Gathering Traditions and Generations
Journey to Indian Country

Career Development Panel
15th Annual NW Tribal Transportation Symposium
March 19, 2008
Don Motanic
Intertribal Timber Council, Technical Specialist
Developing a Career

- Grew up in Seattle area, but parents kept us connected w/ sweats and summers in berry fields near Mt. Adams

- Quit math in 10th grade after a “D” in Geometry

- U of Washington minority recruitment offered “remedial” classes

- Summer work at Seattle Watershed put reality with math and road design
Developing a Career

- Started working at Yakama and worked on tough road issues right away
  - Floods
  - Volcanic mud flows

- Timber Harvest Transportation w/ Skyline Logging to control road density
Developing a Career
Many Mentors “Gathering Generations & Traditions”
A Mentor-Youth Trust Walk

Background

Trust Walk

- In a trust walk, two people alternate being leader and blindfolded follower.
  - individuals take turns as the blind follower or leader
  - guide each other through an obstacle course
  - both learn communication skills and develop a sense of trust.
- While attempting to encourage students towards science and engineering professions, who plays the leader and who plays the blind?
- Regrets? Balance Family/Career
Tribal youths meet ‘Mystic Mountain’

Fantasy could lead to careers in land resource management

By Betty Fowser

The idea is to have the Indian Youth Center, based in the Rosebud Indian Reservation, work with the National Park Service to develop a program that will expose youth to the opportunities in the park.

The program will be called ‘Mystic Mountain’ and is designed to introduce young people to the natural and cultural resources of the area.

The program will include outdoor activities such as hiking, camping, and fishing, as well as cultural events such as powwows and traditional dances.

The program will be led by Indian Youth Center staff and will be open to all youth ages 12 to 18.

This program is part of the county’s efforts to increase youth involvement in outdoor activities and cultural events.

BIA official acts as role model

By Sandra Fowser

The Indian Youth Center has announced the appointment of a new director, who will act as a role model for the youth in the program.

The new director, who will be responsible for overseeing the program, is a member of the youth group and has a strong background in outdoor activities and cultural events.

The director will work closely with the youth to help them develop leadership skills and to encourage them to take an active role in their community.

The program will continue to be funded by the county, and will receive additional support from local businesses and organizations.

The youth center is located in the Rosebud Indian Reservation and serves the area’s young people.

For more information, contact the youth center at (406) 555-1234.
Successful Programs

- American Indian Science and Engineering Society (AISES)
  - Established 1978
  - In 30 years # of Native Science & Engineers
    - 1978 approx 2,000
    - 2008 approx 12,000
  - More than 150 college AISES chapters
  - More than 100 high school AISES chapters
  - Approximately 15 professional chapters nationwide
Successful Programs

AISES Activities

- **National Convention** (2000+ attendees)
  - 2008 in Anaheim (Oct 20 – Nov 1)
  - 2009 in Portland (Oct 29-31)
    - NW Tribal Transportation Sponsor Booth?

- **Higher Education**
  - Scholarships
  - Internships
  - Leadership Conference - February
  - College Chapter Support
Successful Programs

AISES Activities

- K-12 Education
  - Teacher Education for Native Students
  - National Science Fair in Albuquerque
    - Annual in March
    - NW Tribal Transportation assist with a sponsorship next year?

- www.aises.org
Successful Programs

AISES Three Boards – Creating the “Safe Camp”
Code of Ethics since 1978 – No alcohol or harassment

- AISES Society – Non Profit
- Winds of Change Magazine – Profit
- AISES Foundation – Non Profit
The Status of Native Americans in Science and Engineering

Eleanor L. Babco
Executive Director
Commission on Professionals in Science and Technology

Prepared for the National Academy of Engineering
Workshop on Engineering Studies at the Tribal Colleges

March 15, 2005
Workforce Challenges

The Status of Native Americans in Science and Engineering

The Science and Engineering Labor Force

Of the 3.4 million scientists and engineers who were employed in the traditional science and engineering occupations in 1999, only about 10,000 (0.3%) were Native Americans. This propor-

- 2008
  - 12,000 Native Science and Engineers
  - Approximately 10% (1200) connected with tribal community

- Portland State University
  - 20 Native Students Enrolled in Engineering School
  - 2 Native Students involved with Native Community (10%)

- How can we assess disconnect issues and connect students?
Workforce Challenges

- Other factors effecting Native Science and Engineering Students

One factor may be that Native American students are not exposed to enough rigorous math and science courses that allow them to consider careers in science and engineering.

Another factor may be that Native American women are more likely than men to earn bachelor’s degrees, and like women of other racial or ethnic groups, are less likely to choose science and engineering as college majors.

- Do they feel safe?
- Is science & engineering fun
- Do they feel productive? “Do I make a difference”
Tribal Government Challenge
Developing Science & Engineering Workforce

- Do they feel safe?
  - Two Comments to me after a tough tribal council meetings from two different tribal leaders/elders
    - Tribe A --- “Just be tough, nobody with thank you”
      - AKA – TOFTT – Take One For The Team
    - Tribe B --- “When you walk out that door, take off that manager’s coat, don’t take our comments personal, you’re still one of the community” – Lillian Flett (Spokane Elder)

- Is science & engineering fun

- Do they feel productive?
  - “Do I make a difference”
Missing Links for Future Engineering Students

- Gathering Generations and Traditions
  - Collaborate with new partners to share information
    - Portland Native Youth Network Five Meetings Per Year
      - Regional Title VII coordinators, OMSI, AISES, NAYA, PSU, Portland CC, NARA, ITC, CRITFC
  - Look for Non Traditional Resources –
    - Corporations - Retirees
    - Non-Engineering
    - Non-Indian
Missing Links for Future Engineering Students

Recommendations

- Sponsor
  - NW Tribal Transportation Booth @ AISES National Conference
  - K-12 Youth to AISES Science Fair
- Develop A NW Tribal Transportation Scholarship & MOA with Engineering Schools
  - Develop Scholarship for Engineering Students
  - Find Engineering Schools to match tuition shortfall similar to ITC and U of Washington Forestry with Picard Scholarship
Three Tips for Developing Mentor and Student Relationships

- **Safe**
  - Every tribal youth camp identified this value as most important by students

- **Fun**
  - Make math and science interesting by 3 “Ls”
    - Listen
    - Laugh
    - Learn

- **Productive**
  - They go home with a feeling:
    - “I made a difference!”