



8th Annual Tribal Leader/Scholar Forum

**Reno, Nevada
June 26, 2013**

**National Congress of American Indians
Policy Research Center**



ABOUT THE NCAI POLICY RESEARCH CENTER

The Annual Tribal Leader/Scholar Forum

The NCAI Policy Research Center's Annual Tribal Leader Scholar Forum provides an opportunity for researchers, practitioners, community members, and others to present their findings to tribal leaders, policymakers, and tribal members during NCAI's Mid Year Conference. Research presentations focus on areas that have or could have real impacts for tribal communities. The Forum presents tribal leaders with innovative research methods and relevant findings for local and national policymaking. A unique component of this forum is the dialogue between tribal representatives and researchers. These relationships are especially important given that data drives community planning and that the policy environment demands evidence-based justification as part of funding requests and grant applications.

NCAI's Policy Research Center

In winter 2003, NCAI secured seed funding for a national tribal research and policy center that would focus solely on issues facing tribal communities. Developed under an advisory council of tribal leaders, Native scholars, tribal organization heads, regional Indian policy center directors, private sector researchers, and state policymakers, this tribally-driven consortium of existing research bodies and primary researchers is equipped to gather and assess data on conditions and trends in Indian Country, and support and inform the policy development efforts of tribal leaders, tribal organizations, Congress, the Administration, and state governments with objective data and analysis. Through this work, the NCAI Policy Research Center can provide tools necessary to inform public policy debates with meaningful data and assist in shifting the discourse in Native policy from a problem-focused approach to truly proactive, future-thinking strategy development.

The Center develops, coordinates, and disseminates policy-focused research. It applies this body of work to Native policy issues on the horizon of federal, state, and tribal policymaking. The Center operates within the National Congress of American Indians, whose membership's priorities both contribute to the development of the Center's research agenda as well as benefit from the direct dissemination of policy research findings and think tank policy scenarios. It is up to the elected tribal leaders from their respective communities and the national tribal organizations that serve them to apply the research findings, come to consensus on positions where possible, and move their advocacy agenda forward.

PRC Mission and Vision

The mission of the PRC is to:

Provide tribal leaders with the best available knowledge to make strategically proactive policy decisions in a framework of Native wisdom that positively impact the future of Native peoples.

The vision is:

Supporting Indian Country in shaping its own future.

8th Annual Tribal Leader/Scholar Forum

PLANNING FOR CHANGE IN NATIVE COMMUNITIES:
Using Research to Understand Economic, Civil, and
Cultural Transformation

Compiled Abstracts & Presentation Slides

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PRE-MEETING SESSION: Policy Research Center Partner's Meeting

Research on Violence against Indian Women

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The topic of the presentation will be on the recently formed National Indigenous Women's Resource Centers' Research Committee. There were several major driving forces for the need for this committee. First, there is very little research done in this area, especially by Indigenous scholars and researchers. This Committee is comprised of leading Indigenous scholars, researchers and practitioners along with grass roots women and child advocates in Indian country.

Second, is the increasing pressure from federal policy makers and funders to make domestic violence programs and shelters incorporate Evidence Based Practices (EBP) as a way to standardize and thus document standards of care or treatment for victims of domestic violence. The impact of requiring the use of EBP on Indian and tribal domestic violence programs and shelters could be devastating and highly detrimental for a multitude of reasons and result in even fewer resources available to Tribal Nations. Of the 566 federally recognized tribes today, we have less than 35 tribal shelters for women and children.

Finally, there is this quagmire or predicament we find ourselves in as Indigenous people around the issue of data. There is very little data available on our communities with regard to violence, such as rates or numbers of incidents of domestic violence, sexual violence, suicide, homicide, child abuse/neglect, etc. Also, how are violent incidents captured, reported, by who, to who? How do we know what the true picture is of our community? How can we collect, manage and maintain control of our own data? Tribal and Indian domestic violence programs and shelters are often ask to demonstrate need based on numbers or data, that often is just not available. How can the research committee, working with tribal communities address this?

Violence against women in general, and violence against Indian women in particular, represents a far greater range of issues, such as history, jurisdiction, racism, poverty and other socio-economic indicators. This presentation will focus on these key issues and the work that is being done to address them.

This presentation based on the initial goals and objectives of the NIWRC Research Committee are consistent with the forum theme, "Planning for Change in Native Communities: Using

Research to Understand Economic, Civil, and Cultural Transformation.” They consist of the need to:

- Identify data needs for tribal communities;
- Develop strategies for data collection and analysis in tribal communities;
- Assist NIWRC staff in organizing existing data and developing fact sheets;
- Provide valuable insight and expertise regarding NIWRC research information clearinghouse and create repository space on NIWRC’s website to provide useful information to tribes and other agencies, etc.;
- Identify ways in which NIWRC can strengthen tribal communities and build capacity;
- Establish working groups to share research and undertake policy analysis;
- Move policy to practice through the use of evaluation, research and performance measurement that accurately reflects the work in tribal communities to create safety for Indian women and end the violence;
- Review current best practices, promising practices, practice based evidence, traditional or cultural based practices, along with intervention and prevention programs;
- Examine the impact of incorporating Evidence Based Practices (EBP) and Trauma Informed Practices in tribal programs, including cultural adaptation and fidelity issues;
- Explore the impact of violence on children and childhood exposure to violence
- Identify resources for tribal communities such as peer advocacy, or community capacity building
- Engage Indian and tribal domestic violence programs and shelters in community based participatory research
- Identify those areas where further research is needed, and
- Develop a plan of action for implementing these research activities

The movement to end violence against women has always been deeply rooted in social and community change.

NIWRC convened the first Research Roundtable on November 29-30, 2012, in Albuquerque, NM in collaboration with the Center for Native American Health at the University of New Mexico. This round table brought together members of the Indigenous research community, tribal domestic violence program and shelter practitioners and Indian women and child advocates to address the full range of violence against Indian women issues/concerns and develop a plan of action. Part of this presentation will be the work that has been done so far along with the future activities and opportunities.

The NIWRC Research Committee will identify key issues involved such as cultural, procedural, systems analysis, implementation, resources, and workforce solutions that impact the safety and protection of Indian women and children. These identified issues will form the basis for the research agenda for future discussions. Throughout this process tribal programs, women’s advocates, tribal coalitions, tribal leaders and Indian women in the communities will be consulted.

Through a process of community-based participatory research the NIWRC Research Committee will develop tool kits to assist tribal communities to create partnerships with educational and


research institutions to organize, identify, create, collect, analyze and maintain their own data for their community.

The NIWRC Research Committee plans to advance this Indigenous research agenda by working with tribal communities to develop community action projects or local initiatives to build capacity in tribal communities to respond to the violence, or create a community response. This process will build on the strengths of the community and the people in that community to do the work, as opposed to a reliance on outside, often non-Indian entities.

Some of the anticipated policy changes as a result of our work include the following:

- Challenging the use of EBP in tribal domestic violence programs and shelters by advocating for and documenting the significance and effectiveness of “traditional based practices” in working in tribal communities;
- Using our own language around EBP, PTSD, Trauma Informed, Depression, Mental Health, Cognitive Behavioral Therapy, etc.;
- Strengthening our sovereignty as Tribal Nations, by increasing safety for Indian women and children;
- Insuring our right to self-determination through promoting understanding and awareness and incorporating Indigenous values and practices can only stand to prove that our right to self-determine programs and services that best fit the needs of our people is what is best for our Tribal Nations.

At the initial meeting of the NIWRC Research Committee, it was determined that we need to reach out and collaborate with other Indigenous research committees such as, the National Congress of American Indians (NCAI) Policy Research Center, the National Indian Child Welfare Association Research Center, the National Indian Education Association Research Committee, and the Data and Policy Center and the National Indian Health Board Research Center, First Nations Behavioral Health Institute, One Skye and others that may be identified by the group. NIWRC believes that these are valuable alliances and anticipates that all these avenues will work together to compliment and support the respective work.




**NIWRC RESEARCH
ROUNDTABLE ON
VIOLENCE AGAINST
INDIAN WOMEN**

NCAI 8th Annual
Tribal/Leader Scholar Forum
Reno, Nevada
June 24, 2013

National Indigenous Women's Resource Center

- New National Indian Resource Center Addressing Safety for Native Women
- Funded by FVPSA for 2011-2016 grant term
- Serving Indian Nations, Alaska Native Villages, Native Hawaiians and Indian non-profit organizations



"Dedicated to reclaiming the sovereignty and safety of Native women"

National Indigenous Women's Resource Center



NIWRC regional map

NIWRC Program Offerings

- Training and Technical Assistance
 - Regional Trainings, Advocacy Institute, Leadership Institute
 - On-Site Trainings upon request
 - Monthly Webinars on Key Topics
 - Women are Sacred National Conference
- Public Awareness/Resource Material
 - "Advocate" monthly E-Newsletter
 - E-Blasts
 - Restoration Magazine
 - On-Line Library of Resources for download
 - Speakers Bureau
 - Tribal Resource Directory
 - Website Based Community for Peer to Peer Mentoring
- Policy Development
- Research Committee

"IF THE EMOTIONAL, MENTAL, PHYSICAL, AND SPIRITUAL WELL-BEING OF A WOMAN IS INTACT, SO TOO IS THAT OF HER FAMILY, COMMUNITY, AND SOCIETY." INDIGENOUS PROVERB



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Violence Against Indian Women

- 64% of Indian women are victims of domestic violence
- Indian women suffer from violent crime at a rate of three and a half times the national average
- Indian women are stalked far greater than any other racial/ethnic group
- Indian women are murdered 10 times more often than the national average
- Homicide is the 3rd leading cause of death for Indian women
- Of Indian women murdered, 75% were killed by an intimate partner

Sexual Violence

- Indian women are victims of sexual assault at a rate 2.5 times higher than any other racial/ethnic group in the US
- 1 in 3 Indian women will be raped in their lifetime
- Nearly half (48.2%) of all female bi-sexual victims and more than a fourth (28.22%) of heterosexual women experienced their FIRST rape between 11-17 years old
- The majority of women who report sexual violence, regardless of sexual orientation, reported they were assaulted by male perpetrators
- Indian women live their lives in "the dangerous intersections of gender and race."

NIWRC's Research Committee

- Develop research agenda that supports the grassroots movement to end violence against Indian, Alaska Native and Hawaiian women
- Inform national and local research agendas that impact policy & practice on violence against Indian and native women

NIWRC's Research Committee

- Define key research concepts and methods to incorporate indigenous cultural values, beliefs and traditions
- “Knowledge”
- “Data”
- “Evidence”
- “Efficacy”

NIWRC's Research Committee

- Privileging the voices of survivors
- Grounding research methods in local Native communities
- CBPR: involving local Native communities in data-collection, analysis and reporting
- Advocating for policies that enhance the strength and resiliency of Native women and communities

Goals: NIWRC Research Committee

- Creating change through research & evaluation on violence against Native women
- Advancing public policy to account for assets, resiliency, hopes of Native women and communities
- Building tribal capacity to better serve Native women and children survivors of violence by using cultural beliefs and traditions



National Indigenous Women's Resource Center Research Committee

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Strengthening Sovereignty, Working to End Violence Against Indian Women

***From Pictures to Numbers: Conclusions from Three Waves of Data Regarding
Science-related Priorities for Native Community Sustainability in the Pacific
Northwest***

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Societal patterns of consumption and waste have triggered social and environmental concerns in the nation and the global community. At the same time, communities, states, and sectors increasingly have to work together to solve problems as populations overlap, technology advances, and the marketplace globalizes. In the effort to plan a future that is environmentally, socially, and economically sustainable, scientific and Indigenous communities need one another. This presentation describes the process of Vision Mapping that brought scientists and Native American/Alaskan Native/First Nations community members to develop priorities for sustainability that included input scientific and Indigenous perspectives.

This research addresses change in Native communities in two ways. The first is in regard to a national and international community that has specifically called Indigenous communities to aid in the movement toward, what is commonly referred to as, sustainability and sustainability science. The second anticipates the future economic and tribally relevant professions Native youth should consider pursuing for the benefit of themselves and their communities.

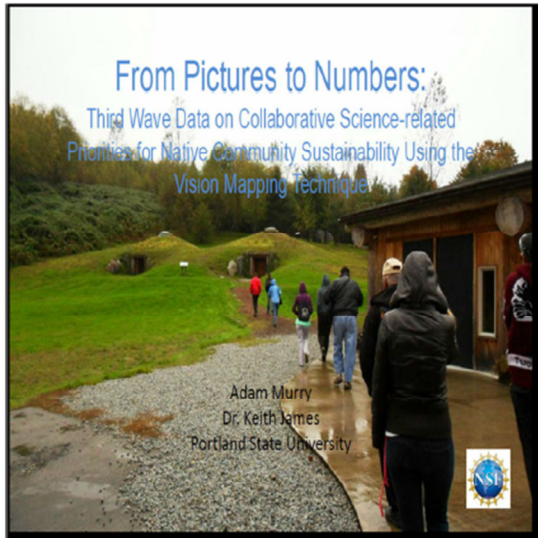
This presentation considers the latest findings from *Indigenous Sustainability Workshop*-based breakout groups that brought government, university, and private sector scientists and science professionals together with Native American, Alaskan Native, and First Nations tribal leaders and community members held in 2008-2010. Focus groups employed the Vision Mapping technique (Murry, James, & Drown, 2013) that was designed in the context of Indigenous-scientists interactions and with the intent of bridging culturally-based communication, linguistic, and educational differences between participants. Findings from the first two workshops were published in the *American Indian Culture and Research Journal*, Vol 37, no. 3 (2013). This presentation reviews past findings along with new data from Canada and then summarizes quantified priorities for Native community sustainable development. Results show that locality substantially influences the type of sustainable development priorities that breakout groups list and emphasize. However, six priorities were prioritized across all three workshop locations (in order of emphasis); recognize and protect culture, education, between-community collaboration, preservation of traditional skills, natural resources protection, and health and well-being.

There are many practical implications based on the sustainability priorities identified through this research program. On the individual and family level, Native families should encourage their children to pursue education and careers in science-related fields that have not only been shown to be promising fiscally but that relate to their community-identified needs. On the community or local level, this research makes explicit the necessity of conducting local needs-assessments for

sustainable development and recognizing the diversity amongst tribal nations even in regard to development priorities. On the state and national level, the six overarching needs across Native communities in the Pacific Northwest suggest that policy and intergenerational investment should prioritize the maintenance of traditional culture and skills, the protection natural resources and access to them, education of its community members, health and wellness promotion, and collaboration between communities.

This series of data collections revealed six priorities that span geographical, rural, and urban locations for Indigenous nations in the Pacific Northwest. These priorities might be summarized as the maintenance of traditional culture and skills, the protection natural resources and access to them, education of its community members, health and wellness promotion, and collaboration between communities. Although it would be ideal if similar data collections were to take place across a wider range of locations, these sustainable-development priorities inform policy priorities in the amount that they pertain to economic, social, and environmental legislation on behalf of Native communities. Some of the possible policy suggestions stemming from this data on Native community sustainability priorities are outlined below:

1. In general, the priorities identified in this study serve as benchmarks for policy decisions and advocacy in so far as policy is shaped by the goals of social, economic, and environmentally sustainable Native community development. Priorities might be viewed as the processes and valued outcomes Native communities need the most investment in or the least concessions of.
2. For the maintenance of traditional 1) culture and 2) skills, educational policy should attempt to include informal, familial learning as a credible source of our children's education. Tribal holidays should be protected in local school and work institutions.
3. For the education of community members, policy could take two directions. The first involves an increased emphasis on the type of schooling available in academic settings. This might include pushing for institutional acceptance of *culturally responsive schooling* (Castagno & Brayboy, 2008), which is argued to increase the student engagement necessary to keep our future Native leaders, researchers, and innovators from leaving school. The second should help maintain *access* to quality education for Native students. Establishing pathways of financial assistance, either for the individual students or the schools that teach them, can remove a substantial obstacle that still challenges this generation.
4. Policy regarding the protection of and continued access to natural resources is straightforward. Without access to natural resources, the cultures and economies of Native communities have no independent source. Policy regarding protection of natural resources works in concert with other priorities, such as health and wellness, maintenance of culture and traditional skills, and many of the other priorities only found within location.
5. Policy for health and wellness could take two directions. The first is policy that ensures Native communities have continued access to government programs (e.g. I.H.S., HUDD), particularly those negotiated through treaty. The second is to advance policy that rewards those who offer services to Indigenous communities through a process that respects the privacy, culture, and property of the community members.



Overview

- Context
 - Sustainability science
 - Indigenous contributions and benefits
 - Indigenous sustainability workshops
 - The Vision Mapping technique
 - The problem of quantification
- Method
 - Document & Q-sort
 - Ratings of presence
 - Frequency
- Results
- Discussion

Sustainability Science

“The first message we want to convey is that the present pattern of development cannot continue and must be changed” (Brutland, 1987, p.2)

- Unsustainable social conditions (Freudenburg, 2005)
- Consumption and waste physically unsustainable (Fowler & Hobbs, 2003)

A sustainable society meets the needs of present generations without compromising the ability of future generations to meet their own needs.

