Building a Successful Student Research Program Through Collaboration
"The Navajo Nation is Our Campus"
Established in 1968

Diné College Locations:
Tsaile, AZ (Main Campus)  Window Rock, AZ
Tuba City, AZ            Ganado, AZ
Chinle, AZ              Kayenta, AZ
Crownpoint, NM          Shiprock, NM

Navajo Nation
Interstate Highway
Major Highway
Navajo Road
River/Waterway
Rail Line
City
Town
Scale in Miles
0 10 25
Some Questions

- How to build a successful educational model?
- From Liberal Arts to Science, Math and Engineering and Why?
- Community Colleges and Research?
- No labs, no instruments, no teachers, no matter!
- Drugs, alcohol and early parenthood – unsung superheroes?
Building Research Capacity
A Visionary Presidency

DINÉ ENVIRONMENTAL INSTITUTE
President’s Office
Organization of DEI

- Land Grant Office
  - Endowment
  - Equity
  - Extension
  - Research
  - Demonstration Farms

- Uranium Education Office
- GIS Lab
- Navajo Dryland Environments Lab
- Pathway Project
Internships

“Stay Close, Go Far”

- Science Career Cohort (SCC)
- Environmental Education and Research (EvER)
- Land Grant (LG)
- Peer Educators
- Public Health
  - RISE
  - SREP
  - NRI
Our First Year
Science Lab
Learning Center
Institutional Data
Science Career Cohort (SCC)

“From Middle School to Graduate School”
Science Career Cohort
Shiprock Pilot Program

Qualifications
- Remedial Math, Reading and Writing
- Any major
- Any age and past history
- Must have a Mentor
- Travel as a cohort
- Early Field Experience
- Community Service
- Work 40hrs/wk
EvER and Land Grant

- Science, Math, Engineering majors
- Community Research Projects
- Year round research
- 10 week summer project on rez
- 4+4 program (NASA and others)
- 2nd summer project at 4 yr institution for possible future transfer w/mentor
Peer Educators

- Work with First Year SCC students
- Assist with remedial math and English
- Tutoring software assistance
- Certifications
- Give great advice!
Research Coordinators

- BA/BS seeking students
- Supervise Summer Research Projects
- Provide Continuity
Graduate Students

- Provide technical expertise
- Get valuable cultural experience
- Publish Research Appropriately
- Provide research lab capabilities
- Future mentors for Native American students
Collaborations That Work

- US EPA Regional Projects
- National Park Service
- Research Labs
- 1862’s and 1890’s
- Tribal Agencies
- Entrepreneurs
- Retired Experts
- Nonprofits
- Investment Bankers
- Other Tribal Colleges
Rocky RACOON No. 6
Meeting with BIA Area Office Director Mr. Omar Bradley regarding installation of a CO₂ Monitor on the Navajo Reservation.

Students at the federal building in Gallup with University Corporation of Atmospheric Research graduate student Sherri Heck & SOARS Director Dr. Rajul Pandya.
The ROCKY RACOON Story

- Why we aren’t political
- Global Research
- Good numbers matter and exist!
- National Center For Atmospheric Research (NCAR)
- DEI/BIA/NNH₂O Resources
- http://raccoon.ucar.edu/
Typical Data Set
Challenges

- The need to achieve 4 year status
- Lack of research facilities, equipment and ability to sustain them
- Housing for visiting researchers
- Faculty development
- Future Energy Development
- Water Quantity and Quality
- Economic/Workforce Development
Questions?