prepared through the college's *Wowasi Un Wakanyeja* Welfare to Work Program and is part of a five-year, \$16 million dollar project geared toward creating a systematic plan and developing infrastructures that will reduce the number of American Indian youth who drop out of high school and therefore face increased chances of unemployment and dependency on welfare.

The new program, Yug'an Ojanjanglepi ("Opening the Windows"), will assist approximately 750 youth between the ages of 14 to 21 with developing personal skills and work experience, assessing skills, and providing mentoring opportunities. As part of the program, the college's Youth Data Nexus will provide greater educational and employment opportunities for youth by serving as an employment agency, providing educational and career counseling, referral services, and job listings. In addition, the program will organize Boys and Girls Clubs for 14-to 18-year-olds and Youth Adult Societies for 19- to 21-year-olds.

The college's program would have a dramatic impact on the future for local youth by providing the guidance they need to effectively choose colleges and careers that are best suited to their abilities and to the needs of their communities. According to Oglala Lakota College President Tom Shortbull, "We will build on strategies that the college has found to work on the reservation: utilize organizations that are already successful, integrate Lakota culture throughout the program, and bring the program to the people where they are" (p. 35).

Source: Tribal College Journal, Summer 2000

Research indicates that students who participate in TRIO programs are more likely to succeed in postsecondary education and in the workforce. Upward Bound participants are four times more likely to complete their undergraduate degree than those students from similar backgrounds who did not participate, and students in the Student Support Services Program are more than twice as likely to remain in college compared to those from similar backgrounds who did not participate (COE, 2000). On Tribal College reservations where educational attainment rates are low, student participation in these programs is essential to increasing the chances for educational success.

Special Role in Teacher Education

Tribal Colleges play a special role in educating teachers who serve schools in local communities—especially American Indian teachers. Due to the prevalence of alcohol abuse, unemployment, and poverty that many American Indian children face on a daily basis from an early age, the need for role models is great. The educational underachievement of American Indian youth calls strongly for role models as evidence of American Indians in leadership roles who have achieved academic success. Tribal Colleges serve this function by graduating American Indians with degrees in education, many of whom continue on to advanced degrees. Equally important is the participation of non-Indian Tribal College students in education programs. These teachers, who tend to teach in reservation schools or in schools with high American Indian enrollment, bring with them the cultural traditions and approaches to learning gained while attending the Tribal College. Major importance is placed on educating both American Indian and non-Indian teachers to become role models for the communities, thereby creating a "lineage of leadership" for future generations (The Institute for Higher Education, 2000).

Teacher education programs at Tribal Colleges are at various stages of development. Some of these schools are just beginning to implement teacher education programs while others are refocusing their programs. The unique relationship that Tribal Colleges have with their students and the surrounding communities is one of the main catalysts for growth in the number of American Indian educators in the 1990s. Culturally specific programs, innovative curricula and approaches, and a concentrated focus on successfully educating American Indian children play a pivotal role in producing well-trained teachers.

Innovative Tribal College programs, or programs that are in the process of development, include the following:

- Many of the teacher training courses at Fort Peck Community College in Montana are delivered by distance learning from other institutions due to the reservation's remote location. Freshmen are encouraged to first enroll in the new paraprofessional education program, a one-year certificate program for teacher aides and substitutes, and then encouraged to continue on to earn associate's or bachelor's degrees (the latter in cooperation with local state institutions). Both the paraprofessional certificate and the associate's degree program require 40-45 hours of field practice, and the bachelor's degree requires student teaching (*Tribal College Journal*, Winter 1999).
- The Elementary Teacher Education Program (ETEP) at Haskell Indian Nations University created a bachelor's degree in elementary education in response to the great need for American Indian teachers to educate American Indian children from a Native perspective. Haskell's ETEP prepares future teachers who have an awareness and deep understanding of Indian history, literature, and philosophy, the skills necessary to develop classes attuned to the needs of the local community, and the ability to be flexible, caring educators who have high expectations for their students (AIHEC, 2000-2001).
- ▶ Research by the Blood Tribe in Alberta, Canada found that both Indian and non-Indian teachers had low expectations of students and often did not believe they would graduate. To address these attitudes, the tribe asked its Tribal College, Red Crow Community College, to establish a teacher-training program that was culturally sensitive and had relevant curriculum (Ambler, 1999c).
- ➤ Turtle Mountain Community College in North Dakota is developing a teacher preparation program that tries to balance pedagogy, subject matter, and culture in a holistic way. The program seeks to assess students based on achieved outcomes. As the program continues to develop, the college will test how to prepare teachers for work with Indian children while satisfying state certification and regional accreditation requirements. The program envisions an integrated experience, in which a cohort of students all begin the program at the same time after their first two years at the college, and continue together through graduation (Barden and Davis, 1999).

PROFILE

Fort Peck Language Immersion School

An astonishing loss of tribal languages has occurred on many reservations. In an effort to reverse the loss and regain the presence of Native languages spoken, many American Indian communities offer classes in tribal languages, culture, and history through their Tribal Colleges. At Fort Peck Community College, a different approach is being implemented to recover languages lost and reintroduce the use of them to younger generations—tribal language instruction begins at the age of three.

In January 1998, Fort Peck Community College opened what may be the first two Montessori Native Language immersion schools in the country. The language immersion schools are unique, intertwining Montessori methods, which focus on preparing independent, self-directed, and responsible children, with the tribal customs and teachings of the Sioux and Assiniboine. In addition, a parent is required to enroll in a similar program in order to incorporate the use of languages in the home, thereby increasing language fluency. Pre-schoolers and their parents are immersed in the speaking of Nakota (language of the Assiniboine) and Dakota (language of the Sioux)—little to no English is spoken.

Funded by Fort Peck Community College and the Administration of Native Americans, each school enrolls approximately a dozen three-year-olds. Blending myths, stories, art, and music with academic and language instruction, the immersion programs work to meet every child's needs and foster a love of learning and respect for their tribal culture and language. The Fort Peck Community College Montessori schools base their instruction on the "Tree of Life," legends, and arts and are rooted in the following spiritual traditions:

- 1. The word "spiritual" is used to refer to a "way" of living rather than an espoused religious doctrine. Spiritual traditions provide tools for learning.
- 2. Words and language used in a spiritual, evocative, or affective context are sacred, to be used responsibly.
- 3. Art is sacred and results from a creative process that is an act and expression of spirit.
- 4. Life and spirit, dual faces of the Great Mystery, move in never-ending cycles of creation and dissolution, expressing the sacred in communal context.
- 5. Nature is the true ground of spiritual reality (p.15).

The implications for the lives and communities of the pre-schoolers and their parents who are educated in these schools are substantial. Lost languages will re-emerge in future generations of American Indians and improvements in educational attainment among American Indian youth will occur.

Source: Tribal College Journal, Spring/Summer 1998

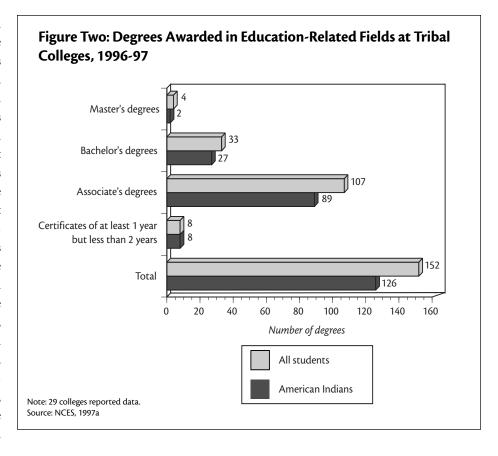
The emergence of teacher education programs at Tribal Colleges and their continuing development are contributing to increases in American Indian teachers. In AY 1993-94, 9 out of 10 teachers in the United States were white; American Indians accounted for less than 1 percent of all public elementary and secondary school teachers in the United States (AACTE, 1999). However, the presence of American Indian teachers in the classroom is increasing. For example, between 1991 and 1995, the number of American Indians enrolled in

teacher education programs increased by 57 percent (AACTE, 1999). By AY 1993-94, 38 percent of the teachers in BIA/tribal schools were American Indian (Pavel et al., 1997).

In AY 1996-97, 152 degrees and certificates were awarded by Tribal Colleges in education-related fields, such as early childhood, elementary teacher education, and special education.⁹ (See Figure Two.) The majority of these degrees (70 percent) were associate's degrees, as most Tribal Colleges

⁹ Data were available (or were reported) for 29 colleges.

are two-year institutions. An additional 24 percent of the awards were bachelor's or master's degrees. Together, degrees and certificates awarded for education made up 7 percent of all degrees and certificates awarded by Tribal Colleges in that year, but almost 38 percent of all bachelor's degrees awarded and two-thirds of the master's degrees awarded. Almost 83 percent of the educationrelated degrees and certificates awarded by Tribal Colleges were awarded to American Indian students, and 86 percent were awarded to women (NCES, 1997a). In comparison, among all institutions of higher education, less than 1 percent of educationrelated degrees (associate's, bachelor's, and master's) were awarded to American Indian students (NCES, 1999).



Tribal Colleges have recognized that a disparity exists between the number of American Indian teachers and the number of American Indian teacher aides—for example, Fort Peck Community College in Montana assessed that nearly 90 percent of the 225 teachers in their local school districts were non-Indian while 90 percent of the 109 teacher aides were American Indians. As a result, they encourage their students to continue on to earn advanced education degrees (*Tribal College Journal*, Summer 2000). Given that most Tribal Colleges are two-year institutions, many have established articulation agreements with local mainstream four-year institutions so that students who have received associate's degrees can go on to earn a bachelor's degree required to teach in the classroom. For example:

- ▶ In collaboration with the University of North Dakota, Fort Berthold Community College graduated its first class of American Indian teachers in spring 1998, 15 with bachelor's degrees in elementary education (*Tribal College Journal*, Winter 1999).
- ► Northwest Indian College, in partnership with Washington State University, is offering its first course in a new four-year degree *Oksale* ("teacher") Native Teacher

Education Program. The program, initiated in 1999, will train American Indian elementary and secondary teachers to teach in tribal and public schools. In addition, the college is in the process of gaining approval for an independent program (AIHEC, 2000-2001; *Tribal College Journal*, Winter 1999).

➤ Salish Kootenai College partners with Western Montana College in recruiting and retaining American Indian teachers. The program aims to increase the pool of American Indian teachers in the state of Montana; currently less than 12 of the approximately 450 teachers on the Flathead Reservation in northern Montana are American Indian. Twelve students were enrolled in the joint teacher education program in 1999 (*Tribal College Journal*, Winter 1999).

Recently, new opportunities have been created for twoyear Tribal Colleges to link their programs with four-year Tribal Colleges. In 1995, Sitting Bull College, a two-year college located on the Standing Rock Reservation in Fort Yates, North Dakota, partnered with Sinte Gleska University, a four-year college located on the Rosebud Sioux Indian Reservation in Rosebud, South Dakota. Since 1989, Sinte Gleska University has been the only Tribal College offering a master's degree program in education, in addition to its bachelor's degree program. The agreement between Sitting Bull College and Sinte Gleska University incorporates each institution's teacher education curriculum, allowing students to transfer easily into the four-year program without having to repeat courses. Students enrolled in the joint program graduate with a double major

in K-8 elementary education and K-12 special education (Alliance for Equity in Higher Education, 2000; Ambler, 1999c). These arrangements between two- and four-year Tribal Colleges are important for the future of American Indian education—such collaboration will encourage higher levels of student success at the K-12 level and American Indians' enrollment in college.

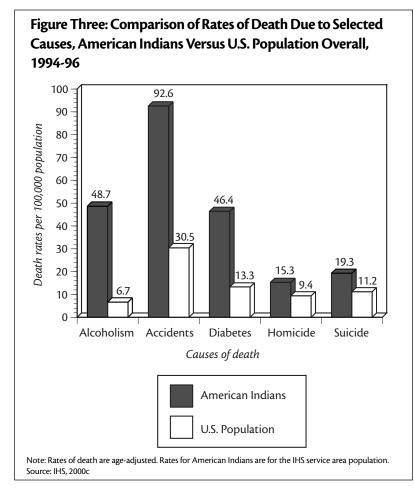
III. Participation in Health and Nutrition Activities

Tribal Colleges are confronting the health problems specific to the reservations and communities they serve in unique and diverse ways. Today, the health of American Indians remains poor in comparison to the health of the entire U.S. population—American Indians experience higher rates of sickness, disease, and mortality among all age groups. Currently, the alcoholism death rate for American Indians is 7.3 times higher than for the general U.S. population; accidents, 3 times higher; diabetes, 3.5 times higher; homicide, 1.6 times higher; and suicide, 1.7 times higher (IHS, 2000c). (See Figure Three.)