“A centerpiece of any strategy to achieve sustainability must be the accelerated development of (individual and national) capacities in science [and] engineering” (World’s Scientific Academies, 2000, section 2.A, parentheses added)

Indigenous Contributions & Benefits

“Indigenous people and their communities and other local communities have a vital role in environmental management and development because of their knowledge and traditional practices. States should recognize and duly support their identity, culture and interests and enable their effective participation in the achievement of sustainable development.” (UN General Assembly, 1992, principle 22).

Benefits to science
 Traditional ecological knowledge (TEK) – (Cajete, 2000, Berkes, 1999)
 Native scientists – (Peat, 2002; Miller, Sarewitz, & Light, 2008)

Benefits to Native communities
 Development of infrastructure – (James, 2000, 2006)
 Vulnerable populations – (Intergovernmental Panel on Climate Change, 2007; UNEP, 2012)

A Problematic Integration

- Communication barriers, conceptual barriers, and differences in political agendas (Ellis, 2005)
- Native Americans' experiences with science and technology
 - Historical and current (Hodges, 2012; James, Hiza, Hall, & Doppelt, 2008; Lewis, 1995)
- Cultural dissonance
 - Cultural values (Aikenhead & Ogawa, 2005; Cristancho & Vining, 2004)
- Aversion to Science
 - Underrepresentation in STEM (James, 2000; Lewis, Menzies, Najera & Page, 2009)
 - Attitudes toward science (Murry, 2013)

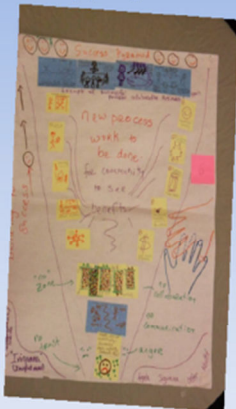
Indigenous Sustainability Workshops

- PNWNCSP
 - Indigenous sustainability workshops
 - Fairbanks, AK (2008)
 - Portland, OR (2009)
 - Chilliwack, BC, Canada (2010)
 - Scientists together with Native American, Alaskan Native, and First Nations tribal leaders and community members
 - *“How can mainstream science and Native communities work together to promote sustainable Native communities?”*

Vision Mapping

Vision Mapping technique
(Murry, James, & Drown, 2013)

- Mixed breakout groups
- Visual, written, & symbolic representations
 - Culturally-based communication differences
 - Generational
 - Educational
 - Language
- Engagement



Vision Mapping

The problem:

How can we analyze this data beyond simply reporting what we see?

What were the important themes across groups?


What answer did we have to *“How can mainstream science and native communities work together to promote sustainable Native communities?”*





Method

- Documentation & Q-sort
 - Exhaustive inventory
 - Emergent themes
- Rating of presence
 - Three raters (at least one Native American)
 - Likert scale (0 not present at all – 6 strongly present)
 - Theme emphasis within groups
- Frequency of presence
 - Number of times a theme appeared across posters (Average rating > 0)
 - Theme importance across groups

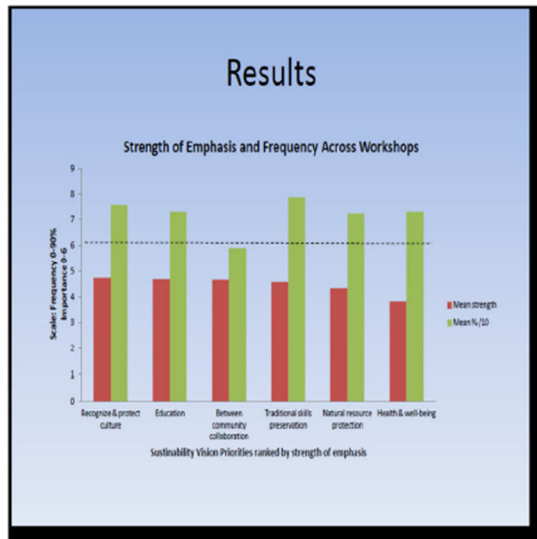
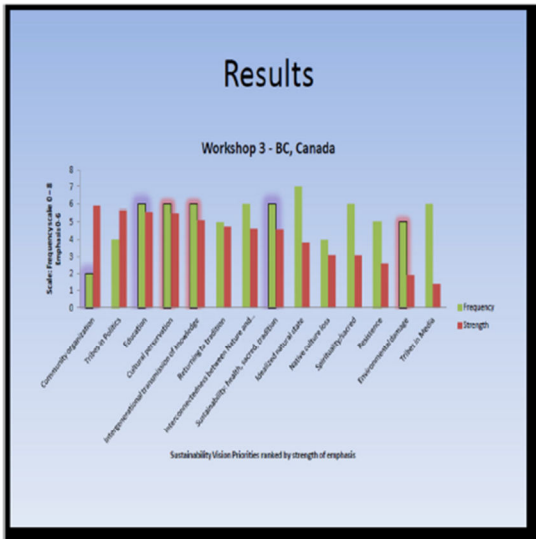
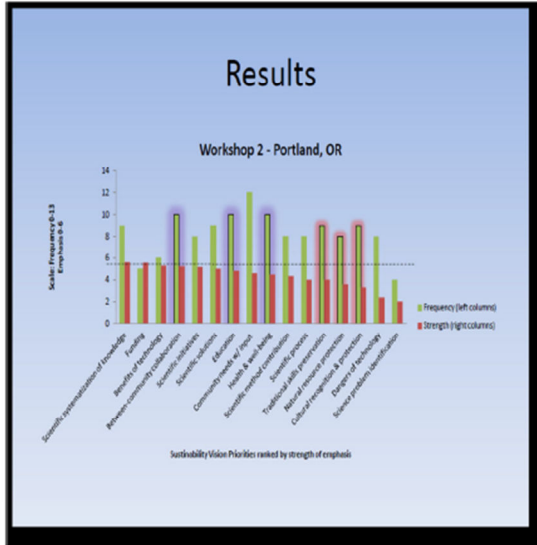
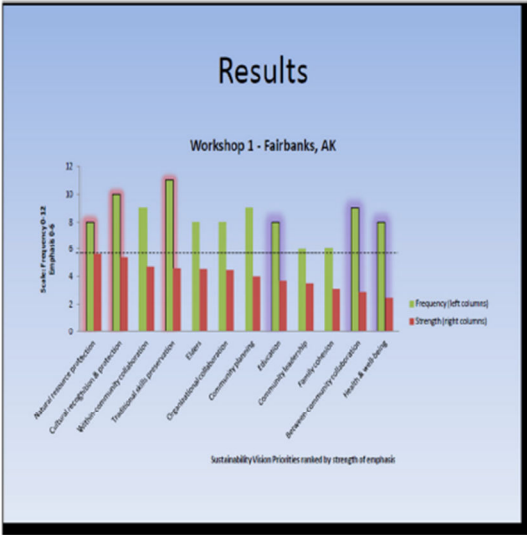


Results

- Qualitative themes
 - 12 themes 1st workshop (Fairbanks): Natural focus
 - Natural resources, elders, recognition and protection of culture, maintenance of traditional skills, within-community collaboration, between-community collaboration, family cohesion, leadership, planning, education, health, organizations.
 - 16 themes 2nd workshop (Portland): Science focus
 - Teamwork/collaboration, education, recognition and protection of culture, community needs, natural resources, traditional skills, dangers of technology, benefits of technology, health, science attributes, and funding.
 - 14 themes 3rd workshop (Chiliwack): Political focus
 - Education, cultural preservation, intergeneration transfer of knowledge, tribes in politics, health, interconnectedness, returning to tradition, community organization, idealized natural state, Native culture loss, spirituality, environmental damage, resistance, tribes in media.

Results

- Quantitative ratings
 - Inter-rater agreement
 - Workshop 1 (Fairbanks): $\alpha = .84$
 - Workshop 2 (Portland): $\alpha = .73$
 - Workshop 3 (Chiliwack): $\alpha = .90$
 - Inter-rater agreement post-rWG's
 - Workshop 1 (Fairbanks): $\alpha = .95$
 - Workshop 2 (Portland): $\alpha = .93$
 - Workshop 3 (Chiliwack): $\alpha = .97$



WHO COUNTS? (and why it matters) Demographic Changes, Data Quality Challenges, and Tribal Control of Data

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The panelists will present information and provide analysis about the changes in the census self-identification categories in the 2000 and subsequent decennial census as well as errors in the American Community Survey (ACS) data of American Indian and Alaska Native populations (AI/AN) using specific examples from Arizona and across the U.S. In addition, the panel will discuss a range of significant policy implications of this data. The panel will conclude with a discussion of possible steps for tribal governments to repatriate census and ACS data as well as to expand tribal capacity to gather and analyze data within their own communities. The panel will use a 'real time' digital feedback system in which members of the audience can respond to questions using their cell phones, or on paper (e.g., poll everywhere). The feedback data is immediately analyzed and displayed on a screen for everyone to see (the data is aggregated and analyzed so no individual response is visible). Audience participation will help shape on-going research and outreach on the census and ACS as well as assist tribal leaders in identifying their data needs.


The proposed panel directly addresses the theme of change in Native communities by analyzing census and ACS data that seem to imply significant changes in the characteristics of the American Indian and Alaska Native population. The panel will analyze whether the changes are accurate and how they can be usefully interpreted. The panel presentation and discussion will cover information that is critical to tribal planning and tribal governments. It is very difficult for tribal leaders to set goals and measure progress towards those goals without accurate data.

The American Indian Policy Institute is coordinating a research team of tribal governance experts as well as census researchers (in the ASU Center for Population Dynamics) to analyze AI/AN census and ACS data and to conduct accurate trend analyses that are meaningful to tribal governments. The research team has identified serious discrepancies between the census and ACS data as well as ACS data from the 2000 to the 2010 census (e.g., unemployment) that will be presented and discussed during the panel. In addition, the panel will analyze the policy implications of the change in self-identification categories in the 2000 census. The panel will discuss research strategies and initial results from hypothesis-testing for identifying and understanding actual trends in Indian Country from before and after the 2000 census.

Results from the U.S. Census and the American Community Survey are used to determine voting districts as well as allocation of federal and state program dollars. The presentation will highlight and increase awareness of the on-going challenges with the use of census and ACS

data. The presentation and discussion will provide information and tools for tribal nations to access and analyze the data from their own communities as well as steps to build capacity for tribal governments to gather and analyze their own data.

Attendance at this panel as well as feedback participation will provide tribal leaders with an opportunity to return home and lead discussions about the implications of changes in the census self-reporting categories and challenges with the ACS data. It is anticipated that these discussions throughout Indian Country will increase the ability of tribal governments to conduct their own analyses of the census/ACS data and to gather their own population data. This information is critical for tribal governments to set goals and measure progress toward those goals. In addition, the information empowers tribal leaders to analyze and potentially challenge census and ACS data that may adversely impact tribal funding or other tribal goals.



2013 NCAI Mid Year Conference
June 28, 2013
Reno, Nevada

Who Counts? And Why it Matters

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Tribally-Driven





Trans-disciplinary





Tribal Indicators Research Initiative

- Extract AI/AN data from U.S. Census and American Community Survey (ACS) to assist tribes in making effective use of the data.
- Provide innovative analysis of AI/AN census and ACS data in a partnership with tribes, including:
 - Statistical and conceptual data errors
 - Policy implications of census self-identification
- Project partners include: American Indian Studies, Center for Population Dynamics, ITCA, NCAI PRC

The ACS: Who Cares & Why

**Tribal Leaders
Tribal Advocates
Tribal Researchers**

All Need to Care

It's Basic

#s = \$s

#s = \$s

- **Formula Funded Programs**
- **Grant Applications**
- **Presenting a Profile of the Tribal Community**

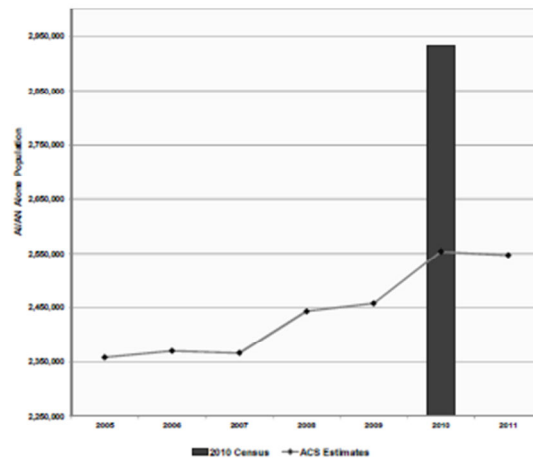
**ACS: Not Your
Old Time Census**

- **Different Sample Size**
- **Different Timing**
- **Almost No Outreach**

Looking behind the Numbers

Is the ACS Accurately Measuring the Entire AI/AN Alone Population?

AI/AN Alone Population



The ACS appears to be undercounting the AI/AN alone population in many local areas

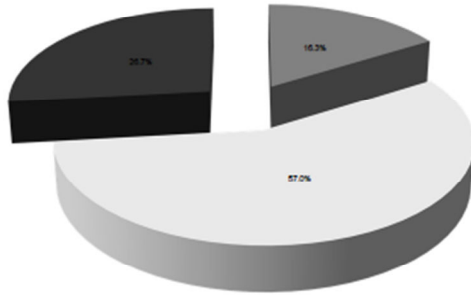
Apparent undercounts in 30% of the larger reservation areas

- Missing 61% in the Bronx
- Missing 39% in Dallas Co, TX
- Missing 32% in LA County, CA

Potential Sources of Error in ACS Data

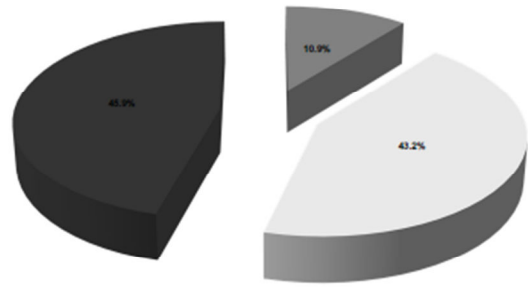
- Sampling error
- Non-sampling error

**Distribution of Large Reservations
by Amount of Sampling Error: Unemployed**



Coefficient of Variation
■ 0% to 15.0% ■ 15.1% to 30% ■ Over 30%

**Distribution of Large Counties
by Amount of Sampling Error: Poverty**



Coefficient of Variation
■ 0% to 15.0% ■ 15.1% to 30% ■ Over 30%

Non-Sampling Error

The number just isn't right!

Some Lessons

**Further research and analysis
needed, by users, by researchers
and by the Census Bureau**

**Who Counts?
And Why it Matters**

**Who Identifies who is and
who isn't an American Indian?**

- The U.S. Census Bureau?
- The Indian Health Service?
- The Bureau of Indian Affairs?
 - The Courts?

Questions?

Undercounting & Underrepresentation in American Indian Populations

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Gathering data on Native American populations has not always provided complete or accurate results. As the sample sizes of American Indians in larger-scaled projects are usually small, the validity of the data becomes questionable due to the high margin of error. For example, when reporting data specific to American Indian reservations in South Dakota, the American Community Survey provides data with margins of error as large as 25%.

The data collection efforts from the 2012 Quality of Life Survey conducted by the Sociology and Rural Studies Department at South Dakota State University attempted to be truly representative of the various segments of South Dakota's population. With nine reservations located in South Dakota, American Indians were an unavoidable demographic for the study.

A total of 6,000 surveys were sent based on randomly selected mailing addresses throughout South Dakota with a two dollar bill incentive. Rural counties and American Indian majority counties were oversampled with 2,000 surveys mailed to rural counties and 2,000 surveys mailed to American Indian majority counties. Despite the effort to collect more accurate data from the American Indian population, the population witnessed the same problems of underrepresentation.

After the distribution of the survey for counties in which a reservation resided, the sample was specified from county to zip code to more readily identify American Indian majority populations. In counties identified as being composed primarily of American Indians, the towns within the counties that had a large concentration of American Indians had a smaller likelihood of selection for the survey than did the white majority populated towns. Rather, even as counties could be identified as having an American Indian majority population, towns within these counties may have a white majority population.

Undercounting & Underrepresentation in American Indian Populations

Mary Killshundred
South Dakota Census Data Center
South Dakota State University

Instruments under discussion

- American Community Survey (ACS): provides annual (or 3 to 5 year) *profiles* of a sample of the US population such as: income, disability, employment and education.
- Quality of Life Survey: Measured levels of trust and over-all satisfaction within South Dakota communities. Used Census and ACS data to identify populations to sample

Issues with the American Community Survey

- Data for smaller geographic areas (especially those under 20,000 as well as for all ZIP codes, even those with populations over 20,000), are only released as 5-year “period estimates”.
- Margins of error not necessarily a big issue in urban areas but become a significant issue in rural areas.

