

LEVELING THE RISK PLAYING FIELD: DEVELOPING A TRIBAL RISK CURRICULUM

Alvin L. Young

U.S. Department of Energy

Center for Risk Excellence

9800 South Cass Avenue, Bldg. 201

Argonne, IL 60439-4802

ABSTRACT

The issues related to risk assessment and risk management that confront tribal decision-makers are manifold and range from the paucity of Indian-specific epidemiologic and genetic information to the apparent inability of current risk assessment models to incorporate tribal cultural issues. Indian tribal officials, like their counterparts in state and local governments, are facing increasing pressures from tribal members to cope with risks, both real and perceived, associated with a wide range of activities. There include the transportation of hazardous materials through the reservation, the cleanup of contaminated sites within the reservation, the environmental restoration of Federal facilities, the siting of waste treatment, storage, and disposal facilities, the development of tribal mineral and other natural resources and the construction and operation of industrial and commercial facilities within the reservation. The U.S. Department of Energy Center for Risk Excellence has undertaken to level the playing field for tribal decision-makers including developing risk curriculum for tribal colleges, enhancing the science skills of tribal college faculty, and assisting tribal councils and tribal colleges in the long-term planning of natural resources on reservations using college curricula activities.

INTRODUCTION

Tribal decision-makers and environmental regulators in tribal settings are generally ill-prepared to respond when confronted with the need to make resource management, environmental protection, and other decisions based on risk. It is generally acknowledged that conventional risk assessment and risk management methodologies do not reflect tribal values and priorities, nor do they accurately depict the unique health, environmental, and cultural risks that tribal communities face. Moreover, there are very few tribal decision-makers and environmental program officials who are knowledgeable about risk, risk analysis, and risk management. The opportunity to "level the risk playing field" must begin with the 30 tribal colleges that have been created within the past 25 years and who, by the direction of the Congress of the United States, became 1994 Land-Grant Institutions. Understanding how these institutions were established, their roles in support of the Tribal Nations and the Reservations, and how risk assessment can be incorporated into their academic programs is essential if the Federal Agencies are to assist in this task.

TRIBAL COLLEGES--THE NEW LAND-GRANT INSTITUTIONS

The Congress directed the United States Department of Agriculture (USDA) to provide the "land-grant" status to 29 colleges and universities that were controlled by Native Americans and were primarily located on Indian Reservations (subsequently, one additional institution was given recognition). The Equity in Educational Land-Grant Status Act of 1994 provides the 30 tribal colleges in eleven states with land-grant status for the "benefit of agriculture and the mechanic arts" within Native American communities. In lieu of receiving public land or scrip for the

endowment and maintenance of the colleges, Congress authorized to be appropriated \$4.6 million for each of fiscal years 1996 through 2000. The interest from this fund is to be distributed to the colleges for academic programs in the food and agricultural sciences. The Act also provided for a non-competitive grants program (Tribal Colleges Education Equity Grants Program, \$1.45 million), competitive grants program (1994 Extension Grants Program, \$5 million), and a Capacity Building Grants Program, \$1.7 million. To date, the Endowment and Equity Grants Programs have been annually fully funded. The Extension Program has received \$2 million annually beginning in FY 1997; but to date, no funds have been appropriated for the Capacity Building Program.

Executive Order 13021 (1996) reaffirmed the special relationship of the Federal Government to American Indians and Alaska Natives, and for the purpose of helping to: (a) ensure that tribal colleges and universities are more fully recognized as accredited institutions, have access to the opportunities afforded other institutions, and have Federal resources committed to them on a continuing basis; (b) establish a mechanism that will increase accessibility to Federal resources for tribal colleges and universities in tribal communities; (c) promote access to high-quality educational opportunities for economically-disadvantaged students; (d) promote the preservation and the revitalization of American Indian and Alaska Native languages and cultural traditions; (e) explore innovative approaches to better link tribal colleges with early childhood, elementary, and secondary education programs, and (f) support the National Education Goals.

Lastly, the Federal Government is committed to providing equal opportunity for all peoples. The roles and responsibilities of the Federal Government to the Native American community are only now being defined. The United States Department of Energy (DOE) has a unique opportunity to provide the leadership in bringing the Native American into an equitable position with regard to other underrepresented groups.