Although the most important health and nutrition issues vary by reservation and tribal community, the Indian Health Service (IHS) has identified alcohol and substance abuse to be the most significant health problem affecting American Indian communities in general (IHS, 2000b). It is related to many other social issues present on reservations. In 1994-95, 4.5 percent of American Indian mothers drank alcohol during pregnancy, three times the percentage for mothers in the general population (IHS, 2000c). Such high rates increase the occurrence of Fetal Alcohol Syndrome (FAS) and Fetal Alcohol Effects (FAE)

on some reservations, with enduring impacts on children's health, the need to provide special education to elementary and secondary students, and the longer-term ability of some adults to sustain employment. According to one estimate, 21 percent of the children born on the Rosebud Indian Reservation, home of Sinte Gleska University, suffer from FAS or FAE (Ambler, 2000b).

Diabetes is also a significant health issue for American Indians. Diabetes causes complications that affect sufferers' daily lives and place a burden on local health care services. Poor nutrition and years of dependency on high fat foods provided through federal government food programs have contributed to the persistence of the disease. On many reservations, tribal members have neglected traditional Native diets beneficial to the health of American Indians. In the Woodlands region, for example, tribal diets consisted of lean meats, fish, wild berries, wild rice, and other staples, and many tribes in the area are encouraging a return to traditional diets (SDI, 1999).



Often, the faculty, staff, and students who work at and attend Tribal Colleges have first-hand experience with living with diabetes and understand what it takes to change dietary patterns and nutrition habits. In 1999, a study of the health and nutrition status of 323 Tribal College students (all in North Dakota) conducted by United Tribes Technical College and North Dakota State University showed a high occurrence of diabetes in students' immediate families, nearly 40 percent. In addition, students reported poor dietary habits, with nearly 90 percent eating fast food at least once a week (UTTC, 2000d).10 Many Tribal College personnel have witnessed a close family member suffering from substance abuse and understand the devastating effects on the family and reservation communities. Tribal Colleges also recognize that the education of American Indian health professionals, as well as non-Indian students who are educated in Tribal teachings and customs, is essential to reversing the high rates of poor health, disease, and mortality facing American Indians.

Contributing to the health and wellness of their students and the surrounding communities in a culturally sensitive way is an important part of the community-based missions of Tribal Colleges. The colleges attempt to improve local health and nutrition in a variety of ways, providing counseling services by counselors who understand clients' concerns and lifestyles, establishing health and wellness centers that combine tribal approaches to healing and modern medicine and fitness, and preparing professionals in health-related fields.

Health and Wellness Programs and Other Services In order to combat the health and nutrition problems prevalent in local communities, Tribal Colleges offer an extensive array of programs that focus on counseling, nutrition, and health services in order to provide American Indians with opportunities for a better and healthier life for themselves and future generations. Some Tribal College programs are targeted toward specific conditions while others hope to broadly benefit the overall health and wellness of the local community.

Given its importance as a health risk, a number of Tribal College programs target various forms of substance abuse. Almost 60 percent of the colleges report that they provide substance abuse counseling to their students and/or local communities (AIHEC, 2000-2001).¹¹ For instance, the

Twelve Feathers Program at Southwestern Indian Polytechnic Institute provides alcohol and drug abuse prevention counseling, education, and coordination of referral services in an attempt to educate the local community about the dangers of using and abusing drugs and alcohol. It accomplishes these goals through classroom courses, support groups, and individual and group counseling (SIPI, 2000).

Related Tribal College programs try to deal with the effects of continued substance abuse by parents on their children, including FAS. For example, United Tribes Technical College in Bismarck, North Dakota is participating in a five-year demonstration project called the "Sacred Child Project" that is funded by the Center for Mental Health Services in the U.S. Department of Health and Human Services. The Sacred Child Project is one of only three Native programs in the United States that works with American Indian children who have serious emotional challenges, incorporating tribal approaches to healing with contemporary medical services. In 1999, 44 percent of participants were from single parent homes, and 76 percent were enrolled in Medicaid; the majority (74 percent) were between the ages of 13 and 18. The philosophy of the program, "every child is sacred," is designed to develop a strategic mental health plan for American Indian children that allows them to remain with their families and communities rather than being entrusted to the care of the state. Currently, American Indian children comprise 7 percent of children under the age of 18 in the state of North Dakota, but they represent over 33 percent of the children in foster care, group homes, residential centers, the state hospital, and Youth Correction Centers (Tribal College Journal, Spring/Summer 1998; UTTC, 2000c).

Many of the Tribal Colleges' programs focus on the effects of diabetes and other conditions. For example, under a grant from the National Institutes of Health's Minority Biomedical Research Support, Diné College employs students part time during the school year and full time during the summer to research the prevalence and effects of diabetes in the Navajo Nation. Speaking to patients in their Native language and combining cultural understanding of disease and healing with modern medicine, the college's students are able to reach their patients and positively influence dietary habits

Students attending Cankdeska Cikana Community College, Fort Berthold Community College, Sisseton Wahpeton Community College, Sitting Bull College, Turtle Mountain Community College, and United Tribes Technical College comprised the 323 surveyed students.

Data were available for 29 of the colleges.

and lifestyles (Ambler, 1999a). At Si Tanka College in South Dakota, land-grant extension activities develop diabetes prevention education and support community gardening projects throughout the Cheyenne River Sioux Reservation, including developing a Healthy Living Summer Youth Camp and promotion of community and family gardens through a support network (CSREES, 2000b; AIHEC, 2000-2001).

Many Tribal Colleges have attempted to encourage better nutrition and physical exercise habits overall, and about 40 percent of the Tribal Colleges currently offer nutrition and health services to their communities (AIHEC, 2000-2001).12 To improve overall nutrition, some Tribal Colleges have established health and wellness centers that serve the entire community. One of the most impressive examples is the Center for Community Health and Wellness (Daya Tibi, "House of Good Living") at Fort Peck Community College. Through the use of the center, students attending Fort Peck and members of the surrounding community, including pregnant women, heart attack victims, and senior citizens, have access to a variety of activities. An average of 125 people use the center a day, participating in aerobics, walking, jogging, yoga, health education, nutrition, expectant mother exercise programs, as well as food preparation and preservation classes (FPCC, 2000; Tribal College Journal, Fall 1999). In the first two years after its establishment in 1997, the Fort Peck Community Health and Wellness Center has served over 500 people, who visited over 20,600 times. The positive impact on the health of the Fort Peck community is shown by a reduction in blood pressure and diabetes for people using the Center's facilities and services. Among this group, high blood pressure declined by 32 percent and high blood pressure among diabetics, 22 percent (Mainor, 2000).

Through land-grant extension programs, Tribal Colleges reach out to local residents in tangible ways. In FY 1999, Oglala Lakota College was able to support its Holistic Human Health Extension Program, which promotes human wellness and basic health habits through good nutrition, diet, and physical exercise, primarily through community education with schools and other reservation organizations. In addition, adult education continuing education units (CEUs) will be available to community members through these activities. Sinte Gleska University used the funding for its Outreach/Lakota Permaculture project to enable community residents to make informed decisions about

food, nutrition, and health and increases awareness, prevention, and treatment of diabetes (CSREES, 2000b).

Through all of these programs, Tribal Colleges integrate cultural traditions and values with knowledge of how to combat local health issues. The Woodlands Wisdom Partnership—a collaboration of the College of Menominee Nation, Turtle Mountain Community College, Leech Lake Tribal College, White Earth Tribal College, Fond du Lac Tribal and Community College, Lac Courte Oreilles Ojibwa Community College, and the University of Minnesota—hopes to implement a culturally responsive nutrition education program on 11 local reservations, in order to reduce the risk of chronic disease, promote traditional subsistence dietary patterns, and encourage physical activity and health (CSREES, 2000b). Under this partnership, White



Dental Assistance Program at Salish Kootenai College

Earth Tribal and Community College co-sponsors a "gathering day" called Healing Our Families. Healing Our Families aims to educate the American Indian community on the critical problems of diabetes, heart disease, and fetal alcohol syndrome affecting the reservation, to collaborate on solutions towards solving these problems, and to celebrate lifelong learning activities at White Earth (Anderson, 2000).

Preparation of Professionals in Health-Related Fields

Tribal Colleges also help improve reservation communities' health and wellness in an indirect way—by graduating students, especially tribal members, who have expertise in health-related fields and who remain on the reservation to

¹² Data were available for 29 colleges.

PROFILE

UTTC Injury Prevention Program (UTTC-IP)

Injuries are one of the leading causes of hospitalization and death for American Indians. More than 1,300 American Indians die from injuries each year and over 10,000 are hospitalized. In 1998, United Tribes Technical College (UTTC) established the first undergraduate injury prevention program in the country to address this important issue. UTTC's program is dedicated to all American Indians and their families who lost a life unnecessarily due to fire, poisoning, suicide, drowning, or car crash. The college's Associate of Applied Science degree in Injury Prevention remains the only undergraduate degree in this specialization.

UTTC began its injury prevention program to address a clear need to prevent increases in the already epidemic numbers of injuries on North Dakota and other reservations. Through its program, UTTC educates students to become qualified injury prevention specialists who are able to work with local state, national, and tribal organizations and implement intervention techniques aimed at reducing injury fatalities in local communities. The college also partners with the University of North Carolina Injury Prevention Research Center to extend the program into other American Indian communities and other rural areas.

In order to prepare American Indian injury prevention specialists who are able to return to the reservation and serve their people, the United Tribes Technical College's injury prevention program involves the following objectives:

- Assist students through education to develop, implement, and evaluate grassroots interventions on alcohol- and traffic safety-related problems
- ➤ Serve as a liaison and secure funding for the UTTC-IP by coordinating and collaborating with state and national traffic safety related problems
- ▶ Provide a two-day Native American Lifesaver's Conference annually
- ▶ Reduce alcohol-related injury and death in the high-risk group age 25 and younger and
- ▶ Discuss intervention strategies to address the three highest causes of morbidity/mortality for American Indian communities.

In 2000, UTTC graduated the first class in injury prevention in the United States: five students, representing the Rosebud Sioux Tribe, Turtle Mountain, Standing Rock Sioux, Crow Agency, and Ute Mountain. Three out of the five plan to further their education at a local four-year institution. Two are pursuing careers in injury prevention and health in reservation communities.

Sources: UTTC, 2000a; NHTSA, 1999

serve local communities. Despite recent increases in the number of American Indians pursuing degrees in health-related fields, there are shortages of American Indian health-care professionals in many reservation communities, with disproportionately low numbers of American Indian doctors and nurses. According to U.S. Census data, between 1980 and 1990, the number of American Indian physicians grew by 63 percent and registered nurses by 92 percent (Boyer,

1997). However, in 1990, American Indians still accounted for only 979 physicians out of a total of almost 600,000 in the country, and only 7,961 registered nurses out of almost 1.9 million—less than half of 1 percent in both cases (Census Bureau, 2000). In addition, there are only a few Indian professionals in the country with training in the area of improving the health and wellness of American Indians through better nutrition and attention to diet.



Optical Technology Program Laboratory at Southwestern Indian Polytechnic Institute

It is important to increase the number of tribal members in the health-related fields because the presence of American Indians in medical fields provides role models for younger generations, allowing them to see American Indians working in medical positions using culturally supportive approaches to medicine. Even if they are non-Indian, however, Tribal College students are more likely to understand the problems and issues specific to local communities.

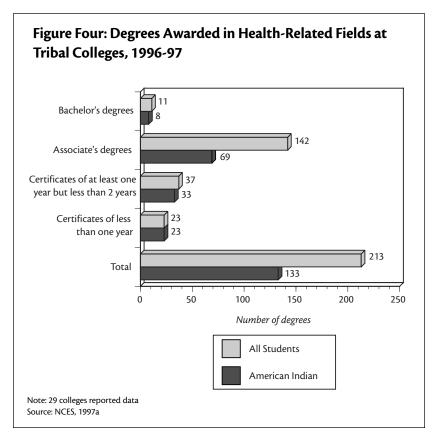
Tribal Colleges offer a variety of instructional programs in health-related fields, such as nursing, substance abuse

counseling, and food and nutrition studies. All of these areas are essential to the wellbeing of local communities. Some examples of Tribal College programs are the following:

- ▶ Northwest Indian College is developing a community-based Nutrition Assistant program, which incorporates tribally specific cultural materials with the standard curriculum and focuses upon improving nutrition and increasing physical activity for American Indians in the Northwest region (AIHEC, 2000-2001).
- ► Sisseton Wahpeton Community College is recruiting tribal members to enroll in its nursing program and remain in the program until they graduate. Faculty members work intensively with current nursing students to address any personal or academic

▶ Sinte Gleska University's chemical dependency program trains graduates to address the drug and alcohol problems on the Rosebud Reservation and other communities. Several years ago, the college upgraded its program to a bachelor's degree in human services with an emphasis in chemical dependency (*Tribal College Journal*, Spring 1999).

Through these types of programs, Tribal Colleges hope to graduate students in health professions who will serve local communities. In 1996-97, almost 10 percent of all degrees and certificates awarded by Tribal Colleges were in the health professions and related fields (NCES, 1997a).¹³ Over 200 degrees and certificates were awarded by Tribal Colleges in the health professions or related fields, such as nursing, alcohol/drug abuse counseling, dental assistant, and medical records technician. (See Figure Four.) The majority, 67 percent, were associate's degrees; an additional 28 percent were certificates below the level of an associate's degree, and 5 percent were bachelor's degrees. More than



problems before they threaten the students' academic careers. Between 1992 and 1998, the college graduated 88 individuals with an associate of arts degree in nursing (*Tribal College Journal*, Winter 1998-99).