How does Quality of Life Survey relate?

- Provide a check to the American Community Survey
- Despite efforts to avoid undercounting of American Indians, instrument still showed same problems as American Community Survey
- Identified American Indian majority populations through county level data, but the narrowing of identification to **zip code level data** showed American Indians still under counted

Potential reasons for undercount

- Household sizes for American Indian population may be higher than those reported in the Census with multiple families sharing a residence.
 - Interchangeable use of “household” and “family” in method
- Several American Indian households may share postal addresses.
 - *Common assumption: American Indians refuse to participate in counting attempts due to distrust.*
- The Post Office may follow regulations which restrict the number of people or households receiving mail at one location.

The sampling method of the Quality of Life Survey

- 6000 total surveys sent throughout South Dakota
 - 2,000 surveys sent to Rural Areas
 - 2,000 surveys sent to American Indian Majority counties:
 - Buffalo
 - Dewey
 - Shannon
 - Todd
 - Mellette

Observations in the sampling method of the Quality of Life Survey

- Survey's were sent at a higher frequency to counties identified as American Indian majority.
- Counties identified as American Indian contained zip codes with white majority populations which tended to receive more surveys than a zip code within the same county with an American Indian Population.
- In some cases, the white majority population had a much lower population, but still received more surveys.

Sampling Buffalo County



- Total population: 1,912
- American Indian Population: 1,607 or **84% of the total population**
- Average Household Size: 3.59
- Median Age: 25

52 Randomly Selected Mailing Addresses in Buffalo County

Fort Thompson Zip Code 57399

- 14 addresses selected for a population of 1,525.
- 96.8% of Fort Thompson residents are American Indian.
- Fort Thompson Residents had a **0.9%** chance of selection in a random process.

Gann Valley Zip Code 57431

- 38 addresses selected for a population of 151.
- 92.9% of Gann Valley residents are white.
- Gann Valley Residents had a **25.2%** chance of selection in a random process.

Sampling Jackson County



- Total population: 3,031
- American Indian Population: 1,575 or **52% of the total population**
- Average Household Size: 3
- Median Age: 31.5

144 Randomly Selected Mailing Addresses In Jackson County

Wanblee Zip Code 57577

- 24 addresses selected for a population of 1,211.
- 89.8% of Wanblee residents are American Indian.
- Wanblee residents had a **1.9%** chance of selection in a random process

Kadoka Zip Code 57543

- 23 addresses selected for a population of 870.
- 81.6% of Kadoka residents are white.
- Kadoka residents had a **2.6%** chance of selection in a random process

Sampling Dewey County



- Total population: 5,301
- American Indian Population: 3,907 or **74.9% of the total population**
- Average Household Size: 3.05
- Median Age: 30

193 Randomly Selected Mailing Addresses In Dewey County

Eagle Butte Zip Code 57625

- 12 addresses selected for a population of 4,230.
- 87.9 % of Eagle Butte residents are American Indian.
- Eagle Butte residents had a **0.2%** chance of selection in a random process

Timber Lake Zip Code 57656

- 44 addresses selected for a population of 723.
- 57.5% of Timber Lake residents are white.
- Timberlake residents had a **6.1%** chance of selection in a random process

Sampling Mellette County



- Total Population: 2,048
- American Indian Population: 1,108 or **54.1% of the total population**
- Average Household Size: 2.88
- Median Age: 34.2

119 Randomly Selected Mailing Addresses in Mellette County

Norris 57560

- 24 addresses selected for a population of 436.
- 79.6% of Norris residents are American Indian.
- Norris residents had a **20.2%** chance of selection in a random process

Wood 57585

- 39 addresses selected for a population of 226.
- 71.7% of Wood residents are White.
- Wood residents had a **32.8%** chance of selection in a random process

Still seeing the same problems

- American Community Survey distributes same number of survey even as household population grows so the margin of error is high.
- The Quality of Life Survey was distributed based on the sampling frame established by the Census and American Community Survey.
 - Even use of oversampling provided undercount

Going forward

- Larger household in which more people are getting more mail in one location
- Multiple households sharing mailing addresses
- Post Office regulations limit the number of people receiving mail at single location
- Redefine or refine the use of “household” as unit of analysis

People cannot answer a survey they did not receive

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GENERAL ASSEMBLY: Building Native Business, Stewarding Tribal Land, Nourishing Culture

Measuring and Marking the Impact of an Indigenous Community Development Fund

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Established in 2000 as a Native community development financial institution (CDFI), Four Bands Community Fund (FBCF) works to transform and build people's capacity to navigate the changing economy by fostering entrepreneurship, small business development, and financial literacy on the Cheyenne River Sioux Reservation. FBCF, a leader in its work, has partnered with University of Arizona Native Nations Institute to evaluate the effectiveness of its products and services in preparing Native entrepreneurs; to research the methods and impact of FBCF's community outreach; and to produce new information on how the Cheyenne River Sioux tribal government strengthens the environment for FBCF's work. This presentation will focus on what other Native nations can learn from research on FBCF about local economic transformation and about matching tribal efforts to regional economic change.

One key lesson concerns the way FBCF worked with its partners in the South Dakota Indian Business Alliance (SDIBA, an affinity group composed of non-profit organizations, political leaders, banks and government entities) to develop government policy recommendations in four key action areas—and then worked with the Cheyenne River Sioux Tribe to implement those priorities. This presentation will examine those key policy areas, show how they have helped FBCF work with the tribal government on institution building and human capital development, and indicate the ways these changes might increase Native entrepreneurs' power to participate in transformative economic change.

This research considers four different aspects of FBCF's work—providing services and products (particularly the business coaching program) to clients, fostering business formation on Cheyenne River, providing community outreach, and engaging with the tribal government and institutions.

By the end of 2011, Four Bands had served almost 4,000 clients through multiple programs. It has loaned a total of \$3.3 million to tribal citizens through approximately 300 micro, small business, and credit-builder loans. To support this lending, FBCF provides one-on-one training for prospective and current business owners. Five years of longitudinal data from these clients are the core data for evaluation research. One of the emerging findings is the need for clients to engage longer with FBCF. Most of the clients do not have much education past a high school diploma or lack experience with business and financial management, and longer engagement—



while more expensive in terms of time, staff, and monetary investment—appears to be associated with better outcomes.

In terms of business formation, the research shows that since 2000 FBCF's lending products have contributed to the establishment or expansion of over 100 Native-owned businesses and the creation or retention of over 400 jobs on the Cheyenne River Indian Reservation. While this job creation has not eradicated poverty, it has started to change community members' perspectives. There appears to be an increased sense that Native entrepreneurs can stay, work, and make a living in their home communities.

Realizing that community outreach was a critical method for forwarding its goals, FBCF has worked to partner with citizens, organizations, and governments on the local, state, federal, and tribal levels. These partnerships have fostered a "community forum," or ongoing set of opportunities for sharing ideas and experiences and planning for change. One local example is FBCF's unique partnership with five reservation schools to expose over 2,000 children to financial literacy and entrepreneurship. Another example is FBCF's participation in the South Dakota Indian Business Alliance, a group that not only helped hone its members' policy priorities (as noted above) but also successfully advocated for installation of the first-ever Secretary of Tribal Relations, a member of the South Dakota Governor's cabinet. This position provides a possible platform for transforming economic development by eliminating state-level institutional barriers affecting Native entrepreneurs.


Finally, the research shows evidence of the effectiveness of Four Bands engagement with the tribal government and its institutions. Governance initiatives, such as the effort to strengthen the tribal courts, have been undertaken to decrease institutional barriers to entrepreneurship development. In 2012, the Cheyenne River Sioux Tribal Council mandated that all its employees take personal finance training, and it partnered with Four Bands to train 293 tribal employees (this is over 75 percent of the overall tribal government's employees). These actions demonstrate how the tribal government is improving human capital through policy, which assists in improving the larger infrastructure of the Native nation.

Detailed evidence from over a decade of work by FBCF—in collaboration with the Cheyenne River Sioux Nation and other partners—will provide tribal leaders with a clear view of the importance of basic human capital in the transformation of a reservation's workforce and economy. In particular, the research points to the ways that combined nonprofit and public sector efforts to foster financial literacy, entrepreneurship, and small business development build community capacity to navigate—and fit into—the changing economy. Most practically, the presentation will discuss how this work might be replicated in other Native nations. In particular it will address the question of how other tribal communities might reproduce a "holistic" CDFI—one which not only offers multiple services to its clients, but also views the community as a whole, businesses, the education sector, other civic organizations, and tribal government as clients/partners in the work. It also will address four policy areas for tribal governments interested in replication (governance, infrastructure, finance, and resources) and provide specific examples of policies in these priority areas that tribes can enact now to prepare the ground for change.






MEASURING AND MARKING THE IMPACT OF AN INDIGENOUS COMMUNITY DEVELOPMENT FUND

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Lakota Mowrer, MSW (Cheyenne River Sioux)
Four Bands Community Fund
National Congress for American Indians Mid-Year
Conference
June 26, 2013

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OVERVIEW




Four Bands Community Fund Findings and Implications from the research and evaluation of FBCF's success:

- Business Formation – evidence of creating and retaining jobs
- Tribal Government Engagement – evidence of creating policies and partnerships

Now What?





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FOUR BANDS COMMUNITY FUND

- Founded in 2000 as a non-profit
- Located on the Cheyenne River Sioux Reservation, South Dakota, which is comprised of two of the poorest counties in the United States
- Native Community Development Financial Institution (CDFI) – U.S. Treasury certified
 - provides financial products and services in underserved Native communities
- Served 4,000 clients through services such as loans, financial literacy education, and businesses coaching

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CHEYENNE RIVER SIOUX RESERVATION




● Tribal Headquarters (Eagle Butte)


www.sdtribalrelations.com




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FINDINGS & IMPLICATIONS: BUSINESS FORMATION






Business Formation and Growth

- 176 native owned business started
- Business development classes are a factor in starting a new business
- Technical assistance is a factor for businesses surviving their first year

Jobs Created


- Over 400 total jobs created
- Majority of the jobs were created on the reservation
- Conducted market feasibility studies to assess the potential of more job creation

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BUSINESS FORMATION AND DATA COLLECTION







- Collects data such as demographics, economic factors, and utilization of CDFI services.
- Holds the organization accountable to the community.
- Use data for tribal and state economic plans to improve regulations such as streamlining the process for a business license.





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IMPLICATIONS: TRIBAL GOVERNMENT ENGAGEMENT






These government policies and actions seem to be structuring a more positive environment for Four Bands:


- Implement a Uniform Commercial Code and usury laws
- Buy Local policy for tribal government, enterprises, businesses, and residents
- Conduct mandatory personal finance training for tribal government staff
- Tribal government uses Four Bands' financial services

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NOW WHAT?





Research & analysis suggest that Four Bands strategy, especially as it combines with complementary tribal government policy is effective. So now what?

GOVERNANCE



- *Enhancing strong partnerships between tribal, state, and federal agencies to remove barriers effecting business in Indian Country*
- Ex. Adopting a formal tribal policy to support citizen entrepreneurship

INFRASTRUCTURE

- *Identify ways to create and leverage existing resources for infrastructure development*
- Ex. Create "Reservation Maps" and reports that highlight economic development in the private and public sector to feature on user friendly government and non-profit websites and literature

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NOW WHAT?

FINANCE

- Expand debt and equity resources available to Native CDFIs for ongoing community investment
- Ex. Share best practices during public events and on websites to demonstrate the value of investment in Native entrepreneurs

RESOURCES

- Support collaborative resource development and connect Native entrepreneurs to new and existing resource networks
- Ex. Utilize best practices to implement K-12 entrepreneurial education to promote citizen entrepreneurship as a job option



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RESEARCH AND EVALUATION

A holistic approach for Native CDFIs allows for more successful ways to build human and institution capacity. Tribal governments also play a crucial role in strategically building this capacity in a changing economy. *But measuring and marking the economic impact of these efforts can only be done through data collection, research, and analysis.*



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QUESTIONS & THANK YOU



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RESOURCES

Indigenous Governance Database:
nidatabase.org/db/
 Provides educational and informational resources about topics such as nation building, governance, and sustainable economic development in Indigenous country. Developed by the Native Nations Institute for Leadership, Management, and Policy at The University of Arizona with support from the Bush Foundation and Morris K. Udall and Steward L. Udall Foundation

South Dakota Indian Business Alliance:
www.sdibaonline.org
 Provides resources and events for entrepreneurs and tribal leaders. Advocates policy changes to assist in growing citizen entrepreneurship.



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RESOURCES



Native CDFI Network:

<http://nativecdfi.net>

Plays a vital role in strengthening the Native CDFI industry, and informing policy that is supportive of Native economic development strategies.

The Great Plains Native Asset Building Coalition:

<http://greatplainsnativeassetbuilding.org/>

A group of organizations that serve Native Americans in the Great Plains region by providing loan capital and customized assistance to expand economic development and the creation of wealth and asset development in Indian Country.



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Establishing a Creative Economy: Art as an Economic Engine in Tribal Communities

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Establishing a Creative Economy: Art as an Economic Engine in Tribal Communities is based on research collected from the *American Indian Creative Economy Market Study Project*, a survey that was undertaken in Fall of 2011 by First Peoples Fund, Artspace, Dr. Kathleen Sherman, and Colorado State University graduate students. The survey examined the household economics, infrastructural needs and social networks of Native artists, providing a tool to define the role of Native artists within reservation economies in the Great Plains region, evaluate the effectiveness of support programs currently available for Native artists, identify challenges faced by Native artists and opportunities to better support them, and make the case for art as a driver of the economy, not only on Lakota reservations, but in rural and urban Native communities across the country.

A standard survey instrument, combining qualitative and quantitative questions, was used as the basis for interviewing Native emerging artists about their experiences, and was conducted in person, by phone, and online. A slightly modified version of the same survey instrument was then used to interview mid-career level Native artists participating in First Peoples Fund's Artist in Business Leadership and Cultural Capital programs. CSU administered the survey to 143 artists: 102 emerging artists from the South Dakota's Pine Ridge and Cheyenne River Reservations and 41 established artists from FPF's programs. Emerging artists were selected through a snowball sampling technique, primarily from the Pine Ridge Reservation, with several respondents from the Cheyenne River Reservation and the Rapid City region in Western South Dakota.

This project offered the first of its kind evidence regarding the need and potential for growing economies and creating sustainable and vibrant Native communities through art. The contrast between the responses of the emerging artists and the established artists highlights the particular experiential, infrastructural, and social networking characteristics that allow Native artists to expand their own economic potential and their personal impact on their reservation community and economy. *The results of the study provide an important glimpse into a vibrant and culturally significant Native arts community with the power to transform reservation economies.*

Native Arts Economy Today

An estimated 30 percent of Native peoples are practicing or potential artists. On the Pine Ridge Reservation in South Dakota, for example, 51 percent of Native households depend on home-based enterprises for cash income and 79 percent of those home-based enterprises consist of some form of traditional arts.¹ Yet most artists on these reservations live below the poverty level and lack the necessary arts-specific business skills and training to operate successful Indian art ventures.

A number of academic studies (e.g., Pickering Sherman, Longitudinal Study, 2008) demonstrate a vibrant, dynamic, and culturally embedded household economy that combines market-based sales with barter and trade, self-provisioning, and support to and from extended families. Many emerging Native artists and other culture bearers are involved in the informal sector economy primarily because they lack the resources and comprehensive understanding of the distribution channels and networks for their art. The missing links needed, but not readily available, for most households to transform their market-based activities into greater self-sufficiency for themselves and their families include: Access to capital, financial education, increased knowledge of the distribution networks that support artists, access to markets and professional development training for artists.

Native Arts Economy

Art is deeply rooted in Native communities. An estimated 30 percent of Native peoples are practicing or potential artists and most live below the poverty line. Fifty-one percent of Native households depend on home-based enterprises for cash income, and 79 percent of those home-based enterprises consist of some form of traditional arts.

Direct support for Native artists increases their economic success. Of artists who have participated in FPF fellowship programs, only 7.5 percent report household income of less than \$10,000, as compared to 61 percent of emerging artists reporting household income below \$10,000.

Native artists learn more effectively through informal networks (peer- and family-based training) than formal networks (institutional training). A challenge lies in reaching artists on reservations in a way that combines the benefits of both informal and formal networks. The most likely solution is an Arts Lab, where artists can obtain access to training, mentoring, materials used in the creation of arts, and physical and electronic marketplaces.

In South Dakota, the market economies on reservations are marginal and underdeveloped, requiring a creative integration of traditional economic practices and modern global marketing to generate culturally appropriate alternatives for building assets and creating wealth. A very small, though growing, number of privately owned formal businesses operates on this First Peoples Fund Planning for Change in Native Communities Proposal March 1, 2013 3

reservations. The vast majority of private enterprise that operates on reservations, and the sector with the greatest potential for dramatic growth, is informal, home-based businesses, many of which are focused on traditional arts. A better understanding of the role of these artist households in the reservation and regional economy, and the forms of support that might increase their economic impact will provide guidance for more effective community and economic development practices and will illuminate opportunities for growth. Artist entrepreneurs can offer a path out of poverty through innovative and entrepreneurial thinking, cultural healing, greater economic stability, and strong families and communities.