INSTITUTIONS

The 1994 Legislation identified the following Tribal Colleges and Universities to be 1994 Land-Grant Institutions:

Bay Mills Community College, MI
Blackfeet Community College, MT
Cankdeska Cikana Community College, ND (Formerly, Little Hoop Community College)
Cheyenne River Community College, SD
College of the Menominee Nation, WI
Crownpoint Institute of Technology, NM
Dine' Community College, NM (Formerly, Navajo Community College)
D-Q University, CA
Dull Knife Memorial College, MT
Fond du Lac Community College, MN
Fort Belknap College, MT
Haskell Indian Nations University, KS (Formerly, Haskell Indian Junior College)
Institute of American Indian Arts, NM (Formerly, Institute of American Indian and Alaska Native Culture and Arts Development)

Lac Courte Oreilles Ojibwa Community College, WI
Leech Lake Tribal College, MN
Little Big Horn College, MT
Little Priest Tribal College, NE
Nebraska Indian Community College, NE
Northwest Indian College, WA
Oglala Lakota College, SD
Salish Kootenai College, MT
Sinte Gleska University, SD
Sitting Bull College, ND (Formerly, Standing Rock College)
Sisseton Wahpeton Community College, SD
Turtle Mountain Community College, ND
United Tribes Technical College, ND

CRITICAL NEED FOR CURRICULUM PROGRAMS/SITUATIONAL ANALYSIS

The Tribal Colleges/1994 Institutions are unique in that they are charters by one or more tribes and maintain a board of directors that is exclusively or predominately American Indian. Like a state university or public community college, they are formally sanctioned as the institutions of higher learning for their communities. All tribal colleges began as two-year institutions. The immediate goal was to provide vocational training, especially for jobs available within the reservations. A longer term goal was to prepare students to transfer to higher education four-year degree programs. Today, job training still dominates the curriculum, although the range of degrees has greatly expanded. Students may choose from culinary arts and construction trades to human services and tribal management. The most popular degrees are in the fields of business, health, and education. Most colleges offer one or more certificate or associate degrees in these disciplines, usually in nursing, secretarial science, and early childhood education. As the colleges grow, more are adding four-year and even graduate degrees. Haskell Indian Nations University, Oglala Lakota College, and Sinte Glaska University offer bachelor's degrees in elementary education and business. Salish Kootenai offers a four-year degree in human services. Oglala Lakota College also offers a master's degree in tribal management. Many of the colleges are working cooperatively with their Land-Grant 1862 Institutions (e.g., Mokana State University and North Dakota State University) and are offering students four-year and graduate degrees. Curricula in agriculture, food science, nutrition, and natural resources are new to the tribal colleges and USDA's role in developing these program is essential.

Courses in Native American studies are a special part of every tribal college. All colleges offer courses in their tribe's arts, philosophy, and history. While most students choose to major in career-oriented disciplines, many enroll in one or more cultural courses, and all feel the influence of tribal culture on campus. Tribal colleges have a dedication to students that most other colleges and universities cannot match. These colleges confront subtle barriers to enrollment. Within reservations, the greatest obstacles are the severe economic hardships and an often psychological barrier--the belief that higher education is something foreign and intimidating. Tribal college staff work especially hard to eliminate fears in ways that are often simple but effective. In all that the colleges do, their first priority is to support students and ensure their success.

Total enrollment among all tribal colleges continues to climb rapidly. Currently, more than 22,000 students are enrolled in the 30 colleges. Approximately 13,500 of these students are “enrolled” members of Federally-recognized tribes. The typical tribal college student has often been described as a single mother in her early thirties. This population has been the least served by higher education, yet was the most eager to get a degree so as to get off welfare and provide for their families. Yet this group has been unable or unwilling to leave home and attend schools in distant cities, thus the tribal colleges have been the only option. Today, the average age of students has dropped slightly as more students in the traditional eighteen to twenty-one age group enroll. Another major task of the tribal colleges will be to increase the male representation in higher education. Clearly programs are needed at the colleges that will influence the men to stay in high school, and hence, continue into a college program. Environmentally-and Agriculturally-related programs may be a key to those efforts.

Most instructors at tribal colleges are non-Indian. This is in contrast to the dominance of Native Americans in the administration and student body. Tribal colleges encourage American Indians to apply for teaching positions, but they have a hard time finding applicants; the supply of qualified Native American Faculty is still severely limited. In addition, tribal colleges cannot offer competitive salaries or benefits. Many tribal members with graduate degrees are lured away to better paying positions off the reservation.

THE NEED FOR TRIBAL RISK EDUCATION AND TRAINING

As noted earlier, there are very few tribal decision-makers and environmental program officials who are knowledgeable about risk, risk analysis and risk management. This is not surprising since American Indian students are not taught tribally-appropriate methods for evaluating impacts to tribal lifestyles, health, and resources. That this is so is because colleges generally do not incorporate risk into their environmental and resource management studies nor have the tribal college teachers been provided with the appropriate risk teaching tools.