¹³ Twenty-nine colleges reporting.

PROFILE



Senior BSN Salish Kootenai College Colleagues with Surgeon General David Satcher at Montana Public Health Association Convention

Salish Kootenai College (SKC) Nursing Programs

In the past, the majority of American Indian nurses received their training and degrees from mainstream four-year institutions. However, Tribal Colleges are beginning to prepare future American Indian nurses at increasing rates, bringing attention to the role these colleges play in expanding the presence of much-needed nurses on reservations. Although the numbers of American Indian registered nurses remain low, between 1980 and 1996, they increased by 177 percent, the highest of any ethnic and racial group.

An important example is Salish Kootenai College's culturally based, accredited nursing programs, which offer an associate of science degree, accredited by the National League for Nursing Accrediting Commission, and the bachelor of science, which opened in 1998. Both programs combine a rich academic background with a curriculum that is shaped by the traditions of the American Indian community. Learning is interactive: Teaching is structured using learning circles and emphasizes cooperative learning groups rather than the lecture format. Students interact with and participate as members of the tribal community to gain the cultural perspectives of clients and to address health care needs of American Indian people. The programs consist mainly of women (though male enrollment has been increasing in recent years) who come from reservations throughout Montana and other northern mountain states.

Over 200 students (half of which are American Indian) have received their associate's degree in nursing (ADN) since the program's origin 10 years ago. An additional 75 American Indian graduates are expected in the next five years. The success rate of SKC students who pass the national registered nurse (RN) licensing exams is quite high, with 92 percent of SKC graduates successfully practicing as registered nurses. Most graduates practice locally in tribal health and contract care facilities; 30 percent of the graduates are practicing or have practiced on the Flathead Reservation (where Salish Kootenai College is located), 20 percent on the Blackfeet Reservation, Fort Belknap Reservation, Rocky Boy Reservation, Fort Peck Reservation, and Crow Reservation, and 8 percent on other reservations and Indian urban centers.

Many graduates also pursue bachelor's degrees in nursing at mainstream universities or through SKC's new program. SKC developed a Bachelor's of Science in Nursing (BSN) program in fall 1998 and graduated its first class of six students in June 2000, four of whom are American Indian. The RN/BSN program is designed for working RNs, many of them full-time workers, who therefore attend school part-time. The majority of the 25 RN students currently enrolled in the RN/BSN program attend classes online, through web-based mechanisms, and on campus during the weekends. Campus-based meetings occur only two to three times per quarter, requiring some students to drive 10 to 12 hours to attend class. The BSN curriculum focuses on population-based health care where students are working with the community on a variety of health problems affecting reservation communities. For example, one BSN student created, coordinated, and implemented the first annual adolescent diabetes activity camp and another developed and implemented a teen education program for pregnant teens at a local tribal high school.

According to Jacque Dolberry, Director of the Nursing Department, many of the announcements at SKC's 10th year celebration last June talked about the programs at SKC as being "small and inspirational" miracles. The graduates of the program have been recognized for their great knowledge about health care based on population needs and environmental concerns, and have been invited to several conferences and health state organizations across Montana to present their projects.

Source: Oxendine, 1998; Salish Kootenai College, 2000

62 percent of the health-related degrees and certificates were awarded to American Indian students, and 85 percent were awarded to women. In comparison, less than 1 percent of health-related degrees were awarded to American Indian students by all institutions of higher education in the same year (NCES, 1999).

Many of the colleges have arranged articulation agreements with other Tribal Colleges or with nearby state universities, to facilitate their students' completion of their bachelor's degrees in health-related fields and hopefully continue on further to advanced degrees. For example, students who earn an associate's degree in

nursing from the College of Menominee Nation have the opportunity to complete their education at Bellin College of Nursing (College of Menominee Nation, 2000a). Oglala Lakota College's associate's degree nursing program, in cooperation with the University of South Dakota's Department of Nursing, enables students to complete registered nurse (RN) and master's nursing degrees (AIHEC, 2000-2001). Through linkages to four-year institutions, Tribal Colleges are playing a significant part in increasing the number of nurses, physicians, and other health care professionals—especially American Indians—who will serve reservation health care facilities and health care in general.

IV. The Special Role of Faculty

'ribal College faculty, especially American Indian faculty, have a special status within local communities, in large part because there are relatively few faculty nationwide located on reservations or interacting with American Indian communities. Although non-Indian faculty who contribute to reservation communities are important, the relatively low numbers of American Indian faculty are of most concern. In 1995, only about 3,600 American Indian or Alaska Native faculty taught at all institutions of higher education in the United States, less than half of 1 percent of total full-time and part-time faculty in that year (NCES, 1999).14 To some extent, this underrepresentation reflects the low average levels of educational attainment among American Indians. In 1997, only 149 American Indians earned doctoral degrees, less than half of 1 percent of all doctoral degrees awarded that year. Slightly more than 1,900 American Indians earned master's degrees in that year, also less than half of 1 percent of all master's degrees awarded.15 In comparison, about 23,000 white, non-Hispanic students earned doctoral degrees in 1997 and almost 303,000 earned master's degrees (Wilds, 2000).

The low number of American Indian faculty has an impact on many aspects of tribal community life, from creating a lack of home-grown research and development to the relatively low goals and aspirations of many tribal members. Despite recent gains in educational attainment levels, it remains rare for American Indian youth to see tribal members in positions that require high levels of education and academic rigor. American Indian faculty members—like teachers at the K-12 level—provide hope and inspiration for younger generations just by teaching nearby and interacting with students and community members. Faculty, too, have traditionally played a networking role for local communities throughout the United States, by connecting with mainstream



Classroom Instruction at Haskell Indian Nations University

universities, conducting research in areas of community interest, and creating mechanisms for the dissemination of knowledge. Without faculty located within American Indian communities, these types of connections are rare.

Given these circumstances, Tribal Colleges have made significant efforts to recruit American Indian as well as non-Indian faculty because they recognize their invaluable contributions as role models, educators, and disseminators of tribal traditions. In fact, many Tribal College graduates are motivated to pursue advanced degrees and ultimately return to the colleges as faculty members. This has contributed to the Tribal Colleges' success in attracting comparatively large proportions of American Indians as faculty members. Tribal Colleges are able to recruit high quality faculty despite huge obstacles, such as remote locations and low levels of compensation. Perhaps most important, Tribal College faculty are dedicated to serving communities in ways that integrate local values and interests—from tribal elders who bring

¹⁴ In 1998, American Indians made up slightly less than 1 percent of the total U.S. population (Census Bureau,1999).

¹⁵ The majority of these advanced degrees are being awarded to women: 62 percent of the master's degrees and 54 percent of the doctorates were awarded to women.

specific expertise in tribal customs and traditions, to non-Indian faculty who strive to incorporate tribal philosophies into their curricula and research.

Demographics and Credentials of Tribal College Faculty

Like many rural community colleges, Tribal Colleges tend to be small institutions with fairly low faculty numbers. On average, Tribal Colleges each employed about 30 faculty in fall 1997, ranging from less than 10 faculty members to almost 90. Almost half of Tribal College faculty—48 percent—were female, and over 68 percent were employed on a full-time basis in fall 1997 (NCES, 1997b). (See Figure Five.) In comparison, at public two-year institutions in fall 1995, 48 percent were female and about 35 percent of faculty were full time (NCES, 1999).

Tribal Colleges have been relatively successful at recruiting available American Indian faculty to teach their students—about 30 percent of the faculty were American Indian or Alaska Native (NCES, 1997b). This presents a stark contrast with the distribution at public two-year institutions, where less than 1 percent of faculty were American Indian in fall 1995 (NCES, 1999). Tribal College leaders would like to recruit even more American Indian faculty, particularly

Figure Five: Characteristics of Faculty at Tribal Colleges and Universities, Fall 1997 70% 63% 60% 50% 40% 32% 30% 30% 20% 10% 0% Full-time Part-time Other White Men Women American Indian Note: 29 colleges reported data. Source: NCES, 1997b

because of their importance as role models in the communities and their personal understanding of the education system on reservations. Most of the current faculty at Tribal Colleges are non-Indian. "However, there is no evidence that non-Indian faculty compromise the mission of tribal colleges or are less respected by students" (Boyer, 1997, p. 32). Non-Indian faculty are strongly encouraged to learn as much as possible about local traditions and values, and about ways to integrate Indian culture into their courses. All faculty, both Indian and non-Indian, are praised by their students, as reflected in a recent survey, which found that 69 percent of Tribal College students were very satisfied with the teaching at their college, 93 percent felt that more individual attention is shown to students at Tribal Colleges, and 72 percent thought that the quality of instruction was higher at Tribal Colleges than at mainstream institutions (Boyer, 1997).

The survey results also reflect the high competence and experience of all Tribal College faculty. Because accrediting agencies emphasize academic credentials, Tribal Colleges try to recruit faculty with advanced degrees whenever possible. On average across the colleges that reported data, a recent survey shows that the majority of faculty had a master's degree as their highest degree (53 percent); 13 percent had

professional degrees (i.e., lawyer) and doctoral degrees, while 23 percent had a bachelor's degree. Only 6 percent had an associate's degree or lower (AIHEC, 2000-2001). This distribution is similar to the highest degrees reported by full-time instructional faculty at public two-year institutions in fall 1992, where 64 percent had a master's degree, 19 percent had a professional or doctoral degree, 12 percent had a bachelor's degree, and 5 percent had lower than a bachelor's degree (NCES, 1999).

Furthermore, 4 percent of Tribal College faculty members were reported to be tribal historians or elders, reflecting the importance to the Tribal College of alternative credentialing (AIHEC, 2000-2001). Typical accreditation procedures may overlook the special significance of alternative credentialing to institutions that have cultural preservation and development as an explicit part of their missions. Tribal Colleges view traditional values and beliefs as central to

Data were available for 29 colleges.

Note that percentages do not add to 100, even with the 4 percent reported to be tribal elders, due to rounding. In addition, data on terminal degrees were available for only 16 of the colleges.

the curriculum and offer courses in tribal languages, traditional philosophies, or other subjects taught by tribal elders. Thus, tribal elders play a unique role in the teaching of tribal values and traditions to Tribal College students. Many of these traditional scholars have little formal education, but are certified as experts in their field by the college or tribe and often hold a place of honor on the faculty. Tribal elders also advise the colleges on cultural and other issues, both formally and informally (Boyer, 1997).

Barriers to Recruiting and Retaining Faculty

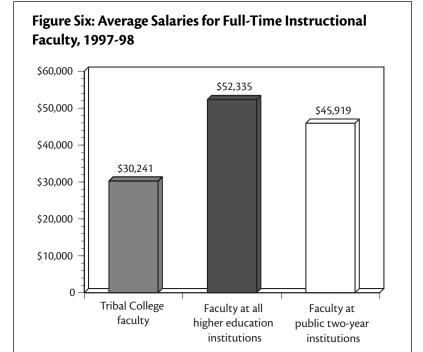
Tribal Colleges clearly are attracting high quality faculty who are dedicated to educating students in a culturally supportive manner. However, the geographic isolation of reservation communities, the low salary levels the colleges are able to offer, and the substantial amount of work, dedication, and involvement in their students' lives to which Tribal College faculty must commit make recruiting and retaining faculty a difficult task. Tribal Colleges continue to draw new faculty who are dedicated and culturally aware, but many find it difficult to

remain at the colleges for more than a few years (Boyer, 1997). Living conditions on reservations can be difficult, especially for those faculty not used to living on isolated reservations with poor infrastructure and often frigid climates.

Contributing to high faculty turnover rates at many of the Tribal Colleges are inadequate resources and low salaries. Recent data reveal that on average slightly more than half (56 percent) of Tribal College faculty had a length of service of five years or less, 24 percent had served six to ten years, and 20 percent had served 11 or more years (AIHEC, 2000-2001).18 This varies among the colleges. Clearly, faculty at many of the colleges do not remain long on the job before moving on to other employment, presumably out of personal financial necessity. Since Tribal Colleges are relatively young institutions, many of the stresses and uncertainties associated with start-up businesses and organizations, such as high workloads and multiple and fluctuating job responsibilities, can impact faculty length of service.

Most disturbing is the low level of faculty compensation in Tribal Colleges and the implications for sustaining a strong academic infrastructure. Faculty compensation is low by any standard. (See Figure Six.) On average, each Tribal College spent almost \$500,000 on outlays for full-time faculty salaries and an additional \$85,000 for fringe benefits in 1997-98. This translates into average salaries of only \$30,241 for full-time Tribal College instructional faculty, and an average total compensation of \$34,914 (NCES, 1998).19 These levels are substantially lower than the compensation at mainstream institutions—in the same year, salaries alone for full-time instructional faculty averaged \$45,919 at public two-year institutions; the average compensation amounts would be even higher if fringe benefits were included (NCES, 1999).²⁰ An outcome of low salaries is that faculty tenure is not a viable option for most Tribal Colleges due to the high cost of implementing a tenure system.