Understanding Cultural Assets

To an outsider with limited or no knowledge of modern day Native American societies, the perceptions of most reservations in America are that they are desolate places of high poverty, void of any real opportunities for growth or success. However, a deeper look into these communities reveals a vibrant culture and tight knit “tiospayes” (extended families), both of which define Native people much more than the poverty that exists at the surface. The beauty of the culture is present every day and has endured for generations, despite all attempts of assimilation. Understanding and respecting these cultural assets is critical to any economic development approach, but most especially efforts designed to build the capacity of Native artists.

Cultural Assets as a Path Out of Poverty

Emerging Native artist entrepreneurs and those artists who are culture bearers offer a path out of poverty through the very practice and teaching of tradition-based art forms. When targeted support is provided to Native artists, increased economic success follows. For support to be effective, it must be:

1. Culturally appropriate

Art is embedded in Lakota society. When asked whether or not there was an art community on Pine Ridge, several artists suggested a deep connection between art and Lakota culture. According to a respondent from Kyle, “The entire reservation is an art community. It is informal – meeting with each other. There are no set dates or times. We exchange ideas, barter. It spreads through word of mouth.” To these artists, creating art is a natural extension of being Lakota. As such, creating art affords great opportunity to grasp a unique and culturally appropriate asset and turn it into a meaningful way to grow the reservation economy. It is a homegrown solution.

2. Reflective of how households allocate time

Home-based business is a significant component of the Native economy on reservations and art is the primary home-based business. Art is not merely an activity, but a job for Native artists – those who are struggling and those who have found success. Both groups spend a significant amount of time engaged in art activities – creating, marketing, traveling and selling. Despite the fact that selling art on the reservation is highly seasonal, 74 percent of emerging artists and 90 percent of First Peoples Fund’s Fellows sell their work year-round. Art is a significant means of earning a living, and artists are committed to selling their work.

3. Mindful of Lakota family structures

Creating art is a family enterprise. Among all emerging artists surveyed, 26 percent report four or five family members involved in art. One quilter from Porcupine says selling from home is comfortable because “all my supplies and materials are there, as well as my family. We all work together.” Forty-five percent of emerging artists sell from their home, with individuals (buyers implies “wholesalers” which is not 45%) contacting them directly. Sometimes artist families divide tasks; women create the artwork and men sell it. When asked if they are likely to travel further (more than 100 miles) to sell their work, men are slightly more inclined to so than females (35 percent versus 25 percent).

What Native Artists Need: Given the remote and vast landscapes most Native artists live and work in, access to resources can be a significant problem. To be effective in helping Native artists create and sell their art, support must give them:

1. Access to markets

Physical: Artists generally lack access to the physical markets to sell their work. Most emerging artists living within reservation economies (Pine Ridge and Cheyenne River) sell door to door where buying power is very limited, or travel to regional and national markets that provide access to buyers able to pay for the real value of art. However, artists must have enough economic stability, including sufficient income, inventory, and access to credit, to effectively reach outside markets.

Only half of emerging artists have the resources to travel to sell their work, and the average travel distance is only 24 miles. Artists with an annual income above \$25,000 sell much farther from their home (53 percent sell more than 100 miles away); only 30 percent of emerging artists sell more than 100 miles from their home. This suggests that increasing revenues can offset some of the access issues; however, this also means that emerging artists must sell their work in their own neighboring and nearby reservation towns where families cannot generally afford artwork at market price. Artists who make more money have the personal connections for home and retail sales, and spend less time taking chances selling their art where sales are not guaranteed. The inability for emerging artists to travel to outside buyers is certainly reflected in the prices they can demand for their work.

Electronic: There is a formidable lack of Internet usage and access to electronic markets among artists. Selling on the Internet is a low priority for all artists, but particularly for emerging artists. Only 6 percent of emerging artists sell their work online, although 46 percent of female emerging artists and 63 percent of male emerging artists want access to electronic markets. First Peoples Fund Planning for Change in Native Communities Proposal March 1, 2013 5

2. Access to supplies

Locally sourced supplies are either too expensive or completely unavailable. Access to materials is the most consistent problem facing emerging artists; 68 percent (or 53 percent when emerging artists earning more than \$25,000 per year are factored out) either do not have access to resources, or must travel more than 30 miles to get them. FPF participants, however, tend to have more capital and are able to travel an average of 189 miles to get the resources they need.

3. Space

The concept of space, both mobile and fixed, can be viewed as a place to create, obtain information, connect with other artists, obtain feedback, access markets, and discover opportunities.

Artists want space to create their art. Eighty-six percent of artists work on their art at home, even though this environment can be crowded, with less-than-ideal conditions because of family-oriented distractions. Among emerging artists with an annual income of more than \$25,000, none have their own studio space. However, they feel it is the most important factor to help them in the creation of their art. Among FPF participants, 50 percent place studio space as the most important factor in creating art.

4. Access to credit and capital

Northern Plains' artists lack access to credit. Only 1 percent of emerging artists report any relationship with a bank or formal financial institution. Of the 19 percent of emerging artists who reported ever applying for a loan, 90 percent applied to a CDFI. While these organizations provide critical support, improving access to their programs and resources can improve access to markets for Native artists.

5. Increased business knowledge

In general, business knowledge among Native artists is low. When artists receive training in basic financial management, pricing, use of Internet, and marketing, they are better positioned to access the credit and financial resources necessary to create and sell their work.

6. Access to informal (social) networks

Native artists predominantly rely on informal social networks to enhance their skills, tap into new markets and sales opportunities, and find resources to support their art. This is particularly true among emerging artists. However, because of the limited financial resources available to most families, social networking only gets emerging artists so far, which underscores the need for also accessing greater business knowledge through informal and formal networks.

Practical Implications of the Research or Work for Tribal Communities

Potential for Economic Growth: FPF's Successful Model

Emerging artists have a tremendous potential for contributing to broad-based community and economic development on their reservations through their own conceptions of healing, cultural revitalization, and intergenerational mentoring. They are already working long hours steadily on their art, and with the enhancements FPF can provide, they increase their capacity to move their own families out of poverty and move their local economies forward. FPF has outlined three

stages of entrepreneurial development. This enables FPF to ascertain where each artist is as a business owner and helps FPF provide the appropriate level of services to impact their growth:

Stage 3: Established Business Owners & Professional Culture Bearers

Artists who possess a sophisticated knowledge of business concepts and apply them to their work.

Stage 2: Small Business Development

More established artist entrepreneurs who have systems and processes in place.

Stage 1: Micro-business Entrepreneurship (Emerging level)

Artists who are high touch and require a significant level of assistance.

There are three areas where increased efforts such as those offered by combining FPF's Stages of Entrepreneurial Development model with Native CDFI success coaching have the potential to significantly contribute to broad economic growth, at both individual and reservation-wide levels:

1. Household income

Improving the market value of artwork sold by emerging artists would have considerable impact on reservation communities. The contrast between the earning potential of the two artist groups is substantial in economic terms. The average price per item for an FPF participant is \$2,337; for an emerging artist, it is \$567. If an emerging artist could sell just one item at the same average price as an FPF participant, it would increase their individual annual sales by \$1,750. For the 61 percent of emerging artists who earn less than \$10,000 per year, this would be an improvement of nearly 20 percent. Considering the number of emerging artists living on Pine Ridge and Cheyenne River Reservations, this improved income from artwork per person could have substantial positive effect on the overall reservation economies.

2. Native Community Development Financial Institutions (NCDFI's) and access to credit and capital

The importance of synergies between FPF and Native CDFIs was also reinforced in the *American Indian Creative Economy Market Study Project* results. While FPF has expertise in providing entrepreneurial training tailored to Native artists, Native CDFIs have direct access to emerging artists who need this specialized approach and the ability to provide affordable capital for business development and growth. By actively integrating Native CDFIs into the flow of FPF programs, tailored and targeted services can be provided to support emerging artists as they develop into small-business entrepreneurs with the capacity to engage in FPF's entrepreneurial programs. Coupling the capital access provided by Native CDFIs with the tremendous economic potential of Native artists in the region will have an extensive and intensive impact on the reservation economies in western South Dakota and beyond.

3. Tourism

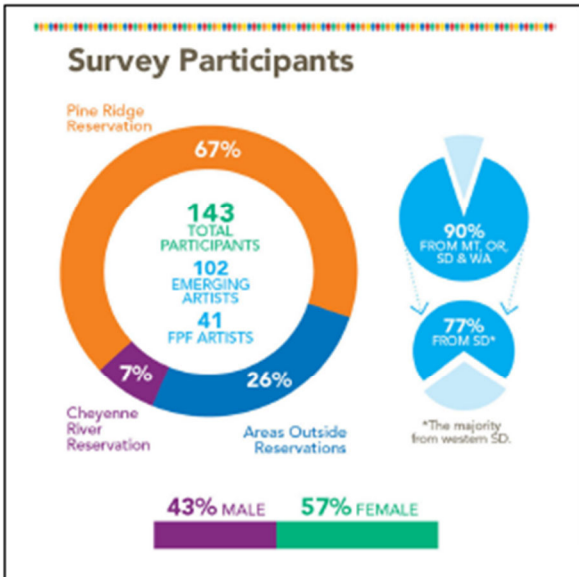
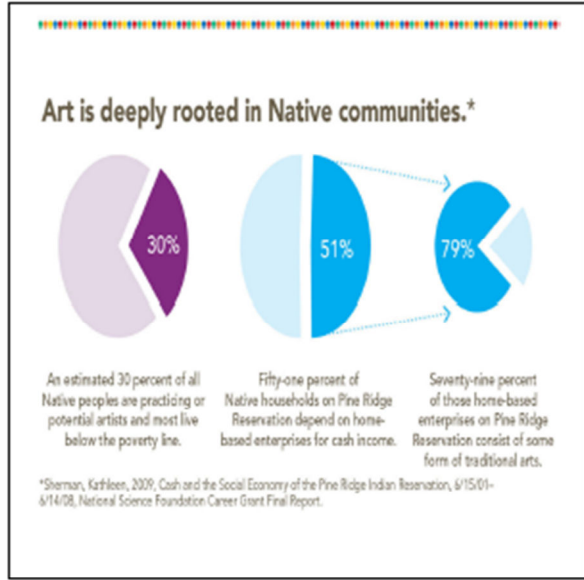
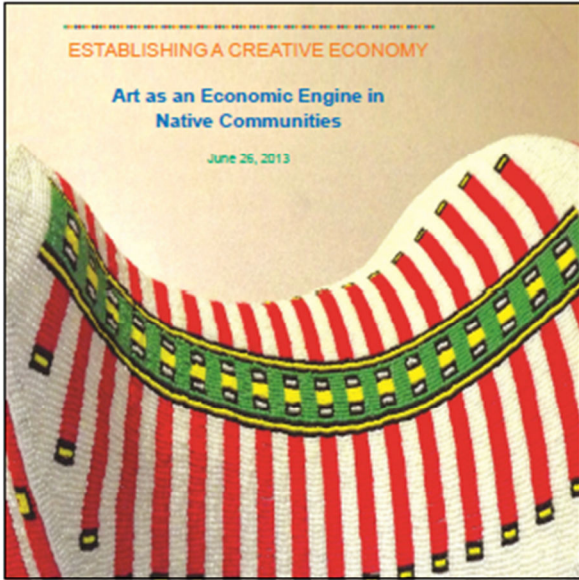
One area that may provide a meaningful avenue for economic growth is tourism. When asked, *“What role does tourism activities have on supporting and promoting Indian artist?”* 74 percent of emerging artists and 63 percent of FPF participants stated that tourism had either a good or huge economic impact. The most frequent reason artists gave for feeling tourism was beneficial was that it increased demand for their work. An increase in demand was correlated to fair pricing, more buyers, and less competition among artists. Many artists like tourism because it helps spread awareness of their art and Lakota culture to places beyond the reservation. An FPF artist explains, “It could be huge. It is our opportunity to celebrate who we are with our voice coming through the art we create. Our voice is real.”

Policy Outcomes from the Work

Although FPF has made a significant contribution to helping artists through a myriad of programs and funding, it will take a concerted, coordinated effort from additional nonprofits, foundations and federal agencies to truly make inroads, buoy the Native arts economy, and pave the way for Native youth to carry on the traditions. As the research shows, this is a viable industry with the potential to make a real and lasting difference in Native communities across the country.

To change the public perception of art from a purely individual aesthetic expression to a critical economic driver, Native arts leaders and committed organizations must unite in their efforts, establish public/private partnerships, and put forth a streamlined and consistent message to help inform policy and educate tribal leaders and other stakeholders regarding the value of art in building sustainable communities. They must also work to increase the amount of funding available for artists and programs that will provide them with the tools, space, access to capital, training and technical assistance to move them from emerging entrepreneurs to established professional culture bearers capable of making a living through their work. When fully supported, these professional culture bearers have the capacity to significantly grow the creative economy throughout their communities.

Support programs exist to provide the opportunity for Native arts to improve the economic lives of Native artists and reduce poverty. The challenge is increasing awareness and access to resources. With an increase in targeted support and recognition from foundations, federal agencies, tribes and other stakeholders, Native artists have the ability to increase their own earnings potential while becoming significant drivers of the economies of their communities. Given the emerging national dialogue and research regarding the intersection of arts and sustainable communities, FPF, Artspace and other nonprofits, foundations, and federal agencies have the ability to contribute the Native voice to the discussion which will help inform these ongoing efforts and will benefit artist communities in rural and urban areas alike.



- First Peoples Funds Grows Artist's Businesses

Three Stages of Entrepreneurial Development



Direct support for Native artists effectively increases their economic success.

Artists reporting household incomes of less than \$10,000

■ EMERGING ARTISTS
 ■ FPF ARTISTS



Artwork Prices

AVERAGE COST OF ITEM SOLD



MOST EXPENSIVE ITEM SOLD



■ EMERGING ARTISTS
 ■ FPF ARTISTS

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Sustainable Journey of Beauty: Housing the Navajo Nation by Growing Sustainable Communities

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The Navajo Housing Authority and Swaback Partners are currently working together on the largest Tribal Master Planning Initiative in the United States. A few years ago, NHA conducted a housing survey among the Navajo people identifying an immediate need for 34,000+ homes in 110 communities across the Navajo Nation. Based off the housing need, NHA began working with Swaback Partners to help create a long-term Sustainable Community Master Planning Initiative that uses best planning practices to identify future potential housing development sites and strategically plan for community development that compliments the Navajo communities, people, culture and way of life. Today we would like to share our story of the Sustainable Journey of Beauty. This session will provide value to all Tribal Nations on the importance of long-term strategic master planning for the future growth and development of Tribal communities.



- As our Tribal communities continue to evolve, it is time to begin using best planning principles and practices to plan for the future growth, infrastructure and development of our Tribal Nations. We are not the same communities we were 30 – 50 years ago and will not be same 30-50 years from now. It is time to begin planning for our continuously evolving communities that best fits our unique culture, traditions, language, people and way of life.
- Swaback Partners and NHA have had over 100 public participation meetings with 110 Chapters across the Navajo Nation over the past year. Our findings include:
- A need for more than 35,000+ houses across the Navajo Nation.
- The importance of the planning process and master planning within tribal communities to build community and economic development.
- The need for land management, zoning, ordinances, building codes, and land reform.
- In moving forward for change, it is going to take time to educate the community to better understand the planning process and the importance of utilizing master planning to benefit tribal communities in the future.
- 110 Chapters provided with a Planning Manual as well as a set of printed maps and conceptual plans for their individual communities to use as a planning tool and model for their communities.
- Policy implications include the need for new and improved policies and processes for Tribal land reform, zoning, ordinances, and building codes to benefit the future development of our Tribal Nations.