The Associates of the Center for Tribal Risk Analysis and Management (Denver, CO) have been at the forefront of developing a tribal risk assessment methodology that has been used by Indian tribes in the Pacific Northwest to analyze impacts of U.S. Department of Energy activities at Hanford on tribal cultural and treaty interests. Similarly, other Associates have developed tools that Indian tribes can use to assess the impact certain environmental remediation technologies will have on a wide range of tribal interests. The Center for Risk Excellence has now joined with the Center for Tribal Risk Analysis and Management in sponsoring a tribal risk education and training program.

To accomplish the tasks of developing a Tribal Risk Curriculum and a subsequent training program will require a number of activities. For example, a teaching tool will be needed that includes segments on: (1) using tribal values and policies to develop risk measure, metrics, and indicators, (2) introduction to toxicology and conventional risk assessment, (3) an example of how the first two segments can be combined into a tribal risk model that reflects lifestyles, values, and cultural risks, and (4) examples of how to do this within specific legal, policy, and regulatory frameworks such as those established by the Federal-Indian trust relationship, treaty

provisions and the Comprehensive Environmental Response, Compensation and Liability Act, National Environmental Policy Act, Clean Water Act, and other Federal statutes. The proposed approach recommends that the Center for Tribal Risk Analysis and Management produce the tribal risk curriculum in two versions: (a) a self-paced seminar with visuals accompanied by text for teachers or students, and, (b) a 1-hour version for teachers to use as an introduction to risk. The curriculum will include study questions and additional suggestions for teachers who want to use it as a basis for independent student projects or term papers. Because each actual tribal application might need to be slightly different, a number of examples showing how tribal cultural, social, and spiritual values can be incorporated into tribal risk modes will be presented. The second phase of this project will involve classroom evaluations by working with specific tribal colleges and instructors.

LONG-TERM PLANNING OF NATURAL RESOURCES

It is appropriate that American Indians receive access to the land-grant system, for no lands are more within the heart of rural American than Reservations. More than 54.5 million acres currently lie within American Indian Trust Territories. Of this, 75 percent are agricultural lands and 15 percent are forestlands. The potential of the natural resources and agricultural opportunities on these lands are tremendous, but due to the lack of training, planning, and access to technology, millions of acres on Indian land are not fully used. Tribal colleges, with their uniquely close ties to Native American communities and with their ability to attract and retain Indian students are key for turning the Reservation economies and education status around. However, central to success will be the careful identification and subsequent long-term use planning of the natural resources on Indian lands. The Endowment Funds managed by USDA are the ideal source of funding by the tribal colleges for the long-term commitments that are required to establish, maintain, and manage a natural resource program. Federal agencies that conduct land use and natural resource planning, and state land-grant universities, have all employed experts who are now in emeritus status and would be ideally available to assist the tribal colleges in developing these programs. Unfortunately, Federal, state, and local agencies have few, if any, Native Americans on their staffs that are professionally trained in areas of land use and natural resource planning. Hence, the role of the tribal colleges in attracting, training, and providing the experience for Native Americans to be competitively employed in these agencies.

CENTER PROJECT

The Center for Risk Excellence is working with USDA and Haskell Indian Nations University to convene a workshop involving four of the tribal colleges in the North Central United States and that are located on major Indian Reservations, e.g., Cankdeska Cikana Community College, Fort Totten, ND; Nebraska Indian Community College, Macy, NE; Sinte Gleska University, Rosebud, SD; and Sitting Bull College, Fort Yates, ND. The Presidents of the institutions, senior faculty that teach in the natural resource, environmental, or agricultural areas, a senior elder from the respective tribes that support the colleges, senior scientists from USDA, DOE, and the Bureau of Land Management, and the respective state's land-grant universities will be invited to attend the workshop. The concept will be to identify teams of "emeritus" scientists who are experts in land use and natural resource planning and who team with tribal elders familiar with the resources and culture of the reservations, to develop Natural Resource Plans for the four reservations. Age and

experience are greatly respected in the Native American culture. The unique approach of using elders and emeritus scientists add both credibility and “buy-in” by the respective communities. In addition, emeritus scientists will see the value and opportunity of this activity. They generally have the time to commit to the tasks, and will require only their expenses to participate.

It will be the role of the tribal colleges to implement these plans through the use of faculty and students, e.g., in the collection of plant species, the identification and classification of water and geologic resources, and the use of GIS to map and classify land use patterns. The ties that develop between the emeritis scientists, elders, and Federal agencies will provide the future pathways for young Native Americans to advance in further education and/or be employed in occupations that focus on the stewardship of America’s natural resources.

We scientists and science administrators in and out of the Federal government have responsibilities to ensure that the next generation of young people not only understand science and technology, but appreciate its application to the stewardship of our lands. Risk assessment, risk management, and risk communication are key concepts if we are to make the best decision for the future. Training in these areas at tribal colleges and at all our institutions of higher learning will ensure that a cadre of young people will be prepared for the future and that the playing field of environmental management will be level!