Faculty development is another crucial area affected by the lack of resources. Opportunities to provide faculty development are limited, since funding to underwrite release time and other



Note: 28 Tribal Colleges reported data; averages are generated totals, which attempt to adjust for the fact that some data are suppressed for reasons of confidentiality. Faculty at Tribal Colleges are on either 9/10 month or 11/12 month contracts, while faculty at higher education institutions are only on 9/10 month contracts.

Data of length of faculty service were available for only 14 of the colleges. However, a survey by Boyer (1997) found similar results—that 60 percent of instructors had been teaching at their institution for five years or less.

Twenty-eight colleges reported data. Full-time instructional faculty on both 9/10 month and 11/12 month contracts are included; average salary and compensation figures are generated totals, which attempt to adjust for the fact that some data are suppressed for reasons of confidentiality.

²⁰ Data are for faculty on 9-month contracts. At all higher education institutions, salaries for full-time instructional faculty averaged \$52,335.

costs is required. Retention of high quality faculty is made difficult with no viable options for professional development. Nevertheless, some Tribal Colleges are able to facilitate faculty development programs through innovative methods. For example, Sinte Gleska University has just received a grant from the Bush Foundation that will be the primary funding source for faculty development opportunities, as well as funding the development of course assessment procedures. In addition, one of the partnerships of Haskell Indian Nations University's business school and its Center for Tribal Entrepreneurial Studies involves two faculty externships to tribal nations (AIHEC, 2000-2001).

The faculty and tribal elders at Tribal Colleges who, despite low salaries and poor teaching conditions, choose to teach at these schools demonstrate a strong commitment to reversing the history of low educational attainment for American Indians. Interviews with 16 American Indians who earned doctorates in the field of education revealed that many of these doctorate recipients viewed their degree as an agent in serving as a role model for the community (Lintner, 1999). As one respondent noted:

(W)e as Indian doctorates have an obligation to start the cycle of access and success: that we provide information that can hopefully start and perpetuate a continuing dialogue. And my greatest hope is that other Indians will look at the doctorate, or any other type of educational goal, as something that is attainable. But we must start this cycle of success (p. 48).

More attention needs to be paid to the major influence these faculty members have in successfully graduating students who return to the reservation and give back to their communities the knowledge and skills learned in college. The encouragement of American Indians to pursue graduate and doctoral level work is imperative in continuing the cycle of academic success in tribal communities.

Tribal College Faculty and the Transfer of Knowledge

Another important aspect of Tribal College faculty is the increasingly important part they play in collecting, analyzing, and disseminating new and traditional knowledge to local communities. "Native scholars once were treated as the objects of research, not as researchers themselves. Now that has begun to change, and the work of Native scholars is gaining more respect ... This is part of a larger movement to

make scholarship more inclusive and responsive to the needs of society" (Ambler, 1997, p.8). This research and dissemination function has extensive, tangible benefits for the community, preserves tribal culture, and in many cases protects property rights within the tribe.

In the past, non-Indian researchers entered reservation communities, gathered their research, and left nothing of benefit behind for the tribes. Today, Tribal College faculty members conduct their own research on issues of specific interest to their communities. Furthermore, Tribal College faculty members' ownership of their own research increases Tribal Colleges' visibility in the institutional research community, and bolsters the reputation of American Indian researchers as contributing players in the world of research, particularly research on American Indians. According to a 1997 study, much of Tribal Colleges' research is targeted toward cultural curriculum development and educational methods, as would be expected of institutions whose primary mission is teaching (Ambler and Crazy Bull, 1997). But areas of research at Tribal Colleges explore a variety of topics that address community needs, including economic development surveys, studies of the impact of specific diseases, studies of the history and development of local tribes, and scientific surveys. Some examples of recent research occurring at Tribal Colleges include the following:

- ▶ In a collaborative effort, faculty members at Turtle Mountain Community College have devised a model assessment tool: the student learning assessment portion, administered through a survey of graduating students, helps faculty understand if they are reaching their students and how to improve their teaching pedagogies (Yellow Bird, 1998-99).
- ▶ Under the guidance of a professor at Oglala Lakota College, students are conducting research using methodological instruments such as surveys, interviews, and literature reviews to explore single parenthood, teenage mothers, alcoholism, and gangs on the Pine Ridge Reservation (Ambler and Crazy Bull, 1997).
- ▶ A new laboratory on the campus of D-Q University in California was designed with a lab that can be used by tribes to test water for pollutants. It was constructed to allow faculty to work side by side with students, and furnished with a darkroom to develop photographs of plants and environmental damage (*Tribal College Journal*, Summer 1997).

PROFILE

Kathy Froelich, Education Department Chair, Sitting Bull College

Kathy Froelich (Arikara/Blackfoot) was once a student pursuing a bachelor's degree in education at Sitting Bull College. Today, she teaches students at Sitting Bull College and serves as the education department chair, shaping the lives of future teachers—particularly American Indian teachers—directing the program into new areas of collaboration with local four-year Tribal Colleges, and investing in culturally relevant and holistic teaching methods. Kathy represents an American Indian woman whose educational experience at a Tribal College, including the chance to complete her degree, have led her to return to a Tribal College to support students in achieving academic and personal success.

In the 1970s, Kathy attended a mainstream institution for one and a half years but left college to marry, move to Standing Rock Reservation, and raise a family. While working as a Head Start aide, she heard about a new bachelor's degree program in elementary education offered at the recently built Standing Rock College (now Sitting Bull College) in articulation with the University of North Dakota. Kathy was one of 32 people who enrolled in the program. According to Kathy: "If it wasn't for the Tribal College, I just know I wouldn't have gone back to college. It was too difficult with raising children." The program offered courses in the evenings so that students could work during the day, although for three weeks during the semester, all students were required to go to the University of North Dakota. She credits the support and encouragement of her advisors and teachers, small classes, and family-like atmosphere as reasons why she successfully achieved her degree. Almost all (95 percent) of that initial class also have received their degrees.

Immediately upon graduation, she was hired to be an elementary teacher at a BIA school in Fort Yates, North Dakota where she taught first and second grade for 15 years. During her time as an elementary school teacher, she pursued her master's degree at the University of North Dakota in education, funding most of it entirely on her own, taking classes in the evening, and finally completing her degree after six years of study. When Sitting Bull College needed someone to chair its education department, Kathy felt the opportunity was calling. After speaking with a tribal elder, she recognized that she could touch many lives—both teachers and children—and guide future teachers to be culturally responsive to the needs of American Indian youth.

Since Kathy has been chair of the education department, major changes have occurred, particularly in the area of the bachelor's degree program. As Sitting Bull College is a two-year institution, students must transfer to a four-year institution in order to earn a bachelor's degree (as Kathy had to do to complete her bachelor's degree). As part of a new direction for the program, Kathy and Cheryl Medearis, dean of education at Sinte Gleska University, a nearby four-year Tribal College, established a partnership between the two schools so that Sitting Bull's students could easily move into Sinte Gleska's program. Students enrolled in the program graduate with a double major in K-8 elementary education and K-12 special education. They are educated through culturally appropriate and student-centered approaches, and go on to work in high-need reservation schools.

Kathy's job, like those of all Tribal College faculty, requires long hours, working on weekends, and great passion for the students and their lives. She still finds time to meet with students despite piles of paperwork and correspondence waiting to be answered. Kathy noted: "We are not here because of the money, the salaries are not great, we are not into status, but we are here to help our community—to make a difference. A mainstream institution would be lucky to have a faculty member who worked at a Tribal College."

Source: Froelich, 2000; Alliance for Equity in Higher Education, 2000

Despite scarce resources and time, Tribal Colleges continue to nurture the development of faculty research capacities and facilitate collaborative research with other Tribal Colleges and mainstream institutions. Collaboration with other land-grant universities is common for many of the funded programs, especially those relating to extension of agricultural and natural

resource management, as well as health and nutrition practices, to local communities. Such cooperation stretches limited resources and improves research in American Indian communities. However, many obstacles to faculty research remain, including a lack of financial support, training for grant and research strategies, and better analytical software and other equipment.

V. Agriculture and Natural Resource Management

and and other natural resources are vital assets of American Indian communities and their use remains central to tribes' concerns and strategies for the future. Part of this importance is economic: according to the most recent Census of Agriculture in 1997, there were 18,495 American Indian farm and ranch operators throughout the country, operating 52 million acres on or off reservations-5.6 percent of the nation's agriculture land—and selling agricultural products with a market value exceeding \$662 million (NASS, 1999). In addition, American Indians attach a cultural significance to the land that stems from a time when tribes lived without territorial constraints and land was viewed as sacred, communal, and a source of strength and tribal identity. Today, American Indians are trying to address the legacy of the creation of the reservation system by regaining control over reservation land use and resource management and reaffirming traditional ties to the land, with Tribal Colleges at the core of their efforts.

Despite the high presence of American Indians in the farm and ranching industry, the amount of land owned and operated today by American Indians is a small fraction of the total land controlled by American Indians in the past. As a result of federal government policies designed to dispossess American Indian tribes of their homelands, modern-day tribal landholdings have been significantly scaled back from traditional boundaries. Primarily due to a policy of allotment, the most fertile and mineral-rich areas are no longer in tribal hands, and patterns of land ownership are checkerboarded. The net effect of federal policies has made it difficult for tribal members to amass enough land for profitable operations. On the more than 35 million acres of reservation land on which Tribal Colleges are located, on average 64 percent of the reservation is tribally owned or allotted ranging from less than 10 percent on the White Earth Indian Reservation to 100 percent on several Tribal College reservations (Tiller, 1996; AIHEC, 2000-2001).

For many decades the federal government was responsible for managing Indian land, water, and other resources, and bad deals were commonplace as a result of fraud and tribes' lack of business experience and understanding of the worth of their assets. Low levels of training and skills in agriculture and resource management among American Indians contributed to this situation, as non-Indians frequently were hired for their expertise and land was leased to non-Indian private interests. Even in the early 1990s, almost two-thirds of Indian-owned farmland and 15 percent of grazing land was operated by non-Indians, who generally spent their income outside the reservations. In more recent years, however, land use policies have shifted, giving tribes more control over their own resources. The current generation of tribal members gradually is acquiring the legal and business skills needed to protect their interests (Levitan and Miller, 1993).

Tribal Colleges are key players in this movement, particularly because of the status of 30 of the colleges as 1994 Land-Grant Institutions.²¹ As land-grant institutions, the colleges are responsible for the broad dissemination of knowledge to American Indians and are faced with the challenge of designing research and extension mechanisms capable of preserving the tribal estate and promoting activities appropriate to their communities and homelands (College of Menominee Nation, 2000b). Perhaps most important are Tribal Colleges graduates skilled in land and natural resource management who in turn help local communities become more efficient and involved in these industries. Tribal Colleges also help communities in more direct ways, such as researching sustainable development and agricultural techniques, helping to reestablish traditional farming methods, providing technical assistance, and other forms of instruction and education.

²¹ The 30 Tribal Colleges that are referred to as the 1994 Land-Grant Institutions are based on the year they were awarded land-grant status.

Resources on Tribal College Reservations

In the area of agriculture and natural resources management—like other services to the community—Tribal Colleges target their efforts toward the specific needs and potential areas of development of local residents. For communities located on Tribal College reservations or nearby areas, the uses of land and other resources are varied—ranging from agriculture and livestock production, forestry, mineral mining, fishing and fisheries, and leasing of land to outside interests.

Agriculture and livestock production continues to be essential to the local economies of virtually all Tribal College communities. Almost half of the income received by the Cheyenne River Sioux Tribe—which chartered Si Tanka College—is derived from farming, and most of the tribe's income on the Standing Rock reservation—home of Sitting Bull College—comes from ranching and leasing of portions of the reservation's 1.75 million acres of grazing land to private cattle interests. In many cases, substantial acres of tribal-owned land are leased to non-Indian interests to provide income to the tribe; for example, members of the Crow Tribe—which chartered Little Big Horn College—operate on only a small portion of their farmland and less than a third of their grazing land. (See Figure Seven on page 39.)

States in which Tribal Colleges are located rank high in terms of the number of American Indian farm operators as well as the amount of land in farms and the number of acres harvested. Together, Tribal College states have over 10,000 American Indian farm and ranch operators, over 40 million acres in farm and grazing land, over one million acres of cropland, and more than \$331 million market value of agricultural products sold. (See Figure Eight.) Of the eight Tribal College states, Arizona, New Mexico, Montana, South Dakota, and California have the highest numbers of American Indian farm operators, while acres of land in farms operated by American Indians is concentrated in Arizona, New Mexico, South Dakota, Montana, and Washington (NASS, 1999).