**THE SUSTAINABLE
JOURNEY OF BEAUTY**

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**NAVAJO HOUSING
AUTHORITY**




SWABACK PARTNERS
Architects + Planners



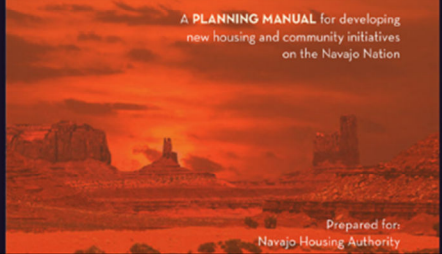
**“HOUSING OUR NATION BY
GROWING SUSTAINABLE
COMMUNITIES.”**

Vision Statement of the Navajo Housing Authority

A JOURNEY OF BEAUTY

**THE SUSTAINABLE
JOURNEY OF BEAUTY**

A PLANNING MANUAL for developing
new housing and community initiatives
on the Navajo Nation



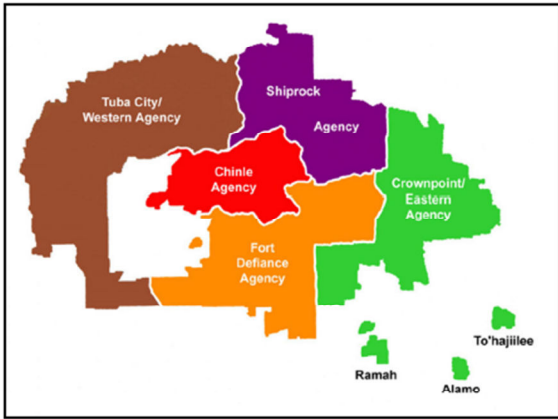
Prepared for:
Navajo Housing Authority

**FRANK LLOYD
WRIGHT'S
SUSTAINABLE
INSIGHTS AND LOVE**

- Large scale
- Citizen Centered
- Comprehensive and Long term



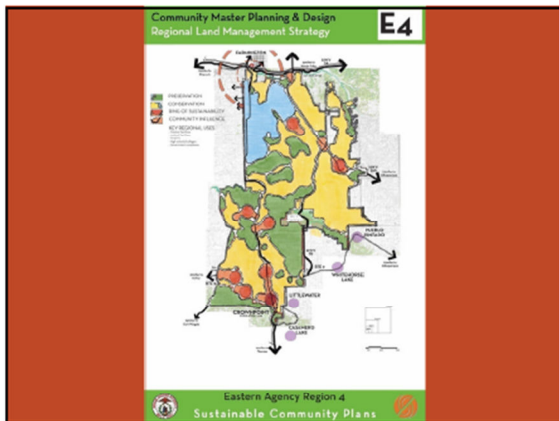
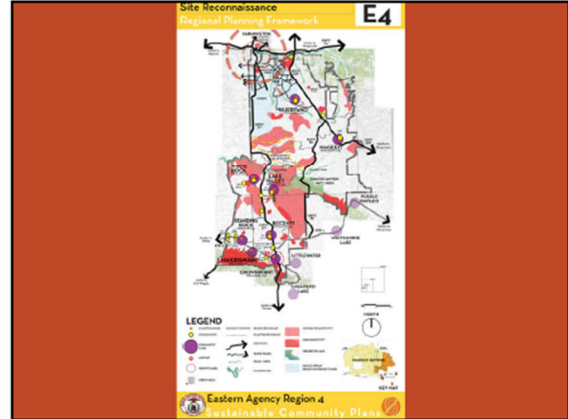
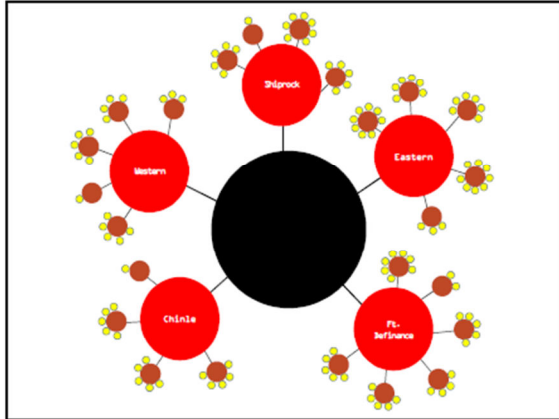
- ❑ 19 Million Acres
- ❑ 32,000 or more Houses
- ❑ Community Facilities



- Coordinating
- Listening
- Testing Alternatives
- Engaging Others

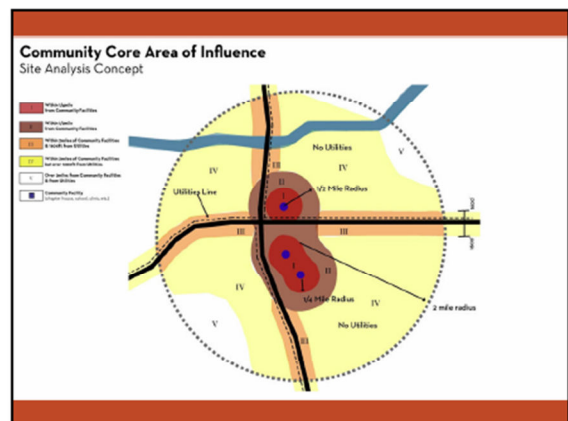
- Planning
- Conceptualizing at all scales
- Architecture

24 Regional
&
110 Chapter
Sessions



- 1. The Navajo Culture**
 - Strong respect for family and families influence location
 - Requires "Breathing Room"
 - Care and stewardship for Mother Earth and all living things
- 2. Basic Physical Infrastructure**
Cost to install, operate & Maintain:
 - Roadways
 - Power Source
 - Safe supply of Water
 - Trash pick-up and Recycling
 - Emergency Services

- 3. The Creative Community**
Everything beyond ones own house:
 - Employment (work places)
 - Education (schools)
 - Health care (clinics & hospitals)
 - Food (farming & distribution)
 - Meetings & Recreation (Buildings & Parks)
 - Senior Care (beyond what families can provide)
 - Animal shelters (& programs)
 - Worker housing (apartments)
 - Retail shops, lodging, restaurants





Housing Need (now 350 units +/-)

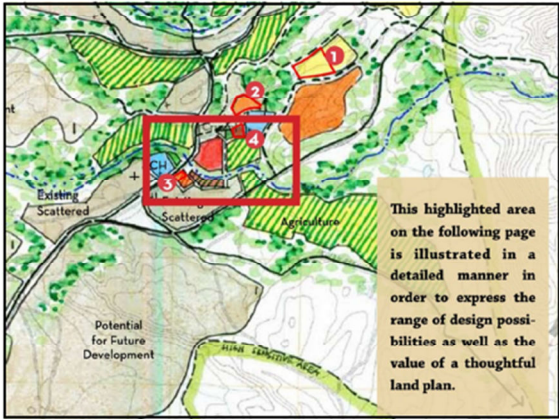
Count	Type	Density	Efficiency Factor	Acres
100	conservation	40%	.35	135 +/-
75	orchestrated neighborhood	30%	.40	53 +/-
40	senior/vet.	15%	.25	13 +/-
40	apartment	15%	.15	5 +/-

Recommended Housing Sites (immediate need)

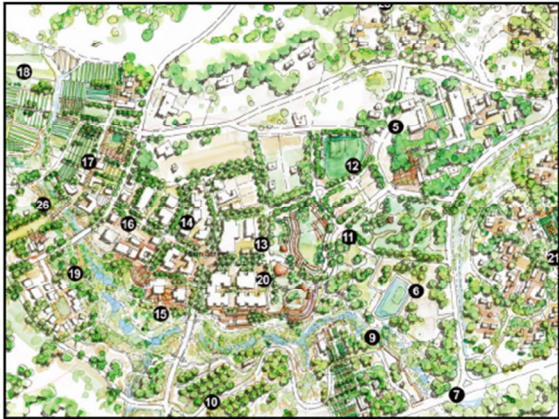
Map Key	Type	Acres	Units
1	orchestrated neighborhood	22 acres +/-	30
2	senior/ vet.	6 acres +/-	15
3	senior/ vet.	7 acres +/-	25
4	orchestrated neighborhood	21 acres +/-	30
5	conservation	83 acres +/-	70
6	conservation	50 acres +/-	30
7	apartment	5 acres +/-	40
8	orchestrated neighborhood	10 acres +/-	15

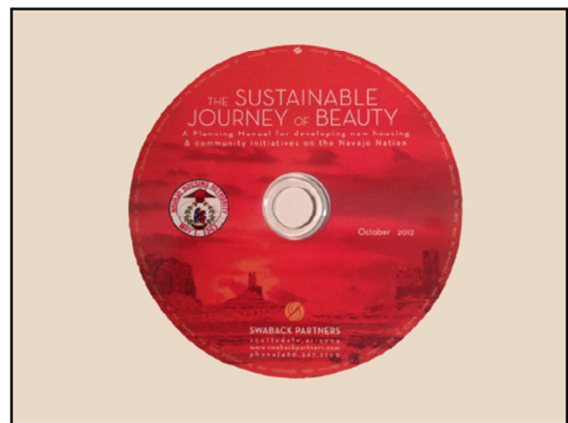
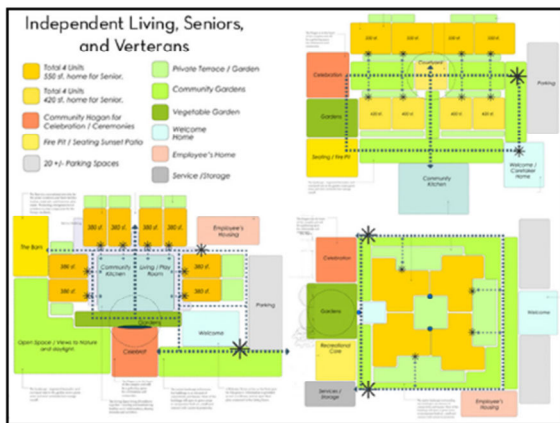
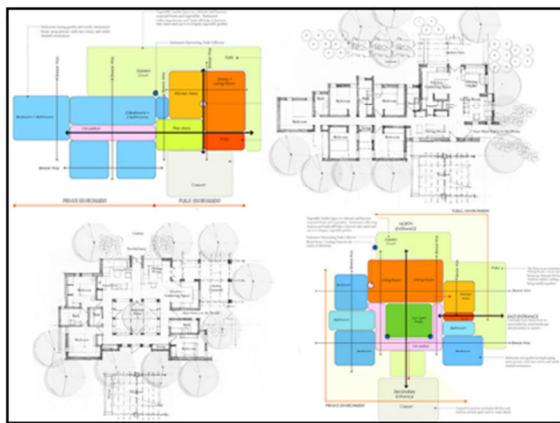
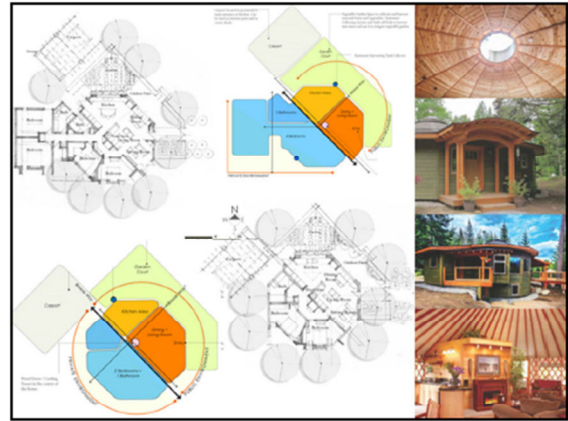
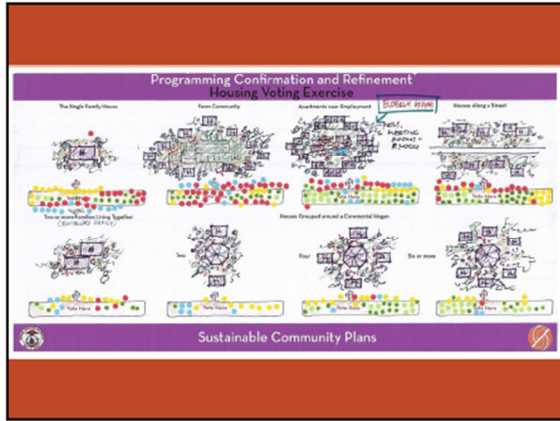
SEAMLESS TRANSITION FROM ANALYSIS TO:

- Public Involvement
- Regional Strategizing
- Local Planning
- Architectural Design
- Design Guidelines



- | | |
|------------------------------------|---|
| 1 Crystal Chapter House | 14 Offices and Government Building |
| 2 Crystal Senior Citizens Building | 15 Restaurants / Terraced Gardens |
| 3 Headstart Center | 16 Retail / Commercial Buildings |
| 4 Community Buildings | 17 Agricultural Retail / Farmers Market |
| 5 School | 18 Agricultural Land |
| 6 Lagoon / Community Utilities | 19 Senior / Veteran Housing |
| 7 Existing Access to the Community | 20 Apartments |
| 8 Proposed Entrance | 21 Orchestrated Neighborhood |
| 9 The Barn / Community Gardens | 22 Neighbors Vegetable Gardens |
| 10 The Orchards | 23 Neighbors Shared Barns |
| 11 Community Park / Amphitheater | 24 Designed Irrigation System |
| 12 Ball Field / Parking Lot | 25 Rural / Conservation Housing |
| 13 Cultural Community Building | 26 Chapter House Lawn |





BREAKOUT SESSION: Agriculture, Water, & Timber: Sustaining Our Natural Resources

Tribal Agricultural Center: Towards a Locally Sustainable and Healthy Food for the Nimipuu and Surrounding Communities

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The reasons for establishing a Nez Perce Tribal Agricultural Center (TAC) are the following:

- 1) Produce and process own food (e.g., farming, ranching/livestock production, greenhouse/aquaponics, food canning/packaging, etc.)
- 2) Produce and process own transportation fuel and livestock feed (canola for biofuel and feed meal to supplement ranching/livestock production). An oil processing or oil extraction and biodiesel processing facility will be established.
- 3) Process native plants for food (e.g., huckleberry, cous, camas) for local use and market
- 4) Restore and enhance habitats and natural production of native plants for tribal uses (food, fiber, medicine, dye, others).
- 5) Establishment of tribal nursery/greenhouse for reforestation, restoration, mitigation, vegetation and reclamation activities.
- 6) Pursue and implement Tribal economic development projects related to renewable energy (e.g., biomass from forest waste, solar, wind, and biofuel from oilseeds, algae, cellulosic and lignocellulosic materials) and other natural resources (water bottling, native plant propagation, grains/oilseeds marketing, feed meal plant).
- 7) Growth of local and organic foods for daily and food processing markets.
- 8) Develop green jobs for tribal members.
- 9) Train the next generation of leaders to be innovative stewards of the land with new and compelling best practices cradled in our tribal values and traditions for the center going forward.
- 10) Seek and engage in developing stronger partnerships with the regional agricultural community and other tribes that are developing similar agricultural centers or food movements.

The TAC will develop programs on:

- 1) Food and Nutrition- Conduct research and/or implement food processing technologies on healthy foods and beverages that prevents/minimizes diabetes and obesity among the people. This includes education component on proper foods and the preparation of such foods.
- 2) Agricultural Operations – Engage in farming, ranching and livestock production activities.

- 3) Horticulture, Tribal Nursery/Greenhouse and Biological Control Center - Propagate native plants for ethno botanical uses, and engage in gardening activities to produce local fruits and vegetables. Establishment of Tribal Nursery and expansion of the Biological Center for enhancing and restoring habitats and ecosystems within the reservation and Usual and Accustom Places.
- 4) Green Energy – Engage in economic development activities on renewable energy and other natural resources.

Implementing the objectives of the TAC programs will benefit the Nimiipuu by enhancing its rights to exercise sovereignty on food/fuel production, processing, utilization and marketing; creating tribal and local jobs through engagement in sustainable activities that will help the environment; fostering tribal technical capability building in agriculture and energy; and advocate good health and nutrition for future generations and their families.

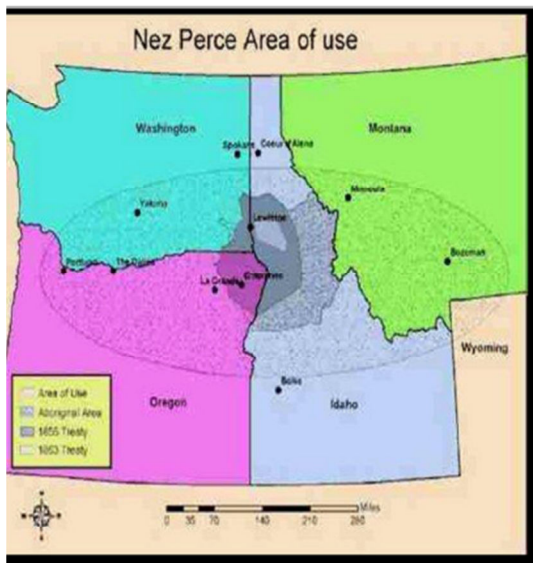
Implementing programs through education and training of youths through local schools in producing own food and energy production will gradually change Nimiipuu communities towards self-sufficiency.

It is expected that agriculture and energy policies will be developed from the establishment of the TAC and implementation of its program objectives.



BACKGROUND ON NEZPERCE TRIBE


- RESERVATION LOCATED AT NORTH CENTRAL IDAHO
- CARRIES OUT FULL RANGE OF GOVERNMENTAL FUNCTIONS INCLUDING TRIBAL GOVERNMENT OPERATIONS, LAW ENFORCEMENT AND COURT SYSTEM, EDUCATION, HEALTH CARE, ECONOMIC DEVELOPMENT, ENVIRONMENTAL & WILDLIFE PROTECTION/RESTORATION, PROMOTION OF CULTURAL FUNCTIONS, AND PROMOTION OF WELL-BEING OF THE POPULATION
- MEMBERSHIP (AS OF FEB 2013), TOTAL = 3,526 (2,269 IN IDAHO)
- EMPLOYMENT: 2,842 (1,328 – DIRECT JOBS; 1,514 – INDIRECT)
- 3RD RANKING LARGEST EMPLOYER IN THE REGION (GOVT, CASINO, ENTERPRIZES, TOURISM, AGRICULTURE & OTHER LOCAL INDUSTRIES)
- LAND OWNERSHIP: 157,020 ACRES; 31, 700 ACRES IN DRY LAND AGRICULTURE (RESERVATION IS 770,000 ACRES, 13% OWNED BY TRIBE, REST ARE OUTSIDE EXTERIOR BOUNDARIES)





TRIBAL STRUCTURE

- Nez Perce Tribal Executive Committee (NPTEC)
- Tribal Departments
- Tribal Commissions
- General Council
- Affiliates



TRIBAL DEPARTMENTS

- Executive Direction: Exec. Dir, Human Resources Department, Economic/Community/Transportation Planning, Agricultural Center
- Administration Department: Administration, Housekeeping, Plant Maintenance, Safety, Information Systems, Pi-nee-Waux Community Center, Tawoopuu Community Center, Wa A' Yas Community Center
- Education Department: Adult Education, Distance Learning Centers, Higher Education, Early Childhood Development, Students for Success, Vocational Rehabilitation Services
- Finance Department
- Department of Fisheries Resources Department: Admin, Enforcement, Harvest, Production, Research, Resident Fish, Watershed



- Department of Natural Resources: Cultural, Cultural Language, Environmental Restoration & Waste Management, Water Resources, Wildlife, Forestry, Land Services, Tribal Tourism/Event Planning
- Social Services Administration: Admin, BIA Welfare Assistance, Children's Home, Child Protection, Financial Assistance, Indian Child Welfare, Senior Citizens, Temporary Assistance to Needy Families, USDA Food and Nutrition Services, Veterans Benefits
- Office of Legal Counsel

AFFILIATES

- Law and Justice Department: Tribal Court, Police, Prosecutor, Public Defender, Child Support Enforcement, TERO Compliance
- Nez Perce Tribal Enterprise: Gaming, Express
- Ni-Mii-Puu Health
- Nez Perce Tribal Housing Authority
- Nez Perce Horse Registry



TAC BACKGROUND

- PROPOSAL TO FORM TAC SUBMITTED TO NPTEC IN JULY 2012
- TAC APPROVED BY NPTEC IN OCT 2012
- FUNDING FOR MANAGER APPROVED IN DEC 2012
- MANAGER HIRED MID-FEB 2013

TAC PURPOSES

- Produce and process own food
- Produce and process own transportation fuel and livestock feed
- Process native plants for food for local use and market
- Restore and enhance habitats and natural production of native plants for tribal uses
- Establishment of tribal nursery/greenhouse for food production, reforestation, restoration, mitigation, revegetation and reclamation activities
- Pursue and implement Tribal economic development projects related to renewable energy and other natural resources

- Develop green jobs for tribal members.
- Train the next generation of leaders to be innovative stewards of the land with new and compelling best practices cradled in Tribal values and traditions for the center to go forward.
- Production of local and organic foods for daily and food processing markets.
- Seek and engage in developing stronger partnerships with the regional agricultural community and other Tribes that are developing similar agricultural centers, or food movements

PROGRAMS TO BE FORMED
(Each has an Education/Training Component)

- Food and Nutrition
- Agricultural Operations
- Horticulture, Tribal Nursery/Greenhouse
- Biological Control
- Green Energy

**PAST, CURRENT & FUTURE
PROGRAMS/PROJECTS/ENTITIES IN SUPPORT OF TAC**

- NATURAL RESOURCES DEPARTMENT
- LAND SERVICES PROGRAM
- BIOLOGICAL CONTROL CENTER
- FORESTRY PROGRAM
- WATER RESOURCES PROGRAM
- FISHERIES DEPARTMENT
- WILDLIFE PROGRAM
- NEZ PERCE HORSE REGISTRY
- DEMO OF BIODIESEL PRODUCTION (1995-96), RESURRECT IN JUL 2013
- OILSEED CRUSHING FACILITY FEASIBILITY STUDY (FEB 2003)
- BIODIESEL PLANT BUSINESS PLAN (JAN 2004)
- NEZ PERCE TRIBE WASTE TO ENERGY FEASIBILITY STUDY (JUL 2012)
- GREENHOUSE PROPOSALS IN RESPONSE TO DHHS (SUB: MAR 2013)
- USDA-NRCS TRIBAL AGRICULTURAL COUNCIL

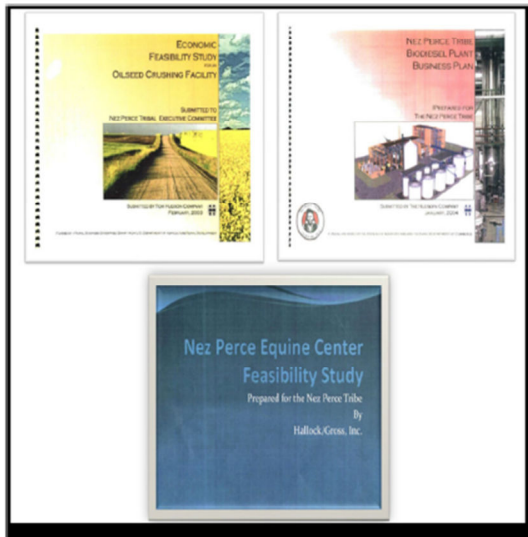
**PAST, CURRENT & FUTURE
PROGRAMS/PROJECTS/ENTITIES IN SUPPORT OF TAC**

- BIODIESEL AND LIVESTOCK FEED PROCESSING FACILITY (SUB: MAR 2013) – INITIAL 100,000 GALS FUEL, AND 700 TONS PREMIUM MEAL
- TAC FACILITY – TWO PROPOSALS TO SUBMIT (END OF JUN & JUL)
- ON-GOING LAND ACQUISITION BY TRIBE
- FEE TO TRUST CONVERSION PROJECT (MAY 2013)
- SNAKE RIVER BASIN ADJUDICATION PROJECTS/FUNDS
- ON-GOING PROPOSED ENTERPRISES, I.E., MANUFACTURING, CONVENIENCE STORES, TOURISM, FOOD PROCESSING
- NEZ PERCE EQUINE CENTER FEASIBILITY STUDY (MAR 2013)
- NATIONAL NATIVE FOOD INITIATIVE WITH NORTHWEST INDIAN COLLEGE (NWC) COOPERATIVE EXTENSION
- TRIBAL ENERGY GROUP
- INTERTRIBAL NURSERY COUNCIL
- USDA COUNTY OFFICES (NEZPERCE, LEWIS, IDAHO, CLEARWATER, LATAH)




- PRODUCED OVER 10,000 GALS OF BIODIESEL FROM YELLOW GREASE
- USED 100% IN 1995 DODGE RAM 2500, 50% ON 1995 CHEVROLET SUBURBAN, 20% ON LAWN MOWER/TRACTOR
- DODGE RAM ACCUMULATED OVER 100,000 MILES, LONG DISTANCE TRIPS TO ORLANDO, FL, & NASHVILLE, TN, AND ROUTINE TRIPS TO RICHLAND, WA

**1995-96 DEMONSTRATION OF BIODIESEL
PRODUCTION AND UTILIZATION**



CENTRIFUGE FILTERING OF USED COOKING OIL

BIODIESEL PROCESSOR

WATERLESS WASHING/PURIFICATION OF BIODIESEL

- PROCESS USED COOKING OIL FROM 2 CASINOS AND 2 CONVENIENCE STORES
- OPERATIONAL IN JULY 2013
- BIODIESEL USED IN APPALOOSA EXPRESS, MAINTENANCE MACHINES/VEHICLES, WATER TREATMENT FACILITY AND TAC

BIODIESEL PRODUCTION OF USED COOKING OIL

BIODIESEL & LIVESTOCK FEED PROCESSING FACILITY

1. Admin/Lab
2. Scales
3. Seed Receiving/Meal Outboard
4. Chemical Storage
5. Production Storage
6. Oilseed Processing
7. Oil Refinement
8. Biodiesel Production
9. Glycerin Production

- OIL EXPELLER INPUT = 1,000 TONS CANOLA OILSEED
- OIL EXPELLER OUTPUT = 100,000 GALS. OIL; 700 TONS FEED MEAL
- BD PROCESSOR INPUT = 100,000 GALS. OIL; 20,000 GALS. ALCOHOL
- BD PROCESSOR OUTPUT = 100,000 GALS. BD; 20,000 GALS CRUDE GLYCERIN

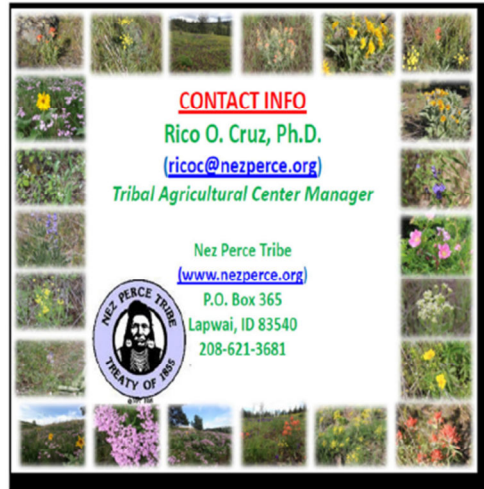
TRIBAL GREENHOUSE/NURSERY

- ONE GEODETIC DOME (42' DIA) INSTALLED BY JAN 2014
- INITIAL FIELD ASSESSMENT, DOCUMENTATION: APR - AUG 2013
- SEED/PROPAGULE COLLECTION: JUN - OCT 2013
- PROPAGATION OF COLLECTED SEEDS: FEB - SEPT 2014
- PROPAGATION OF OLD SEEDS/PROPAGULES : JUN - AUG 2013
- MORE GREENHOUSES INSTALLED: OCT 2014
- DETAILED FIELD ASSESSMENT FOR FUTURE PILOT RESTORATION: MAR-SEP 2014



TAC ACTION ITEMS


- PRODUCTION OF BIOFUELS AND FEED MEAL FROM CANOLA STARTS OCT 2013
- HIRE STAFF
- PROPAGATION OF TULE AND DOGBANE
- CONTINUE PURSUING/DEVELOPING GRANTS & OTHER FUNDING TOWARDS ESTABLISHMENT OF TRIBAL NURSERY & AGRICULTURAL CENTER FACILITY
- COLLECT SEEDS AND PROPAGULES
- INSTALL AT LEAST ONE GREENHOUSE
- PROPAGATE COLLECTED SEEDS AND PROPAGULES
- CONTINUE FIELD ASSESSMENT OF POSSIBLE SITES FOR PILOT RESTORATION ACTIVITIES
- INSTALL OTHER COMPONENTS OF CENTER FACILITY



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Resilience to Climate Change: Collaborating on Adaptive Management Strategies for the Pyramid Lake Paiute Tribe

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Native Americans in the Southwest are vulnerable to climate change because of their intimate relationship with the environment upon which their culture, tradition, and livelihood depend. The threat of global warming and climate change may overwhelm and disproportionately impact tribes because they are more vulnerable to flooding and droughts due to economical and water management infrastructure challenges. Furthermore, tribes who have not developed or exercised their Indian water rights may be sacrificed under low flow conditions and unable to meet the water needs of their people.

- Primary example of Native American vulnerability to climate change is Nevada’s largest tribe, the Pyramid Lake Paiute Tribe (PLPT), who are deeply connected – culturally, physically, and spiritually – to Pyramid Lake and its ecosystem. Located at the terminal end of the Truckee River Basin (TRB) near Reno, NV, Pyramid Lake is considered “the most beautiful of North America’s desert lakes” (Wagner and Lebo, 1996) and is home to the endangered cui-ui fish (*Chasmistes cujus*) – a primary cultural resource – and the threatened Lahontan cutthroat trout (*Oncorhynchus clarki henshawi*).
- The Pyramid Lake Paiute refer to themselves as *Kooyooee Tukadu*, or cui-ui eaters, and traditionally, along with other Paiute groups, traveled to the lake every spring for annual cui-ui spawning runs to gather and dry fish (Wagner and Lebo, 1996).
- The Paiute origin story is based upon Pyramid Lake as well as a tufa-rock formation on the lake shore called the Stone Mother, resembling a woman whose tears created the lake (Wheeler, 1987).
- Fishing and recreational activities are central to the PLPT economy. Wetlands also provide reeds for basketry, a symbol of Native identity. Although some cultural practices have been lost due to impacts from non-tribal settlement and upstream water diversion

for irrigation and municipalities, the PLPT continues to hold steadfast to their cultural connection to the lake.

- Existing climate change studies for the TRB in Nevada are part of a larger study domain (southern Sierra Nevada) with principal focus on hydroclimatology (Cayan et al., 2008; Coats, 2010; Howat and Tulaczyk, 2005; Regonda et al., 2005).
- A climate change and adaptation study in the TRB including tribal perspectives is lacking. Our key research question is to assess the adaptation potential of PLPT and is stated as: Are there physical and social limits to adaption for PLPT? If yes, what are they? Our hypothesis in relation to this research question is: PLPT is a resilient tribe against climatic and non- climatic stressors as they have strong adaptive capacity and institutions which help them bear, and adapt to the severity of climate change and non-climatic stressors.

Project objectives are to:

1. Determine the climate change adaptation potential of the Pyramid Lake Paiute Tribe by understanding vulnerabilities, thresholds, and resiliencies of the systems;
 2. Develop collaborative tribal water management and adaptive strategies; and
 3. Determine effective tribal partnerships and collaborations.
- Climate change is an emerging area of research that directly affects tribal communities, which are often dependent upon resources and landscapes that can be significantly impacted. This presentation demonstrates the process for one tribal community to determine its risks and then to plan for climate adaptation in a collaborative manner.
 - Project is funded through the United States Department of the Interior Southwest Climate Science Center (SWCSC) and the United States Geological Survey (USGS); and is a joint collaboration between researchers at the Pyramid Lake Paiute Tribe, University of Arizona, University of Nevada Las Vegas, and USGS. The project kickoff meeting took place in November 2012 at the PLPT in Nixon, NV. The extent of work to date has largely involved collaborative planning among project personnel as well as an in-depth review of existing literature and scientific studies on the ecology, hydrology and water quality of Pyramid Lake and the Truckee River Basin.
 - A review of the evolution of PLPT water rights over the past century is underway. Researchers have already begun to identify certain hydrologic and ecologic parameters that will help to inform vulnerability thresholds and adaptation potential. The next major task will involve participatory sessions with tribal representatives and community members to give an update on progress and brainstorm the relevant climate change issues that this project should address from a tribal perspective.
 - The research supports the mission of the SWCSC to provide scientific information and tools to anticipate and adapt to climate change and has broader implications in its application to other tribes facing similar challenges to climate change impacts. Moreover, this project has global applicability to indigenous communities around the world who

face local and climate stressors on their water resources and who also have a strong cultural and environmental understanding of their water and land.

- Major expected deliverables include peer reviewed journal publications; professional and tribal presentations; adaptive water management strategies that are stakeholder-driven and a collaborative effort; and an analysis of effective collaboration between scientists and PLPT. Results will be presented to the PLPT and to the Nevada Environmental Managers Working Group at the University of Nevada Las Vegas Geovisualization Lab. In collaboration with the Institute for Environmental Conflict Resolution (IECR), the study aims to develop a strategy for efficient consultation with tribal governments and conduct tribal consultation at a major environmental meeting that tribal government representatives attend such as the mid and annual meetings of the National Congress of American Indians.