The use of tribal lands for forest-related industries, mining of minerals and other resources, and fishing differs more among the Tribal College reservations, depending upon their locations and their endowed resources. The Menominee Reservation, home of the College of Menominee Nation, is internationally renowned for their forest management and sawmill operations, and has developed a premier sustainable



Veterinary Studies at Crownpoint Institute of Technology

development model of forestry management (see profile on p. 42). On L'Anse Reservation in Michigan, home of Keweenaw Bay Ojibwa Community College, about 90 percent of tribally owned land is forested and timber is the tribe's primary natural resource. About 2,600 workers are employed in the mining industry of the Navajo Nation, home of Diné College and Crownpoint Institute of Technology, and more than \$75 million is generated annually through royalties from coal, oil, and natural gas activities. Reef-net fishing territory on the Lummi Reservation, home of Northwest Indian College, places the tribe at the center of the region's commercial salmon fishing industry, and fishing remains the primary source of private employment on the reservation. (See Figure Eight.) To fully develop these natural resources, tribes require skilled managers with expertise in a variety of agriculture and natural resource management related areas.

Instruction in Agriculture and Natural Resource Management

With the tremendous need to educate American Indians and other reservation residents in agriculture and resource management and development, Tribal Colleges continually are answering the needs of their communities by offering a variety of new programs and redesigning existing ones in these fields. Through the Land-Grant Education Equity Grants Program, for example, approximately \$50,000 is provided to each Land-Grant Tribal College to strengthen higher education instruction in the food and agricultural sciences. With this funding, many of the colleges have been able to either expand or create programs in a variety of agriculture-related fields, as well as develop community-based models of land use. Some examples of funded projects in FY 2000 are (CSREES, 2000a):

- ► At Bay Mills Community College, funding is focused on planning for a bachelor's degree program in sustainable development, the development of an Internet branch campus to serve all Native communities in the state, and recruitment and retention of American Indian students in Environmental Sciences.
- ▶ Dull Knife Memorial College is expanding its Agricultural and Natural Resources Program offerings both on campus and through distance education, in collaboration with Montana State University at Bozeman.
- ➤ The newly accredited bachelor's degree in Environmental Science at Haskell Indian Nations University was implemented in 1999; the current phase of the project will focus on faculty development, refinement of science equipment, and increased recruitment and retention efforts.

- ➤ The Winnebago Tribe of Nebraska and Little Priest Tribal College are collaborating to map the ecological components of reservation lands, improve field experiments, and eventually graduate tribal members with associate's degrees in Environmental Science.
- ➤ Stone Child College is developing a two-year degree program in Natural Resources Management and hopes to serve as the focal point for training and research for local tribal agencies involved in natural resources, water resources, and the environment.

As a result of their investment in creating programs that mirror the needs of their communities, Tribal Colleges have been successful in graduating students in the agricultural and resource management areas. (See Figure Nine.) In 1996-97,

Figure Eight: Farms and Ranches Operated by American Indians in Tribal College States, 1997

On and off reservation

	Total number of American Indian farm operators	Total land in farms (acres)	Percent of state/national total	Total cropland (acres)	Market value of agricultural products sold (1000s)
UNITED STATES	18,495	52,002,745	5.6%	1,870,963	\$662,374
Arizona	3,980	20,395,360	75.9%	80,013	\$61,717
California	531	327,549	1.2%	39,413	\$43,735
Kansas	158	76,386	0.2%	30,450	\$6,452
Michigan	98	11,996	0.1%	7,336	\$2,806
Minnesota	109	30,932	0.1%	21,853	\$3,279
Montana	983	3,908,324	6.7%	285,752	\$27,826
Nebraska	65	48,107	0.1%	20,059	\$7,796
New Mexico	2,730	7,232,177	15.8%	112,740	\$125,198
North Dakota	276	770,619	2.0%	103,642	\$10,548
South Dakota	770	5,340,464	12.0%	267,208	\$37,909
Washington	496	2,316,064	15.3%	24,017	N/A
Wisconsin	82	17,233	0.1%	10,851	\$3,743
Subtotal	10,278	40,475,211	N/A	1,003,334	\$331,009



Aquaculture Studies at Northwest Indian College

74 degrees and certificates were awarded by Tribal Colleges in agriculture and natural resource management fields, such as horticulture science, environmental science, natural resource conservation, and wildlife and wildlands management. The majority, 58 percent, were associate's

Figure Nine: Degrees Awarded in Agriculture and Natural Resource Management at Tribal Colleges, 1996-97 80 70 63 60 50 43 40 30 19 19 20 12 10 0 Certificates Total Associate's Bachelor's of at least 1 degrees degrees year but less than 2 years American Indians All students Note: 29 colleges reporting.. Source: NCES, 1997a

degrees; an additional 26 percent were certificates lower than an associate's degree, and 16 percent were bachelor's degrees. Together, degrees and certificates awarded for agriculture and natural resources made up 3 percent of all degrees and certificates awarded by Tribal Colleges in that year, and almost 14 percent of all bachelor's degrees awarded (NCES, 1997a).²²

Among all institutions of higher education, less than 1 percent of agriculture and natural resources degrees were awarded to American Indian students (NCES, 1999). In comparison, almost 85 percent of the agriculture and natural resources degrees and certificates awarded by Tribal Colleges went to American Indian students, while 56 percent were awarded to men.

Tribal College efforts should lead to even more degrees awarded to American Indians in agriculture and natural resource management in the future. In fact, over a period of two years, Tribal Colleges have increased the number of

degrees and certificates awarded in agriculture and natural resource management. In 1994-95, seven Tribal Colleges reported awarding only 36 degrees—all at the associate's level—in agriculture or natural resources fields. By 1996-97, eight additional colleges awarded 74 degrees and certificates, an increase of over 100 percent (NCES, 1995 and 1997a).²³ This suggests that the colleges are creating new degree programs and recruiting students for these fields. Increasing the knowledge of tribal members in these areas will help address the skill shortages that occur on many reservations.

Direct Services to Local Communities

In addition to developing instructional programs in agriculture and natural resource management, Tribal Colleges are involved in other activities that directly affect the communities they serve. By providing technical assistance to local farmers and ranchers, training opportunities, and other forms of knowledge dissemination, Tribal Colleges are increasing the capacity of their communities in agriculture and resource management and development. Tribal Colleges also are developing tribal models of land use that incorporate Western land and agricultural strategies. A

²² Data were reported for 29 colleges.

²³ In both years, 29 colleges reported data in the completions survey; in 1994-95, 7 colleges reported completions in agriculture or natural resources compared to 15 colleges in 1996-97.

number of these activities are collaborative in nature, involving all Tribal Colleges in a region or partnerships with nearby state universities or government agencies. For example, through the Haskell Environmental Research Studies Center (HERS), Haskell Indian Nations University, in collaboration with Kansas State University, is working to increase the involvement of faculty and students at Tribal Colleges and other minority institutions in research and technology transfer aimed to clean up hazardous substance contamination on American Indian lands. In 1998, a pesticide technology curriculum for American Indians was designed by HERS to be implemented at all Tribal Colleges; the curriculum educates faculty and students on the damaging environmental effects caused by pesticides in Indian Country and provides vehicles to train American Indians in managing pesticide practices (AIHEC, 2000-2001).

Competitive grants awarded to 1994 Institutions through Land-Grant Extension Programs address a wide range of issues that are important to local communities, including crop and animal production, environmental concerns, youth at risk, nutrition and health, and tourism. For FY 1999, the following are examples of funded projects:

- ▶ Salish Kootenai College was awarded funding to implement a native plant nursery, assist in ecological restoration, and address the issues of biological weed control, community gardening, and water quality education (CSREES, 2000b).
- ▶ Beginning in 1997, Fond du Lac Tribal and Community College, in partnership with the Minnesota Extension Service, became involved in the St. Louis River Watch Project. The project, which works with 21 high schools, teaches area students fundamental ecology and values of the river through field sampling and analysis, monitoring of the river, and collaboration with other students about water quality (Fond du Lac Tribal and Community College, 2000b).
- ➤ Sitting Bull College is in the third phase of its bison management project, which is developing a seed herd for hands-on training opportunities, starting a workstudy assistantship training program, and developing a network of organizations to support long-term bison restoration efforts (CSREES, 2000b).
- ▶ Little Big Horn College is encouraging and training tribal members to participate effectively in the private sector economy, especially related to the tourism that surrounds Little Big Horn Battlefield (CSREES, 2000b).

As Tribal Colleges work side by side with their communities, some Tribal College programs that focus on environmental and agricultural issues take advantage of local land assets and use them as teaching tools. Fond du Lac Tribal and Community College, for example, has implemented an Environmental Institute, which enables students to earn an associate's degree in Environmental Studies that is heavily focused on scientific methods and procedures. As part of the curriculum, 2,140 acres of virtually untouched land, the Environmental Study Area, is used as an outdoor classroom to combine the knowledge of science technology with traditional understanding of the natural world (Fond du Lac Tribal and Community College, 2000a). In addition, Lac Courte Oreilles Ojibwa Community College in Wisconsin has a 200-acre farm that gives researchers access to field plots, community garden plots, and greenhouse space through its Renewable Energy and Sustainable Development Institute (Lac Courte Oreilles Ojibwa Community College, 2000).

Finally, some Tribal College programs tie agriculture and natural resource management training to rural development planning at the local level. In 1998, four land-grant Tribal Colleges were designated by the U.S. Department of Agriculture as National Centers of Excellence—Crownpoint Institute of Technology, Fort Peck Community College, Cankdeska Cikana Community College, and Nebraska Indian Community College. Through these pilot projects, the four colleges are building institutional capacity and training tribal community leaders on rural community development issues. The projects are focused specifically on the needs of the individual community (USDA, 2000):

- ► Cankdeska Cikana Community College: Serious flooding over the past years has devastated the economic livelihood of many farmers in this North Dakota region, making new jobs to supplement farm income even more important. Project activities will include specialized training in advanced technologies for increasing crop production, establishing a program for leadership and business training, and improving economic opportunity through expansion of local products.
- Crownpoint Institute of Technology: Cattle and other livestock are the main source of agriculture income for the Navajo Nation, as well as being important to the region's culture and traditions. The project therefore will focus on establishing training programs for youth in livestock production, training community leaders in state-of-theart methods of livestock care and management, and

PROFILE



Buffalo at Little Priest Tribal College

The Reintroduction of Bison in Indian Country

"The American buffalo, also known as bison, has always held great meaning for American Indian people. To Indian people, buffalo represent their spirit and remind them of how their lives were once lived, free and in harmony with nature" (ITBC, 1999, p. 2). Herds of bison once covered the plains areas, supplying food, clothing, shelter, and other essentials for regional Indian tribes; however, years of trapping, hunting, and settlement by European settlers led to the virtual extermination of the herds. Now, tribes are trying to reintroduce bison to Indian lands.

In fact, the majority of tribes that have chartered Tribal Colleges are involved with the InterTribal Bison Cooperative, an organization that promotes collaboration among tribes in the production and management of bison, facilitates the coordination of education and training programs, assists in transferring surplus buffalo from tribal parks to tribal lands, and is committed to reintroducing bison to tribal lands in a way that promotes both cultural enhancement and ecological restoration. In addition to developing an agricultural industry that will provide income and sustenance, the tribes realize that reestablishing healthy buffalo populations on tribal lands will also provide hope for Indian people. Each of the Tribal College tribes involved has either set aside pasture land specifically for a proposed bison herd, or currently manages a herd—ranging up to 1,500 head on the Crow Reservation, home of Little Big Horn College. The Tribal Colleges are frequently involved, using the herds for research, hands-on training, and education for their bison management programs.

One important example of the Tribal Colleges' involvement is the Northern Plains Bison Education Network, a regional network of Tribal Colleges that collaborate on agricultural and natural resource program development, information infrastructure, and technology capacity-building. The following colleges are members: Cankdeska Cikana Community College, Fort Berthold Community College, Little Priest Tribal College, Oglala Lakota College, Si Tanka College, Sinte Gleska University, Sisseton Wahpeton Community College, Sitting Bull College, and United Tribes Technical College. The primary objectives of the network are to replenish buffalo herds and develop culturally based education opportunities to support the simultaneous development of tribal land and human resources. The network also hopes to expand the knowledge base about American Indian homelands and the number of tribal members with "resident expertise" in the areas of tribal land and natural resource management, especially bison management. Because of the barriers posed by the geographic isolation of many reservations, the network will use emerging technologies such as the Internet, interactive video networks, and satellite communications to accomplish the project's purposes.

A variety of activities are taking place through this network as well as related initiatives. For example, Sitting Bull College is generating a database for current and potential bison producers and is providing training and support services to ranchers in the areas of bison production and management, through a grant from the U.S. Department of Agriculture. In addition, at Fort Berthold Community College, research has begun into the culture of the Three Affiliated Tribes as it pertains to bison. The college's curriculum committee has approved a bison tribal studies class, and a bison degree program will be approved soon.