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Resilience to Climate Change

Collaborating on Adaptive Management Strategies for the Pyramid Lake Paiute Tribe



Shannon Mandell, Olin Anderson & E. Schuyler Chew

NCAI Tribal Leader/Scholar Forum:
"Agriculture, Timber, & Water: Sustaining our Natural Resources"
Wednesday, June 26, 2013

Presenters

Pyramid Lake Paiute Tribe

- Shannon Mandell, Director, Pyramid Lake Museum & Visitor Center
- Olin Anderson, Water Quality Standards Specialist, Environmental Department

University of Arizona

- E. Schuyler Chew, Research Analyst





Principal Investigators

University of Arizona




- Dr. Karletta Chief, Soil, Water, and Environmental Sciences, Principal Investigator
- Dr. Aleix Serrat-Capdevila, Hydrology and Water Resources, Co-Principal Investigator
- Dr. Alison Meadow, Institute of the Environment, Co-Principal Investigator

University of Nevada, Las Vegas

- Dr. William J. Smith Jr., Harry Reid Center for Environmental Studies, Co-Principal Investigator

USGS-Pacific Southwest Area

- Dr. David E. Busch, Biologist, Co-Principal Investigator

Collaborators & Funding

Collaborators

- Pyramid Lake Paiute Tribe
- University of Arizona
- University of Nevada Las Vegas

Two year grant funded by

- Southwest Climate Science Center
- United States Geological Survey






Climate Change & Tribes




- Climate change is an emerging area of research that directly affects tribal communities
- Native people share intimate relationships with the environments, resources and landscapes upon which their culture, tradition, and livelihood depend








Climate Change & Tribes

- "Climate change may disproportionately affect tribes and their lands because they are heavily dependent on their natural resources for economic and cultural identity." (USDOI 2010)
- This presentation demonstrates the process for one tribal community to determine its risks and then to plan for climate adaptation in a collaborative manner

USDOL's Strategic Response to Climate Change



- In 2009, DOI Secretary Salazar's signing of Order 3289 launched a bold climate change-response strategy
- Establishes eight regional Climate Science Centers as partnerships between universities and USGS to combine the expertise of scientists and resource managers on adaptation science


USDOL's Strategic Response to Climate Change

Section 5 of Secretarial Order 3289

- Affirms DOI's primary trust responsibility to tribes
- Ensures government-to-government consultation with tribes on climate change initiatives
- Recognizes that tribal values are critical to determining what is to be protected, why, and how
- Supports the use of traditional ecological knowledge, along with best available science, in formulating policy pertaining to climate change






USDOL's Strategic Response to Climate Change



Southwest Climate Science Center (SWCSC) is a consortium of six institutions: University of Arizona; University of California, Davis; UCLA; Desert Research Institute, Reno; University of Colorado, Boulder; & Scripps Institution of Oceanography at the University of California, San Diego

www.doi.gov/usc/index.cfm

Latest Climate Change Work in the Southwest


- In a regionally-driven effort, the SWCSC partnered with the Climate Assessment for the Southwest (CLIMAS) and other researchers on a comprehensive report for the National Climate Assessment
- This report went far beyond expectations and has been widely praised for its comprehensiveness
- www.swcarr.arizona.edu







Latest Climate Change Work in the Southwest

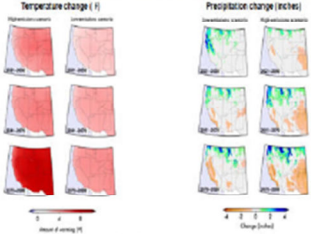
This national report evaluates climate change effects on Native American lands in the Southwest



Available online at www.swcarr.arizona.edu/chapter/17



Climate Projections for the Southwest

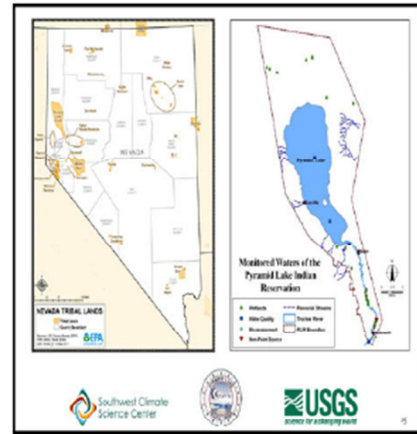


Southwest temperatures will rise by at least 3°F and up to 5°F over recent historical averages over the 21st century.

Lower precipitation in the southern part of the Southwest and little change in the northern part.

www.swcarr.arizona.edu/chapter/9



Tribal Statistics

- Northern Paiute people - "Kooyoee Tukadu"
- 1461 residents on reservation (in 2010 census)
- 2400 members enrolled
- 35 miles northeast of Reno, NV
- Reservation designated 1859 and affirmed in an 1874 Executive Order by President Grant
- Over 745 square miles in size
- Pyramid Lake is 175 square miles in size, 11 miles wide, 26 miles long, and about 345 feet deep

Southwest Climate Science Center | USGS

Man-made Climate Impacts to Pyramid Lake

Construction of Derby Dam on the Truckee River, 1905

- Diverted much of Truckee River flows toward the Carson Basin
- Dropped Pyramid Lake elevation by 85 feet in 1967
- Desiccated Winnemucca Lake (which is now a playa)
- Severe Ecosystem damage for supporting Cui-ui and Lahontan Cutthroat Trout
- Fish are respectively now listed as *Endangered* and *Threatened*

The Tribe has had to adapt to these changes for some time!

Southwest Climate Science Center | USGS

Early Adaptation to Changes

Battling for water rights

- Tribal members and concerned citizens fought and negotiated for many years to save Pyramid Lake
- Water Rights (claim 1 & 2) and certain irrigation operating agreements awarded
- Agreements still in negotiation
- Funding obtained to acquire Water Rights from willing sellers

Orr Ditch Decree
O.C.A.P. Operating Criteria and Principles
W.Q.S.A. Water Quality Settlement Agreement
Public Law 101-618
TROA
Desert Terminal Lakes Program

Southwest Climate Science Center | USGS

Early Adaptation to Changes

Marble Bluff Dam


- Corps of Engineers, 1975
- Constructed on the Truckee near Pyramid Lake
- Stopped the downcutting of the river
- Featured fish passage structure

Southwest Climate Science Center | USGS

Early Adaptation to Changes

Fishery restoration

- Efforts between State, Tribal, and Federal wildlife authorities
- Tribe and USFWS maintain active fishery projects
- Indications of some success












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Climate & Drought Impacts on Native People

Climate and drought affect Native people in many ways

- Physically
- Economically
- Culturally

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Physical Impacts of Climate and Drought

Rangeland

- Horse populations limit forage for grazing animals
- Edible plant arrival, fewer seeds from native species, increase in weed populations



Wildlife

- Migratory birds and wildlife quality affected









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Physical Impacts of Climate and Drought

Wildfire

- Greatest unknown & greatest risk
- Threatens important species
- May destroy homes, rangeland & businesses
- Ecosystem out of fire cycle balance










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Physical Impacts of Climate and Drought

Water






- Moist areas drying up
- Urban water restrictions
- Residential wells impacted

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Economic Impacts of Climate and Drought

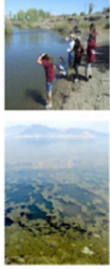





- Cattle health and cost of range improvements
- Community water shortages affect agricultural production and are costly for tribal governments
- Eco-tourism may be affected

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Cultural Impacts of Climate and Drought




- Saddening to see lands degraded
- Reduced ability for subsistence living and continuation of older traditions
- Fewer resources for traditional teaching
- Less water available for ceremonies
- Algal blooms may threaten health of community members

Pyramid Lake Paiute Tribe Climate Change Efforts

PLPT has been proactive on climate change

- Worked with Dr. Karletta Chief and Desert Research Institute (DRI) on a geothermal grant in 2008
- Collaborated in 2009 with the Innovation Working Group (DRI, Univ. of Idaho, & Univ. of New Mexico) on climate change impacts to Native American and Hispanic communities

Pyramid Lake Paiute Tribe Climate Change Efforts

PLPT has been proactive on climate change

- Partnered in 2010 with Dr. Chief and DRI on a Nevada EPSCoR seed grant to a conduct socio-vulnerability assessment
- Contributed to the Climate Change Native American Technical Group with Dr. Bill Smith and Dr. Chief on a [video](#) on Nevada tribes and climate change

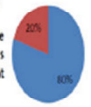
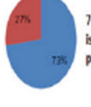
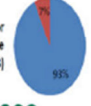









Pyramid Lake Paiute Tribe Climate Change Efforts

Surveys with tribal members indicated




- 80% were aware of climate change and observed changes in their environment
- 73% believed climate change is happening and humans play a role in climate change
- 93% expressed their priority for climate change action at the national level (Gautam et al. 2013)

Pyramid Lake Paiute Tribe Climate Change Efforts

Focus groups allowed researchers to better understand tribal vulnerability to climate change

Justification for Research

Conventional climate change adaptation planning may have unintended consequences and may lead to conflict if tribal consultation is not considered (Redsteer et al. 2013)






Justification for Research

PLPT is seeking new ways to manage ecosystems and build upon existing adaptation efforts

This project expands upon previous CSC work and fills a need for tribal research in the region









Key Research Questions

Assessing the adaptation potential of PLPT:





- What are the physical and social limits to adaptive planning for PLPT?
- What types of collaboration will lead to successful adaptive planning?

Hypothesis





The Pyramid Lake Paiute Tribe is a resilient tribe with the adaptive capacity and institutions which help them:

- adapt to climatic and non-climatic stressors
- devise collaborative strategies to prepare for climate change

Research Objectives

- Determine the climate change adaptation potential of the Pyramid Lake Paiute Tribe by understanding vulnerabilities, thresholds, and resiliencies of the systems

Research Objectives

- Propose collaborative tribal water management and adaptive strategies
- Explore the potential for partnerships and collaborations between tribes and the climate science community





Research Progress



- Collaborative planning since project kickoff meeting in November 2012






Research Progress

- Literature review of Pyramid Lake and Truckee River ecology and hydrology

Research Progress

- Next major step will involve brainstorming workshops with tribal environmental managers




Relevant Policy Outcomes

- Identifying “best practices” for partnerships and collaborations between PLPT and researchers
- Sharing these collaborative strategies for the benefit of other tribes



Relevant Policy Outcomes

- Developing adaptive management strategies specifically for the Pyramid Lake Paiute Tribe
- Equipping tribal environmental managers with scientific information and tools to anticipate and adapt to climate change and other non-climatic stressors



Relevant Policy Outcomes


Devising an adaptation framework:

- With implications for other tribes, especially in the Southwest, faced with similar climate issues
- With global applicability to indigenous communities around the world seeking to prepare for climate change



Closing Remarks

- Adaptation is nothing new to the Pyramid Lake Paiute Tribe, given their efforts to secure water rights to protect fish, ecosystems & way of life
- By 2008 PLPT began to consider their role in addressing climate change
- This research project is a collaborative approach that builds on previous PLPT adaptation efforts






Closing Remarks

- Adaptation planning happens at various levels (government, research) and will have implications for people at the community level
- How can individuals contribute to adaptation planning at the community level?
- Are individuals taking the right steps to move adaptation forward?





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Links to Resources


U.S. Department of the Interior Climate Science Centers
<http://www.doi.gov/csc/index.cfm>

U.S. Department of the Interior Secretarial Order 3289
http://nccwsc.usgs.gov/sites/default/files/documents/other/SO_3289_Amended.pdf

Southwest Climate Science Center
<http://www.swcsc.arizona.edu>

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Links to Resources

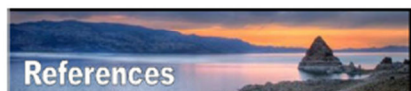
Assessment of Climate Change in the Southwest United States
<http://www.swcarr.arizona.edu>

Special Issue in *Climatic Change* "Climate Change and Indigenous Peoples in the United States: Impacts, Experiences, and Actions"
<http://link.springer.com/article/10.1007%2Fs10584-013-0737-0>

Nevada's Native American Tribes and Climate Change Video
<http://www.thewaterchannel.tv/en/videos/categories/viewwide/1402/climate-change/nevadas-native-american-tribes-and-climate-change>

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Intertribal Timber Council Initiatives and Research

Don Motanic, Technical Specialist, Intertribal Timber Council
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During the last two years, the Intertribal Timber Council, a member of Our Natural Resources (O.N.R.) has launched three major studies:

- 1) The Third Indian Forest Management Assessment Team (IFMAT III),
- 2) Analysis of the Tribal Forest Protection Act and
- 3) the Anchor Forests Project.

All three of these studies seek to understand how current tribal forest and natural resource management affects not only the tribal community but the larger regional communities and economy. By analyzing current constraints and opportunities and making recommendations to facilitate the expansion of tribal management to include ceded lands that are not currently being managed actively in a manner keeping with tribal values, all three of these projects suggest ways forward for tribes to become regional leaders in collaborative landscape level integrated management. Education, increased research capacity and policy changes that enable true, “on the ground” collaboration, especially with federal agencies emerge as key themes in all three studies:

- All three topics relate to an emerging trend in increased involvement of tribes in landscape level management and research.
- IFMAT III is the third decadal review of Indian Forestry, and tracks change from IFMAT I (1992) and IFMAT II (2002). With over twenty years of observation and reporting, IFMAT is a unique long term study of change in tribal forest management and the policies, social and economic trends that affect it.
- Tribal Forest Protection Act Analysis demonstrates the increased need for landscape level management as fire and forest disease risk build up on federal lands adjacent to reservations.

Although TFFPA legislation is almost 10 years old, there have been relatively few “success stories”. This analysis, which was performed collaboratively with the US Forest Service, is an important step in identifying barriers and suggesting steps forward to ensure that there are more successful projects on the ground. The Anchor Forests project was launched in response to change that is being seen on and off of reservations: loss of forestry infrastructure, including mills, skilled foresters and loggers, equipment and technical expertise. The Anchor Forest concept is rooted in collaborative regional partnerships, and seeks to understand how tribal forests can help “anchor” and sustain this critical infrastructure.





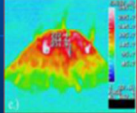

By the time of the NCAI Tribal Leader/Scholar Forum, IFMAT III will have been released, and will include several dozen findings and related recommendations to increase tribal forest management and capacity. Tribal Forest Protection Act Analysis findings are currently in final review, but will also include concrete steps towards guaranteeing that tribes have the ability to

use this legislation as was intended, to help protect tribal lands and resources. The Anchor Forest Project has identified a case study regarding the role of the Yakama Nation in the Tapash Sustainable Forest Collaborative

These research initiatives were assessed at the local, regional and national levels. This involved direct engagement of tribal governments and their tribal communities via focus groups that included tribal leaders, elders, resource professionals, educators and tribal students. Despite being in draft form, our findings and recommendations resulted from a broad-based approach in defining the core issues.

The results from all three projects focus on the need for policies that support, encourage and enable tribes to take a leadership role in expanding their forest management practices to lands beyond the reservation. Tribes are uniquely positioned to become the hub or anchor of collaborative landscape level management. Policies that need to emerge include those that support funding for staffing, education and training, facilitate true, respectful and active tribal participation in collaborative planning, especially with federal agencies, and overcome current obstacles in consultation and partnering with agencies.

Sustaining Our Natural Resources as Climate Changes
Initiatives and Research
Intertribal Timber Council (ITC)


Presented at NCAI Tribal Leader/Scholar Forum
June 26, 2013
Don Motanic
ITC Technical Specialist

Sustaining Our Natural Resources as Climate Changes
Initiatives and Research

- Background
- Initiatives
 - ITC Strategic Plan Process 2005 - 2014
 - Anchor Forest
- Research -Intertribal Natural Resource Coalition
 - Our Natural Resources (ONR)
 - ITC Research Subcommittee
- Next Steps

Sustaining Our Natural Resources as Climate Changes
Initiatives and Research

- Background



- Intertribal Timber Council (ITC)
 - ITC formed in 1976 as a Non-Profit
 - To improve communications BIA-Tribes
 - 60+ tribes nationwide are members
 - 36 annual symposiums
 - Recommendations recorded each year
 - Recommendations guide projects
 - \$500,000 awarded in scholarships
 - Three person staff w/30 volunteers + consultants

Sustaining Our Natural Resources as Climate Changes
Initiatives and Research

ITC Strategic Plan
2005 - 2014

- Goal – Influence Natural Resource Policy
- Objectives – Use Tribal Forest as Models
- Critical Stress Factors – items to go right
- Barriers Identified
- Strategies – Establish, Develop, utilize & revise
- Action/Status – What, Who & When
- Result – Anchor Forest Project-
 - Tribe + Federal + State Forestland

Sustaining Our Natural Resources as Climate Changes
Initiatives and Research
ITC Strategic Plan Details

Goal and Statement	Objectives	Critical Stress Factors
Goal 3: Natural Resource Management Policy & Practices It is a goal of the ITC and member tribes to have significant influence on development, adequate funding, implementation and monitoring of public natural resource programs and best practices that influence management of tribal lands and traditional areas.	FEDERAL FOREST AS MODELS 1. Increase public awareness and acceptance of the potential benefits to be gained from managing tribal lands through resource management and increase viability of successful traditional resource management examples and tribal participation in meetings to influence the development of policy. 2. Develop mechanisms to cooperate forestland owners for ecological services.	(These list must go under to achieve objectives) 1. Administrative and financial constraints 2. Public credibility to address the uncertainty of self-management 3. Lack of resources on tribal resource policy direction 4. Natural resource management has a priority for tribal governments

Barriers	Strategies	Action Plan - Status 2012
1. Lack of available resources to complete the ecological services 2. Short-term nature of tribal agreements and ability to maintain continuity of policy 3. Low return on forestland economic value 4. Long-term threat of federal funding (SAC) on tribal lands	1. Establish, develop, utilize, extend public-private partnerships to increase management sites and economic viability and increase tribal participation in the research to complete 2. Increase tribal land ownership and cooperative forestland owners	(What You Want) 1. ITC received funding from the U.S. Forest Service to conduct an Anchor Forest Project, which will include tribal, state of Washington and U.S. Forest Service land resources Washington Anchor Forests including cooperative research with resource management 2. Administrative preparation for collaboration with community participation in long-term management objectives, and 3. Programs and activities support tribal land management practices and will include administrative and technical assistance, and 4. Long-term agreements, supported by energy systems, professional staff and geographic information systems, and 5. Technical and professional capacity development.