Sources: UTTC, 2000b; ITBC, 1999; AIHEC, 2000-2001

- using a 20-head herd of cattle and 20-head flock of sheep for animal husbandry research.
- ► Fort Peck Community College: The local community must deal with a declining agricultural base along with persistent poverty and a lack of adequate business training. Project activities include improving the college's capacity to assist individual farmers, ranchers, and business entrepreneurs in technical training and the acquisition of resources, assessing the community's resources, and developing leadership through a student internship program.
- ► Nebraska Indian Community College: The communities served by the college have faced years of economic decline and a lack of employment opportunity and

leadership. Project activities will focus on developing the college as a center for information and skill-building in rural development, identifying and establishing relationships with organizational partners, and developing a curriculum to train tribal members in leadership and economic and community development.

Through these types of programs, Tribal Colleges are helping tribes regain control of land and resource use, by improving local expertise, training resource managers, and extending technical knowledge and research to local farmers and ranchers. Such efforts will continue to strengthen tribes' traditional ties with the land, reaffirm their cultural identities, and enhance local communities' economic opportunities.

PROFILE

Profile: College of Menominee Nation's Sustainable Development Institute

The Sustainable Development Institute (SDI) is the primary delivery mechanism of the College of Menominee Nation's Research and Extension Service. The Menominee Tribe is historically a woodlands culture—approximately 95 percent of the almost 235,000 acres of land in the Menominee Reservation is forested. The tribe has used SDI to develop a premier sustainable development model of forestry management. The theoretical model is based upon the traditional Menominee experience with sustainability, expressed as a process of human interaction with the natural environment through six related dimensions: the natural environment, land and sovereignty, economics, technology, institutions, and human perception, activity, and behavior. The model was awarded the United Nations Award for Sustainable Development in 1995 and the United States Presidential Award for Sustainable Development in 1996, evidence of its success.

In addition to formulating the theoretical model, SDI serves the college and community through professional development activities, interaction with faculty and staff, and design of the research agenda and priorities. These priorities include enhanced commerce of timber and other forest products, complemented with new initiatives in permaculture, ethnobotany, and investigation of the feasibility of aquaculture and hydroponics production.

SDI also works to actively support the development of the college's Sustainable Development associate's degree program and related technical degree programs in Timber Harvesting. To attract students to the program, a recruiting strategy has been developed. In addition, SDI staff are working with the University of Wisconsin-Madison to develop an articulation agreement that will enable Sustainable Development students to complete a bachelor's degree. As part of these programs, students engage in fieldwork such as measuring precipitation throughout the reservation or recording information at the SDI weather station and broadcasting it to local communities. Students who earn these degrees can pursue careers in fields such as timber harvesting, research activities, and community awareness of sustainable development.

SDI also has joined the Woodlands Wisdom initiative, a collaboration of six Tribal Colleges located in the Great Lakes area and the University of Minnesota. This partnership will provide nutrition education and research projects combining tribal wisdom and scientific findings, and will design a curriculum for an associate's degree in nutrition and food science.

Due to the geographically isolated and rural nature of reservation communities, SDI is collaborating to enable a multi-media telecommunications infrastructure capable of serving these communities. In one example of the use of technology, the Agricultural Distance Education Consortium (ADEC) will be used as the vehicle through which courses are offered for the Sustainable Development degree program. Future plans include obtaining funding to support sponsored research, providing opportunities for post-doctoral research for American Indians, and creating articulation agreements to facilitate collaborative research.

Sources: College of Menominee Nation, 2000b and 2000c; SDI, 1999 and 2000

Figure Seven: Examples of Land Use on Tribal College Reservations

COLLEGE	RESERVATION(S)	STATE(S)	AGRICULTURE/LIVESTOCK	FORESTRY	MINING	FISHING/HUNTING
Bay Mills Community College	Located in the Bay Mills (Chippewa) Indian Community (also serves other reservations in the state)	₹	Agriculture was historically important for many Michigan tribes in the Bay Mills Indian Community alone	Forestry is important for most Michigan tribes; 1,300 acres of forested land		Many Michigan tribes have treaty fishing rights in Lakes Superior, Huron, and Michigan. The Bay Mills tribe has a fisheries program to develop and maintain commercial fishery assessment program.
Blackfeet Community College	Blackfeet Reservation	MT	185,000 acres of farmland (wheat, barley, hay), and over 640,000 acres used for livestock grazing, 65 head of buffalo on 1,600 acres		Coal, oil, natural gas reserves, mostly undeveloped, some mineral reserves	Recreational fishing, on 8 major lakes and 175 miles of fishing streams.
Cankdeska Cikana Community College	Spirit Lake Sioux (Fort Totten) Indian Reservation	QN	Agriculture is an important source of revenue, especially through leasing of land to outside interests; 135 head of buffalo on 900 acres	6,400 acres of forested land	Small deposits of sand and gravel	Recreational fishing generates about \$12-27 million annually for the local economy.
College of Menominee Nation	Menominee Reservation	₹		Of the 234,000 acres encompassing the reservation, 220,000 acres (95%) are zoned for the sustained yield management of the forest; the sawmill and timber industry employ between 275 and 300 people; lumber production is limited to 20 million board feet annually		Hunting, fishing, gathering, and access to reservation land are exclusive rights of the Menominee people and are protected by federal law; the reservation contains a diversity of wildlife andnumerous lakes and streams.
D-Q University	Not located on a reservation, but serves students from many California reservations	ð				

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COLLEGE	RESERVATION(S)	STATE(S)	AGRICULTURE/LIVESTOCK	FORESTRY	MINING	FISHING/HUNTING
Diné College and Crown Point Institute of Technology	Navajo Nation	AZ, NM, UT	Almost 6,000 active livestock grazing permits, operating on 13.5 million acres; 300 full-time and 1,500 seasonal employees in the agribusiness industry	1,000 employed and an estimated annual economic output of \$87 million	2,600 employed, with more than \$75 million generated annually from coal mining, oil, and natural gas	
Dull Knife Memorial College	Northern Cheyenne Reservation	ΤM	Livestock-based economy, with 12,000-15,000 head of cattle owned by tribal members; in addition, annual revenues generated by farming total about \$2.5 million; 30,600 acres of land used for agriculture purposes, 273,000 used for grazing; 81 head of buffalo on 3,500 acres	148,000 acres of forested land, most of which are commercially viable (Ponderosa pine)	Coal reserves on tribal land	
Fond du Lac Tribal and Community College	Fond du Lac Indian Reservation	Z		300 acres of forested land		Lake Superior provides recreational and commercial fishing
Fort Belknap College	Fort Belknap Reservation	MT	Agricultural-based economy, including ranching (26,300 acres of grazing land) and leasing of dry and irrigated farmland (85,000 acres in total); 275 head of buffalo with pastureage of 10,300 acres	33,700 acres of forest reserves		
Fort Berthold Community College	Fort Berthold Reservation	N O	Both livestock and agriculture industries are underdeveloped; 78,000 acres of agriculture land and 377,000 acres of grazing land	3,500 acres of forestry land; many acres were flooded with the creation of Lake Sakakawea	Oil development is a major industry	Recreational fishing and hunting opportunities
Fort Peck Community College	Fort Peck Reservation	MT	Agricultural-based economy, with tribal members operating about 155,000 acres of farmland while 106,500 are leased to non-Indians; in addition, livestock represents a major use of tribal lands, with 614,000 acres of grazing land	8,800 acres of forestry land	Coal mining, oil production, and sand and gravel deposits are significant sources of income	

	RESERVATION(S)	STATE(S)	AGRICULTURE/LIVESTOCK	FORESTRY	MINING	FISHING/HUNTING
	Not located on a reservation, but works with many reservation communities in Kansas	∑	The economies of most Kansas tribes are primarily agriculture based, including both tribal farming and leased lands; for example, the Kickapoo Reservation has 3,000 acres of agricultural land and 1,900 acres of grazing land			
	Not located on a reservation, but serves many students from reservations in the southwest	S Z	Ranching and farming are important parts of the economies of most reservations in the southwest	Many reservations in the area have substantial timber resources		
-ity	Keweenaw Bay Community L'Anse Reservation Ojibwa College (Keweenaw Bay)	₹		14,000 acres of forested land; about 90 percent of Indian- held land is forested, and timber is the tribe's primary natural resource		Fish hatchery located on tribal land
	Lac Courte Oreilles Ojibwa Reservation	₹	120-acre tribal farm serves the community; cranberries are an important local crop	Logging and sawmill operation owned by the tribe		Small tribal fishery
	Leech Lake Indian Reservation	N N	10,000 acres of farmland, used primarily by family farmers	20,000 acres of tribal and 500,000 acres of public forest land; bulk of reservation land is Chippewa National Forest, which attracts about 1.5 million tourists per year	Some sand and gravel mining	Large sport-fishing industry, with 232 lakes on the reservation, 68 miles of the Mississippi River, and approximately 600 seasonal workers
	Crow Reservation	ΤM	Agricultural land leases to large non-Indian interests are a primary source of income; tribal members operate only a small portion of their farmland (180,000 acres in total) and about 30 percent of their total grazing land (1.2 million acres); the tribe maintains sone of the largest buffalo herds in Indian Country, with more than 1,500 head on about 22,000 acres		Mineral rights to 1.1 million acres in Montana and Wyoming; coal, gas, and oil leases are substantial source of revenue	

FISHING/HUNTING

Figure Seven (continued)	(par				
COLLEGE	RESERVATION(S)	STATE(S)	AGRICULTURE/LIVESTOCK	FORESTRY M	MINING
Little Priest Tribal College	Winnebago Nebraska Reservation	ш Z	Some tribal farms, also land leases to outside agricultural interests; 52 head of buffalo on 240 acres	200 acre forest preserve	
Nebraska Indian Community College	Omaha Reservation, Santee Sioux Reservation, and Yankton Sioux Reservation	NE, SD	Farming is a major occupation on the Omaha Reservation, with 14,800 acres of agriculture land and 2,400 acres of grazing land; cattle ranching and farming are major economic occupations on the Santee Sioux Reservation, including 24 head of buffalo on 900 acres of pasture; Yankton Sioux Reservation is mostly farm and cattle grazing land—there is a tribal farm, but a large portion of reservation land is farmed by non-Indians	4,000 acres of forestry land on the Omaha Reservation alone	
Northwest Indian College	Located on the Lummi Reservation (also serves other reservations in the state)	∀	Seasonal berry-picking is a main source of agricultural employment on the Lummi Reservation	Small local timber industry	
Oglala Lakota College	Pine Ridge Reservation	SD	Diversified agriculture industry, with 85,000 acres used for agriculture and 1.3 million acres of grazing land. Reservation has 600 bison head; the Natural	230,700 acres of forestry land	

Reef-net fishing territory places tribes in the state at the center of the

region's commercial salmon fishing industry; the Lummi tribe has an

on reservation tidelands, and fishing remains

aquaculture project

primary source of private employment

Resource Department is conducting research on nutritional value and impact upon land of bison with a comparison of three pastures

COLLEGE	RESERVATION(S)	STATE(S	(S) AGRICULTURE/LIVESTOCK	FORESTRY	MINING	FISHING/HUNTING
Salish Kootenai College	Flathead Reservation	TW	400,000 acres of grazing land, 15,500 of cropland; about 500 bison on nearly 20,000 acres	Forest lands are a significant source of income (timber)		
Si Tanka College	Cheyenne River Sioux Reservation	SD	Strong agricultural and livestock base, with 28,000 acres of farmland and 915,000 of rangeland; almost half the tribe's income is derived from farming; 800 head of buffalo on 15,000 acres		Some coal is being mined; oil reserves exist	
Sinte Gleska University	Rosebud Reservation	QS	Cattle ranching and farming are major economic occupations on the reservation, involving 67,000 acres of land for agriculture and 810,000 acres of grazing land (much of which is leased); 85 head of buffalo	43,100 acres of forestry land		Recreational hunting and fishing
Sisseton Wahpeton Community College	Lake Traverse Reservation	SD, also part of ND	Economy based primarily on agriculture and cattle grazing, including over \$1.2 million received annually for lease of land to non-Indians; 37,900 acres of land for agricultural use, 56,500 acres of grazing land; 54 head of buffalo on a 600-acre pasture	9,400 acres of forestry land	Granite quarries	Opened a fish hatchery in 1992; operates a hunting program for small game, big game, and waterfowl
Sitting Bull College	Standing Rock Reservation	ND, also part of SD	Most of the tribe's income comes from ranching and leasing of grazing land to private cattle interests; 496,000 acres of agriculture land, 1,751,000 acres of grazing land; 200 head of buffalo on 4,700 acres of pasture	3,800 acre timber reserve		
Southwestern Indian Polytechnic Institute	Not located on a reservation, but serves many students from reservations in the southwest	≨ Z	Ranching and farming are important parts of the economies of most reservations in the southwest	Many reservations in the area have substantial timber resources	Mineral reserves have been detected and oil reserves are likely	

Figure Seven (continued)

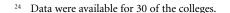
COLLEGE	RESERVATION(S)	STATE(S)	AGRICULTURE/LIVESTOCK	FORESTRY	MINING	FISHING/HUNTING
Stone Child College	Rocky Boy's Reservation MT	MT	Some tribal members employed as farmers or ranchers	16,000 acres of forested lands; local timber industry		
Turtle Mountain Community College	Turtle Mountain Reservation	Q	About 12,000 acres available for agriculture production; tribe maintains small bison herd	Substantial forest lands		Pursuing commercial fishing opportunities
United Tribes Technical College	Not located on a reservation, but serves all of the tribes and reservations in North Dakota in particular	Q	Many of the reservations in North Dakota have significant amounts of farming and grazing land	Woodland areas are common on many reservations in North Dakota		Recreational fishing is popular, especially near Spirit Lake North Dakota
White Earth Tribal and Community College	White Earth Indian Reservation	Z S	2,500 acres of tribally owned agricultural land; land leases to outside interests	60,000 acres of forested land, with maple syrup as a substantial alternative source of forestry revenue	ď	
Sources: Tiller, 1996; Mni So:	se, Intertribal Water Rights	, Coalition, Ir	Sources: Tiller, 1996; Mni Sose, Intertribal Water Rights , Coalition, Inc., 2000; MSBF, 2000; Minnesota Indian Affairs Council, 2000; ITBC, 1999; AIHEC, 2000-2001.	uncil, 2000; ITBC, 1999; AIH	IEC, 2000-2001.	

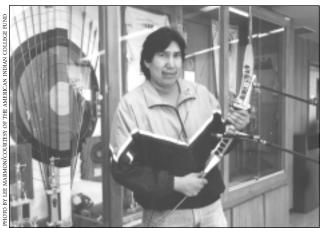
VI. Cultural Development and Preservation

Probably the single aspect most distinguishing Tribal Colleges from mainstream institutions is their role in and commitment to sustaining traditional cultural values and beliefs through every aspect of their activities. This is particularly important because of the need to stem the alarming loss of tribal languages and cultures, which has occurred at an everincreasing rate in recent years. Tribal Colleges play a central role in the effort to bring about a renewal. Integral elements of tribal life—such as language, history, art, music, and dance—are being formally taught in the Tribal Colleges. The result is that American Indian youth are inspired to learn more about their heritage (Boyer, 1997). Commonly embraced by tribal peoples is the idea that cultural identity is the source of strength and positive self-image for tribal members.

The practical effect of the value placed on culture is its impact in shaping the Tribal College curricula. Classes in Native culture pass on tribal history to students and reintroduce lost knowledge, while courses in tribal languages replenish the number of Native speakers; these courses in cultural studies are a critical part of the whole curriculum. In addition, the impact of culture is felt throughout the whole institution, in its educational philosophy and approach to students, even intertwined in courses such as math and science (Boyer, 1997). Tribal Colleges reach out to communities to participate in the preservation of traditional knowledge as well as the continuing development of American Indian culture.

Recent research indicates that colleges and universities reach out to their communities most effectively by working within a local context and using local culture to support and strengthen their efforts. For example, the Rural Community College Initiative found that "the integration of local cultures within the vision of a community college is essential for developing and maintaining institutional relevance to the diverse populations of rural societies" (Eller et al., 1999, p.





Archery Instructor at Diné College.

8). Much of this conclusion was drawn from the experiences of the Tribal Colleges that have participated in the Initiative—especially Fort Belknap College, Fort Peck Community College, and Salish Kootenai College, which are pilot schools. Like all Tribal Colleges, these schools have integrated local culture and traditional values into all their community services, from the provision of elder care and community wellness centers to their functioning as forums for discussion of future tribal initiatives.

Tribal Colleges as Tribal Archives and Exhibition Centers

One important function of Tribal Colleges is their ability to provide space for storing, archiving, and displaying tribal resources. In order to preserve and pass down the histories and traditions of past generations for future generations to experience, for example, many Tribal Colleges use their libraries as tribal archives. In fact, half of the Tribal Colleges report that their libraries also function as tribal archives, in which oral histories are recorded and documents and other materials from wide-ranging sources are collected in one place (AIHEC, 2000-2001).²⁴ The Fort Belknap

College Library and Tribal Archives, for example, are open to all tribal members as well as the surrounding community. The collection focuses on materials related to American Indian studies, especially historical information about the Fort Belknap Reservation area, biographies and recollections, published materials, census records, and treaties (AIHEC, 2000-2001). At the Little Big Horn College archives, a two-year project in oral history development recently concluded with 75 interviews with Crow Indian elders, conducted by students and faculty members and translated for public access (AIHEC, 2000-2001). Both Oglala Lakota College and Blackfeet Community College have collected, recorded, and preserved oral histories of tribal elders and families (Boyer, 1997).

In a related activity, Tribal Colleges frequently provide forums and exhibition space for storage and display of tribal artifacts, courses about Native culture, and sponsored programs. The Cultural Learning Centers Initiative, established with a \$2.5 million grant from the W.K. Kellogg Foundation, is enabling cultural centers to be built on Tribal College campuses. Taking the form of log cabins and traditional tribal symbols such as turtles and eight-sided hogans, these centers house tribal archives, sacred objects, and educational programs on local tribes' traditions and culture. The centers also may serve as exhibition space and classrooms on campuses that have critical basic infrastructure shortages. Finally, the centers will help Tribal Colleges promote tourism on their local reservations (American Indian College Fund and AIHEC, 2000-2001). Some examples of these cultural centers include the following:

▶ Bay Mills Community College has constructed a threelevel log heritage library, which provides classroom space, offices, and a collection of Native art and artifacts (*Tribal College Journal*, Winter 1999).



Part of the Cultural Heritage Collection at Bay Mills Community College.

- ► Haskell Indian Nations University plans to build a 3,000 square foot log cabin to house part of the American Indian Studies Program as well as space for archival storage (AIHEC, 2000-2001).
- ▶ At Fond du Lac Tribal and Community College, officials hope to repatriate tribal artifacts and house, preserve, and display them in their new building. This effort comes as a response to the 1990 Native American Graves and Repatriation Act, which provides for the return of sacred ceremonial items to their tribes of origin (AIHEC, 2000-2001).
- About 200 volunteers showed up at the Institute of American Indian Arts to help build a 4,400 square foot building, which will provide a venue for contemporary exhibitions by students and local artists and public space for performances and speaking engagements (*Tribal College Journal*, Spring 2000).
- ➤ The Cultural Learning Center at Sitting Bull College is the first building on the college's new campus, and will house a student artist studio, a special collection depicting the life of Sitting Bull, and a venue to sell the arts and crafts of local artists (*Tribal College Journal*, Fall 2000).

By providing space for archives and other displays, Tribal Colleges serve as repositories of tribal identities, allowing open access for students, faculty, and other members of the community. In this way, tribal culture maintains a prominent position at the center of community life.

Role in Preserving and Developing Native Languages, Arts, and Crafts

Tribal Colleges also play an active role in preserving and expanding aspects of tribal culture that are less tangible but nonetheless essential to the vitality of American Indian communities—traditional languages, art, crafts, and other expressions of tribal heritage. Numerous efforts aimed toward preserving and reintroducing Native languages are occurring at these schools, targeting not only students, but also the community at large. For example:

▶ At Little Priest Tribal College in Nebraska, the Language and Culture Program sponsored a three-week HoChunk language immersion program taught by tribal elders during July 1999, with more than 20 tribal members participating. This effort was especially important to preserving the HoChunk language given that less than 40 fluent Native speakers remain in the tribe (AIHEC, 2000-2001).



Basket-making class at Northwest Indian College.

- ▶ Bay Mills Community College in Michigan developed its Nishnaabemwin Language and Instructors Institute, a diploma program designed to encourage and promote the understanding and preservation of the Ojibwe language and prepare students to function as language instructors. It enhances students' cultural awareness and offers the opportunity to develop a functional command of the Nishnaabemwin language. This program utilizes a holistic approach that integrates and incorporates the language in all courses. Upon completion of the diploma program, students are able to go back to their respective tribes and schools to teach the language (AIHEC, 2000-2001).
- ► The Salish Cultural Leadership Program offered at Salish Kootenai College in Montana is a year-long certificate-bearing course for adults in the languages of Salish and Kootenai—languages where fluency is currently less than 100 people. The course incorporates all the seasons (Summer: Celebrations and Plants; Fall: Hunting and Animals; Winter: Legends and Ceremonials; and Spring: Plants) in an effort to gain the full knowledge of the language. The class consists of non-traditional students, many of whom are tribal employees who are provided time off from work for personal enrichment through the learning of language, culture, and traditions (AIHEC, 2000-2001).

Another important area of involvement is the encouragement and sponsorship of traditional Indian arts and crafts. The Institute of American Indian Arts (IAIA) Museum houses a unique collection of contemporary American Indian and Alaska Native art and historical material, featuring cultural exhibitions and other

opportunities to involve the public (IAIA, 2000). IAIA is also developing a Native American Youth Outreach Program (NAYOP) in which IAIA students will serve as teachers and mentors to young people in the community. Through this educational outreach and leadership program, IAIA(as part of its Collaborative Arts Partnerships with local community non-profit art and business organizations), engages art faculty, community artists, college students, and teenagers in exploring Traditional Native and Contemporary Arts, bolstering selfesteem and encouraging self-expression in Native American youth (Tribal College Journal, Winter 1999; AIHEC, 2000-2001). Tribal Colleges also blend modern practices with traditional art: the Southwestern Indian Polytechnic Institute has offered a graphic arts program for 25 years, teaching all aspects of the printing business, layout and design, and camerawork and enlisting the assistance of local businesses (Ambler, 1999b).

Cultural activities such as powwows are sponsored by the Tribal Colleges. For example, United Tribes Technical College hosts an international powwow each year that attracts over 20,000 spectators and features dancers, arts and crafts, traditional foods, and representatives from over 70 tribes (UTTC, 2000e). These types of activities reinforce the impact of tribal values and traditions on daily community life, and Tribal Colleges believe that supporting them is an essential part of their missions.

Importance of Culture to Other Efforts

Finally, Tribal Colleges often intertwine cultural awareness programs with intervention programs for at-risk youth or other groups, on the belief that the strength of cultural identities can initiate and support change. For example, Fort Belknap College's Safefutures program provides culturally based services to at-risk youth, with the goals of building job skills, developing an effective tribal juvenile justice system, and implementing a comprehensive service delivery system. Toward these ends, the program has offered structured educational services in the schools, counseling sessions, residential treatment at the Group Home, youth ranch skills, and after school activities that promote cultural awareness (AIHEC, 2000-2001).

Blackfeet Community College has initiated an outreach program targeted toward young Blackfeet women at risk for substance abuse, sexually transmitted diseases, early pregnancy and childbirth, single parenting, school dropout

PROFILE

The Learning Lodge Institute

On many Indian reservations in Montana, language fluency is becoming increasingly rare, and fluent speakers are advancing in age. For example, only 16 fluent Assiniboine speakers were found on the Fort Belknap Reservation in 1994, and 14 Gros Ventre speakers were identified there in 1996. Even on reservations were fluency is more common—for example, on the Crow Reservation, where over 80 percent of tribal members could speak their language a decade ago, and the language is still commonly heard—younger members of the tribe are not as likely to learn the language, provoking fear that the language's long-term survival is in jeopardy. These circumstances have led to a sense of urgency among Montana tribes.

With funds from the W.K. Kellogg Foundation, the seven Tribal Colleges in Montana took the lead in a cooperative effort: the Learning Lodge Institute, a four-year project focusing on tribal language revitalization. With the partner colleges—Little Big Horn College, Blackfeet Community College, Dull Knife Memorial College, Fort Belknap Community College, Fort Peck Community College, Salish Kootenai College, and Stone Child College—this multi-year initiative is strengthening curricula and involving local communities to promote the teaching, learning, and use of 11 languages prevalent in Montana.

Each college develops and directs projects that best serve the needs of the local communities. In addition to traditional language courses, the Institute promotes projects that disseminate knowledge of traditional culture, certify language teachers, develop handbooks, sponsor immersion programs, document ceremonial objects, and partner with local public schools. The participants, facilitators, and teachers involved in the projects bring with them a wealth of knowledge regarding cultural practices, values, and spiritual and philosophical teachings. College staff also meet periodically to share what they have learned and support each other's efforts.

For example, Fort Belknap College and the Learning Lodge Institute have developed a language restoration project for both the Gros Ventre and Assiniboine Indian Tribes. The "Speaker-Learner" project is based on the results of a community language survey, which suggest that the number of speakers in both tribes is decreasing rapidly. Through the project, highly motivated teams of both speakers and learners spend substantial amounts of time together, allowing the learner to become immersed in the language.

Salish Kootenai College has a long-standing language program that teaches both Salish and Kootenai. In addition, its Cultural Leadership Program gives a select group of students a more intensive, culturally based approach, in which language instruction is combined with a variety of traditional activities such as hunting and gathering, songs, and other off-campus activities.

The Learning Lodge Institute supports a summer immersion camp on the Blackfeet Reservation. Participants learn the fundamentals of the language on the Blackfeet Community College campus, then move to a remote campsite where students and instructors spend time together, immersed in language and cultural instruction. The camp is only one part of a larger, reservation-wide effort to introduce tribal members to the language. On the Blackfeet Reservation, 450 people each year are exposed to the language through classes and camps.

Sources: W.K. Kellogg Foundation, 1999; AIHEC, 2000-2001; Boyer, 2000; Ambler, 2000a

and delinquency, and poverty and unemployment. The project—"Spirit of the Circle"—intends to reclaim the empowered position of Blackfeet women in today's society. "Spirit of the Circle" targets those girls and young women who have gone unnoticed and unattended to by schools, social service agencies, and medical programs. Alternative strategies employed by the project include conducting leadership camps, support groups, drug intervention and prevention programs, tutoring sessions, and parental and community activities (Blackfeet Community College, 2000a).

Through its Family and Community Violence Prevention Project("Building a Healthier Community) the Institute of American Indian Arts (IAIA) works with American Indian seventh to twelfth graders at Santa Fe Public Schools (along with their parents), providing them with the tools to increase their academic skills, bolster their self confidence and self-identity, and overcome generational problems, such as high levels of substance abuse and violence in the Santa Fe Indian community. Over a three-year period, 10 IAIA college mentors will work with 50 students, targeting academic and personal

development, family relationships, cultural enrichment, and career development (AIHEC, 2000-2001).

In July 2000, Red Crow Community College hosted a cross-cultural immersion workshop to examine ways in which traditional healing practices can be incorporated into the education and practice of community organizers, planners, and social workers. Participants explored how spiritual, historical, and cultural traditions are gradually being used to guide and support community development efforts on the Blood Indian Reserve (*Tribal College Journal*, Winter 2000).

Tribal Colleges serve as a focal point for a number of cultural development activities, from instructing students in Native traditions and languages, to preserving artifacts and oral histories, to encouraging Indian arts and crafts. Since Tribal Colleges provide a place to enrich and preserve American Indian culture in all people—both younger and older generations—these schools significantly contribute to sustaining the rich history of American Indians for succeeding generations to pass on.

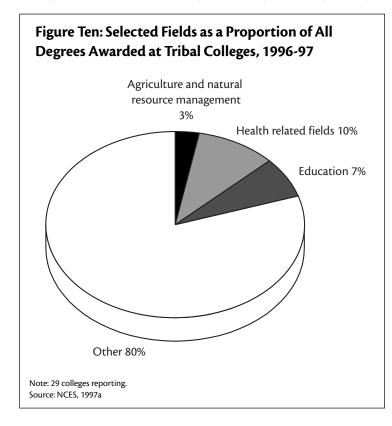
VII. Conclusions and Recommendations

E in their local communities has become a hallmark characterizing the relationship between these institutions and their constituencies. Like mainstream community colleges, Tribal Colleges are guided by input from the local community and serve as a valued resource to the community. The importance of Tribal Colleges to tribal communities, however, transcends their relatively small size. They serve additional important functions not generally associated with community colleges. Notable examples include their role in cultural preservation, indigenous language development, extended educational opportunity, workforce training, economic development, and teacher training. These institutions are directly involved in local community life on many levels. They

offer culturally relevant, innovative means of support that enable community members to more successfully confront the challenges and obstacles facing them.

As this report has described, Tribal Colleges reach out to their youngest community members by linking with local K-12 school systems to provide American Indian children with a more stable and higher quality education than encountered in the past. Through these linkages and other supplemental programs, Tribal Colleges work with elementary and secondary students as they progress through their schooling, boosting their chances to enroll in postsecondary education and graduate from college. Working with both older and younger generations, Tribal Colleges offer assistance and

programs aimed at reducing the negative effects of poor nutrition, substance abuse, and other damaging health problems that plague American Indian communities and place future generations at high risk. By providing high quality faculty—both American Indian and non-Indian-who combine cultural traditions and approaches to learning with more traditional methods, Tribal Colleges advance the educational aspirations of their students and communities, and offer opportunities for locally based research and dissemination. The areas of agriculture and natural resource management are enhanced by Tribal Colleges through degree-granting programs in these fields and through technical assistance and training provided to local ranchers and farmers. (See Figure Ten.) Through every effort, program, assistance, and degree, tribal culture and traditions are interwoven and remain at the heart of Tribal Colleges' missions. In addition, a number of these schools serve as cultural centers and archives, provide Native language training, and support local Native arts and crafts.



The specific areas highlighted in this report represent only a small portion of Tribal Colleges' comprehensive community engagement. In fact, Tribal Colleges are involved in many other aspects of local community life. The following are just some of the services and assistance provided by Tribal Colleges:

- ▶ Daycare and transportation services. Support services such as daycare and transportation are essential to the future economic development of American Indian communities, and Tribal Colleges are very active in the provision of such services. More than a third of the Tribal Colleges report that they provide on-campus daycare services and slightly more than half provide transportation services (AIHEC, 2000-2001).25 For example, Fort Belknap College opened a daycare center in 1997-98 after receiving a small operating grant; the center now operates as a small business, and may even lease or purchase a second facility to accommodate the growing need for child care among both students and community members. Since 1991, Sitting Bull College has administered the Standing Rock Transportation Program, the only public transit system available reservation-wide and serving 13 communities (AIHEC, 2000-2001).
- Housing/infrastructure issues. Infrastructure issues also are vital to the successful growth of reservation communities, from housing to transportation networks to the introduction of new technologies and communications infrastructure. Historically, however, the geographic location and poverty of many tribes has prohibited the construction of such networks. Today, Tribal Colleges are helping out by operating a variety of programs that aim to improve critical infrastructure. For example, United Tribes Technical College's degree in construction technology teaches students the skills to construct homes for their communities, and many of the buildings on campus were constructed by students in this program (UTTC, 2000e).
- ▶ Preparing/strengthening tribal leaders. As American Indian tribes expand their rights to self-determination, strong, competent, and culturally aware tribal leaders are becoming increasingly necessary—not only to serve in local government offices, but also to manage small businesses, hospitals, schools, and other fundamental community institutions. Tribal Colleges have stepped in to train tribal leaders in various aspects of service, from business expertise to tribal government policymaking to general management skills. For example, through the land-grant exten-

- sion program at Cankdeska Cikana Community College, funding is aimed at increasing the human resource capacity of the reservation through a training program to foster self-esteem, build leadership skills, and promote volunteerism. This program has created a center to coordinate community services on the reservation (CSREES, 2000b). In addition, Oglala Lakota College offers a Master's of Arts in Tribal Leadership and Management with two tracts: Tribal Leadership and Management and Educational Administration (AIHEC, 2000-2001).
- Tribal sovereignty/autonomy. Tribal Colleges are some of the most stable organizations in their communities and provide an element of trust for locally run programs. In addition, Tribal Colleges help train staff for important government institutions, such as tribal courts. For example, Turtle Mountain Community College and Salish Kootenai College are working with the University of California-Los Angeles to develop curriculum to train tribal court staff through a program called Project Peace Maker (Tribal College Journal, Winter 1999).
- ▶ GED/adult/developmental education. Tribal Colleges play a role in educating not only their enrolled students, but also adults throughout local communities, many of whom never completed high school. Virtually all of the colleges offer adult education and GED preparation courses on a non-credit basis. Almost three-quarters of the Tribal Colleges report that they offer GED preparation, with an average of 270 students enrolled for those colleges that offered such preparation (AIHEC, 2000-2001). For example, Diné College received a \$1.2 million grant from the Navajo Nation Department of Workforce Development to provide adult basic education and GED development to the department's clientele over two years; the program will be computer based with instructional and tutorial support (AIHEC, 2000-2001).
- ▶ Public libraries. Tribal College libraries perform an important function for local communities, many of which do not have access to other libraries. For example, Blackfeet Community College Library is the only postsecondary academic library in that part of northeastern Montana. Cooperation with other Tribal College libraries in the state, as well as other libraries, has enhanced their ability to serve students, faculty, and the reservation community at large (Blackfeet Community College, 2000b). Likewise, the Lummi Library at North-

²⁵ Data were available for 30 of the colleges.

²⁶ Information was available for 30 colleges, but only 11 colleges provided the number of GED students enrolled.

- west Indian College is a public library designed to serve diverse needs on the reservation and general community, as well as the academic needs of the Tribal College (AIHEC, 2000-2001).
- ► Community meeting places and forums. On a basic level, Tribal Colleges often serve as focal points for bringing community members together. The colleges often provide forums for discussion of tribal policy and the future direction of the community, and may collect local economic, demographic, and environmental data to assist in these discussions. For example, the Sicangu Policy Institute at Sinte Gleska University provides a community forum for policy development, educational initiatives, and community programs to improve the long-term prosperity of Lakota people, in partnership with the Rosebud Sioux Tribe, the tribe's education department and housing authority, the U.S. Bureau of Indian Affairs, and the Indian Health Service, among others (W.K. Kellogg Foundation, 1999).

Tribal Colleges are strengthening their communities through numerous innovative efforts in multiple areas of daily life, including education, health, and economic development. Through programs that integrate American Indian cultural traditions, Tribal Colleges are able to effectively reach out to their communities and make a direct impact on all generations of American Indians. These schools are able to respond to their communities' needs and concerns since they are located on or near reservations and can see first-hand the hardships facing American Indians and reservation communities. Many of the faculty, staff, and students have experienced similar situations in their own lives, which allows them to have empathy for such difficulties. Because of this understanding, Tribal Colleges are able to gain the trust, respect, and appreciation of the communities they serve, and therefore can work directly with community members to facilitate change, on the reservation and in individual lives.

Tribal Colleges, however, receive limited funding to accomplish these great tasks and are forced to stretch their resources to full capacity, leaving the future of their programs and services in question. Although many of the services they provide are supported with monies from contracts with government agencies or other sources, Tribal Colleges must also use general operational funds that are significantly lower than the dollars per student received by mainstream colleges (AIHEC and The Institute for Higher Education Policy, 1999). Additional funding and other assistance—both

federal and non-governmental—are critical in order to support the development of programs and services that have such a positive impact on the daily lives of American Indians. Given the extraordinary situation facing American Indians and the tremendous impact of Tribal Colleges in answering their needs, we offer the following recommendations to government policymakers, university officials, and private sector organizations to help Tribal Colleges continue in the role of engaged institutions:

- Increase federal funding for core operations, especially through the Tribally Controlled College or University Assistance Act, which finances education and general operations at 25 of the colleges. Currently, Tribal Colleges receive considerably less than mainstream community colleges and slightly over half the authorized funding level. Increased funding for core operations will allow Tribal Colleges to continue serving local communities while supporting continued academic quality and improving recruitment and support for Tribal College faculty.
- Appropriate federal funds at the authorized levels for land-grant programs under the Equity in Educational Land-Grant Status Act of 1994, and expand support for the 1994 Institutions by funding the Act's provision for agriculture development facilities. This will enable Tribal Colleges to build upon current programs and expand research in the areas of agriculture, natural resources, and nutrition, as well as improve technical assistance to local communities and develop new curricula in these fields.
- ▶ Increase support for faculty development at Tribal Colleges. Increase existing and create new federal resources, which may be used to support faculty development and related curriculum development. Some federal funding for faculty development could be designated in already established relationships (i.e., Title III). Encourage federal agencies and departments not yet fully engaged with Tribal Colleges to provide resources for faculty development. Within higher education, develop cooperative initiatives with mainstream universities and with other Tribal Colleges to promote mutually beneficial faculty development.
- ► Strengthen and increase resources to improve the participation and success of American Indians in teacher education programs. One example is the American Indian Teacher Corp, a five-year initiative under the

- U.S. Department of Education whose goal is to train 1,000 American Indian college students to become teachers, place them in schools with high concentrations of American Indian students, and provide professional development opportunities and support. The grantees for FY 2000 include 13 Tribal Colleges, which competed against mainstream colleges and universities for the funds.
- ► Continue support for the new National Center for Research on Minority Health and Health Disparities under the U.S. Department of Health and Human Services, which coordinates funding through the National Institutes of Health to conduct research in health and nutrition areas critical to American Indians nationwide and provides funding to increase medical training for American Indians (among other minorities).
- ▶ Provide more opportunities for Tribal College involvement in Head Start, TRIO, and other early intervention programs by increasing the resources targeted toward these programs. Increased Tribal College participation in such programs will help improve the well-being of American Indian youth and their chances for future success.

- ▶ Promote collaborations between Tribal Colleges and local elementary and secondary schools in order to facilitate comprehensive, smooth K-16 connections and improve American Indian educational attainment levels—for example, through the Tribal College Rural Systemic Initiative, which is funded through the National Science Foundation.
- ➤ Support private sector initiatives, such as the Cultural Learning Centers, that help preserve and expand traditional values, histories, art, languages, and other aspects of American Indian culture.
- ➤ Expand technology grants to Tribal Colleges to leverage private sector investment in Information Technology infrastructure. In addition, support funding for training and technical assistance in the use of information technology, especially to provide broader opportunities for the use of distance learning.
- ▶ Promote and support partnership development and collaboration with other Tribal Colleges as well as with mainstream institutions, through adding resources and encouraging cooperative arrangements.

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