Sustaining Our Natural Resources as Climate Changes
Initiatives and Research

Anchor Forests
An Intertribal Timber Council Project



Anchor Forest

A multi-ownership land based area which will support sustainable long-term wood and biomass production levels backed by local infrastructure and technical expertise, and endorsed politically and publicly



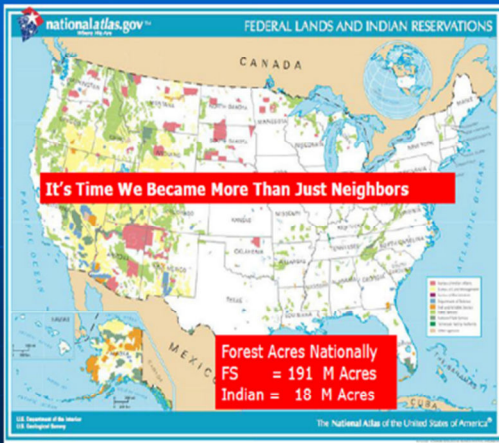
Sustaining Our Natural Resources as Climate Changes
Initiatives and Research

Why do we need Anchor Forests?
Losing 1 million/yr. forestland in U.S. (USDA)

- Political Conflicts (especially on Federal lands)
- Legal Challenges
- Low return on investments → Conversion
 - Uncertainty for larger timber companies
 - Timber Investment Management Organizations
 - Family Forests (risk/estate taxes/lack of interest, etc.)
- Catastrophic losses from insect/disease/wildfire
- Growing uncertainty – climate change, invasive species, infrastructure loss, loss of skilled labor, poor domestic markets, increases on substitutes and imports, etc.
- Urban population culturally & politically uninformed



Forest Service shares 2500 miles of common border with Indian Tribes also border state forest land



Tribal Partners

- Permanence
- Dependence on natural resources
 - Intimate ties between communities and environments (economic, cultural, spiritual)
 - Commitment to stewardship and sustainable use
 - Adaptability to change
 - Reserved rights to water, hunt, fish, graze & gather
 - Multi-generational, place-based experience
 - Time viewed as an infinite event not just a finite unit of measure

Differences in Management

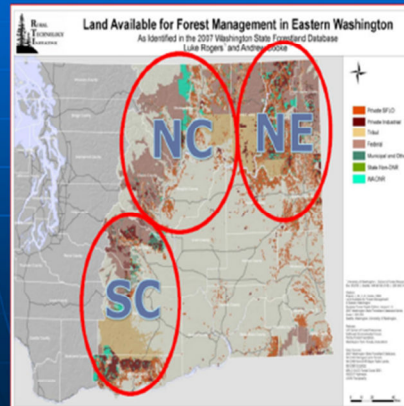
Tribal Lands

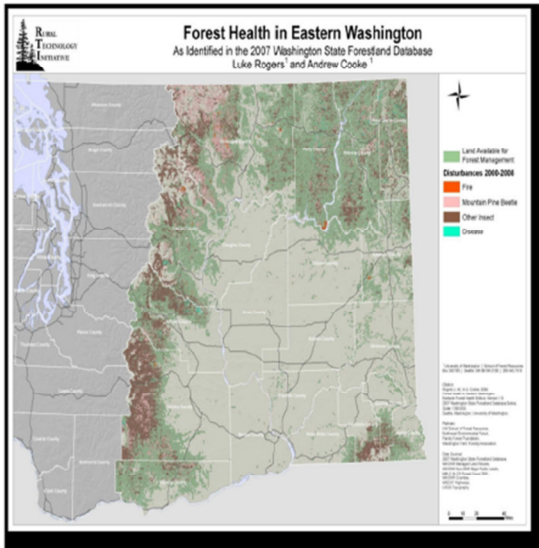
USFS Lands



Applied Regionally

Capable of sustaining combined annual harvest of ~100 MMBF. Most likely a combination of Tribal, WDNR Trust, and NFS Lands





Sustaining Our Natural Resources as Climate Changes
Initiatives and Research

ITC Project

- Anchor Forests – Forest Service Region 6 (NW)
 - Tribal, Federal, State of Washington Forests
 - Eastern Washington State DNR
 - Tribes
 - Yakama
 - Colville
 - Spokane
 - Coeur d Alene
 - Received \$694 K grant from Forest Service

Sustaining Our Natural Resources as Climate Changes
Initiatives and Research

ITC Project

- Anchor Forests – Tasks
 - Assess management plans – Tribe/Fed/State
 - Assess infrastructure
 - Identify funding sources to support
 - Quantify non-market value of eco-services
 - Identify barriers & develop recommendations
 - Results in 2014

Project Used in other parts of the nation?

Sustaining Our Natural Resources as Climate Changes
Initiatives and Research

www.ournaturalresources.org

ONR | OUR NATURAL RESOURCES
HONORING THE NATURAL LEGACY OF INDIAN COUNTRY

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National Tribal Resources Strategy
Tribal lands and values are at the core of our identity. Tribes can ensure this sacred relationship remains intact and robust when working together and through strong public and private partnerships. The alliance is seeking broad review and input regarding the current draft of the Tribal Natural Resources Strategy.

Under the direction of tribal leadership, the alliance will continue to develop and advance this strategy. These action items are suggested via goals with subgoals listed in bullet format. Your input on this strategy is greatly appreciated. To submit your ideas and suggestions, please join our alliance via this website or feel free to contact Rose Whittehair at NCN at email rwhittehair@ncn.org or Jose Aguirre at jaguirre@ncn.org.

ONR IS AN ALLIANCE

■ National Tribal Natural Resource Strategy

Goals

1. Tribal government involvement
2. Add funding for tribal natural resource management
3. Advance tribal wisdom in natural resource research
4. Participation by all sectors of the tribal community
5. Support Our Natural Resource coalition



Biofuel
To
Biochar

■ Goal 3 – Advance tribal wisdom

Objectives

- Add resources for practitioners
- Identify and support protection and advance practices
- Improve or develop protocol with practitioners
- Tribes receive benefit from research and management



■ Goal 4 – Participation by community

Objectives

- Increase resources for community participation
- Provide process to share information and practices
- Support partnership with research institutions



■ ITC Research Subcommittee

- Identify and prioritize community needs
- Increase resources for community participation
- Provide process to share information and practices
- Reduce barriers to research for tribes
- Support partnership with research institutions
- Coordinate with NCAI - PRC

Next Steps –

Follow Anchor Forest Results 2014
www.itcnet.org

Support Our Natural Resources Coalition
www.ournaturalresources.org

Thank You



Strategies for mobilizing and supporting Native communities responding to climate change challenges

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The discussion is based on plans to establish a network of Tribal Colleges and Tribal communities that engage in climate change-related research projects, accessing technical support from experts in the climate change research community, and sharing climate change response strategies across communities.

Relevance to Forum Theme

The panel will discuss a research activity intended to explore strategies for engaging and supporting multiple American Indian and Indigenous communities seeking to address climate change issues, and that are willing to explore and share effective response strategies across communities. The panel will explore models for building Indigenous community capacity for understanding and responding locally to climate change. Emphasis will be on:

- community-driven climate change adaptation/mitigation efforts
- collaborative knowledge creation and sharing
- collective analysis of data collected through community-based field observations
- incorporating Traditional Ecological Knowledge across communities
- policy implications for Tribes and Tribal communities to support community-based adaptation and mitigation

Proposed pilot research

The project will employ participatory design/research methodology, in which Tribal stakeholders will be involved in all aspects of project planning and implementation. A proposed project will be discussed in which pilot teams from Tribal Colleges (faculty and students) would be recruited to pilot an online research course involving multiple Tribal communities. Using the course as a project management vehicle, teams within each community will investigate a local climate change-related issue and explore response strategies.

A strong focus will be on creating mechanisms for tapping the collective knowledge and experience of Native people across Tribes and communities, and to address climate issues collectively, drawing on students, educators, and other community stakeholders. The role of Tribal leaders in this project will be to motivate their community members (including NGOs) to take action, and to bring community resources to bear where appropriate.

How the panel addresses change in Native communities

The proposed research will explore strategies for engaging and coordinating the activity of individuals across Tribal communities to collectively address common environmental issues

associated with climate change. Focus of these strategies will be on increasing the resilience of Tribal communities to emerging environmental threats, as effective adaptation strategies are identified and disseminated across an expanding network Tribal governments, communities, and groups addressing climate issues.

How the discussion will support Native communities in planning for this change

The research is intended to explore a research and education model that will help to ensure that each Native community has the information and expertise locally to support informed decision-making around climate change adaptation and mitigation. The priority is on empowering communities to take action collectively to address local issues. Information and communication technologies are used to support communication and collaborative problem solving by local communities and tribal leadership.

Some policy priorities to be explored by this work

- Tribal agencies and services resources needed to identify climate issues that affect their programs and ability to deliver services
- Degree of dialogue across tribal communities on climate change adaptation and mitigation issues and anticipated challenges to Tribal communities
- Tribal role in ensuring strong partnerships with the entire stakeholder community, including federal agencies, e.g. the National Science Foundation, USDA, EPA, BLM, and the BIA.

Tribal Colleges & Universities

Mobilizing Native Knowledge- building to Address Climate Change

National Congress of the American Indian
June 26, 2013

37 TCUs – 79 Sites in U.S.

Serving 88,000+ American Indians in 15 states through academic and community education programs.
34 TCUs are chartered by their respective Tribal governments; 3 are chartered by the U.S. government)

TCUs & Indian Lands

TCUs:
American Indian
Higher Education
Where the Indians
Are!

TCUs:
MT & ND: All Tribes = TCUs
AZ, MT, ND: Largest Tribes = TCUs

TCUs: Change Agents...

**TCUs
Are Leading
American Indian
Communities
As Innovative &
Cost-Effective
Agents of Change
& Restoration:
TCUs ARE Nation
Building!**

Our Land: 1994 Land Grant Programs

Extension Programs: Community Programs

- › Youth Outreach, Nutrition & Health, Economic Development

Research:

- › Range Management, Water Quality, Native Plants, Food Science & Nutrition, Animal Sciences



Education & Endowment:

- › Natural Resources, Environmental Science, Land Management, Animal Sciences







Climate Change Impacts

- Ecosystem changes
- Increased wildfires
- Higher temperatures
- Ocean acidification
- Forest loss
- Habitat damage
- Reduced access to traditional food sources

Impacts continued


- Reduced access to water for consumption and irrigation

Tribal Response Issues

- Need to monitor effects locally
- Need to share data across tribes
- Need to anticipate challenges before they become severe
- Need mitigation strategies
- Relocation may be only option in some cases – need to assess all options

ALL RESPONSES REQUIRE RESOURCES



Indigenous Research Strategies

- Holistic perspective
- Focus on relationships
- Emphasis on observation
- Build on traditional knowledge
- Community engagement
- Cultural understandings provide local framework for response



What is a MOOC?



- Massively online open course
- Courses available to anyone with no limits on attendance and no cost to student
- Many methods of presentation
- Remarkable opportunities for collaborative learning
- Creates large meeting place for ideas



Adding Participatory Research: the *Connectivist* MOOC

- Students *contribute*, not just assimilate knowledge
- Engages multiple communities in knowledge building process
- Collective analysis of observations
- Incorporates and shares local knowledge
- Local control of the inquiry process



Connectivist MOOC cont'd



- Diversity of issues and perspectives
- Focus on interactivity and connectedness



A Native Climate Change MOOC

- Recruit groups of concerned citizens from multiple Tribal communities
- Provide basic information about climate change science and data collection methods
- Connect with relevant local Tribal agencies
- Facilitate local research/mitigation projects
- Generate cross-community dialogue



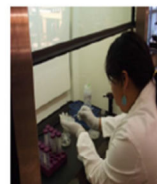
Native MOOC Features

- Each Tribal community/group identifies local climate change issues to explore
- Share observations across communities
- Collaborative problem-solving involving all MOOC participants
- Communities identify and develop local responses



Research Questions

- Can we engage significantly more Tribal communities in climate change research and response?
- Can we generate critically needed research outcomes cost-effectively?
- Can this approach help to *decolonize the global response to climate change*?



Power of Partnerships

*... tools alone do not create
educational change. The power is
not in the tool but in the
community that can be brought
together and the collective vision
that they share..."*
M. Riel



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BREAKOUT SESSION: Measuring Success in Native Education

The Role of Culturally Responsive Pedagogy in the Implementation of Common Core State Standards

Dawn Mackety, PhD, Director of Research, Data and Policy, National Indian Education Association
dmackety@niea.org

This presentation will provide an overview of recent research and recommendations that address the role of culturally responsive pedagogy in the context of implementing Common Core State Standards (CCSS). In addition, we'll discuss ways that Native communities are becoming engaged in the CCSS implementation process. Native communities must be involved if our nation's education systems are to effectively prepare Native students for economic, civic, and cultural transformation that is relevant to Native communities.


Key questions:

- What is the role of culturally responsive pedagogy in the implementation of Common Core State Standards?
- How can Native communities become involved in the implementation process?

Native communities have historically been excluded from states' processes to implement a new set of standards for their education systems. The change is that implementation of CCSS offers an opportunity for many Native communities to be involved in the standards implementation process. In some states, education leaders are looking to Native communities for assistance.

This presentation will offer promising practices and recommendations for how Native communities can become involved in the CCSS implementation process.

- The inclusion of culturally responsive pedagogy in the education of Native students.
- The advancement of self-determination and tribal control of education.



The Role of Culturally Responsive Pedagogy in the Implementation of Common Core State Standards


Dawn M. Mackety, Ph.D.
 NCAI Policy Research Center Tribal Leader/Scholar Forum
 June 26, 2013

National Indian Education Association | www.niea.org

Culturally Responsive Pedagogy

Defined as "using the cultural knowledge, prior experiences, frames of reference, and performance styles of ethnically diverse students to make learning encounters more relevant to and effective for them."

(Gay, 2010, p. 31)



Culturally Responsive Pedagogy

Characteristics:

- Affirms that home culture influences student learning
- Incorporates culture into class content
- Builds bridges between home and school
- Uses a variety of instructional strategies
- Empowers students

(Gay, 2010, 2013)


- Incorporates Native teachers in the school
- Engages communities and tribes

(Castagno & Brayboy, 2008; Brayboy & Castagno, 2009)

Enculturation

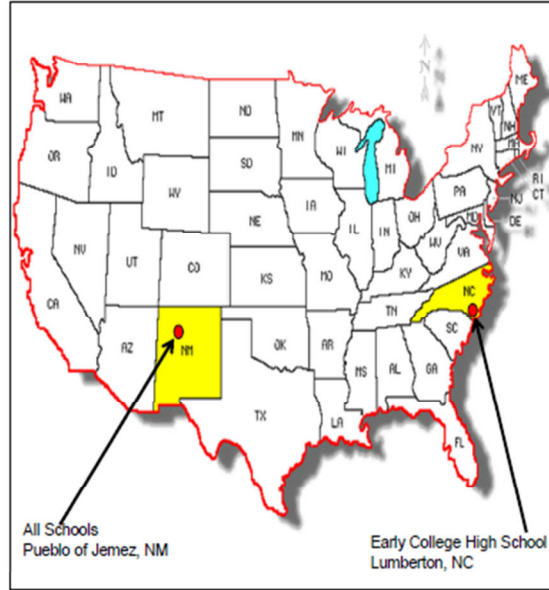
...is directly related to Native student academic success

(Ward, 2005; Whitbeck, Hoyt, Stubben, & LaFromboise, 2001)






- State-led
- Aligns diverse state curricula
- K-12 English language arts and mathematics
- Career and college readiness
- Internationally benchmarked
- Adopted in 45 states
- Optional 15% additional standards




Robeson Early College High School



- Lumbee Tribe
- College campus
- 200 students
- 40% Native, 76% poverty
- National Blue Ribbon School
- Dual diploma and Associate's degree

(Dorer & Fetter, 2013)

Culturally Responsive



- Family and community support and engagement
- Culturally responsive teaching, culturally relevant curriculum
- Student-teacher relationships
- High expectations and standards
- Acceptance



Tribal Engagement



- Indian Education Resource Center
- Tribal members as teachers and leaders

Jemez Valley Schools

- Jemez Pueblo
- Public, Charter & BIE
- 500 students in district, 200 in BIE
- 54% Native, 83% poverty
- Graduation rates exceed state's rates
- Joint professional development

JEMEZ VALLEY HIGH SCHOOL

Cultural Relevance



- Active Tribal Education Department
- Language speakers in the classroom
- Pueblo as a classroom
- Common Core State Standards and cultural responsiveness training for teachers

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Living and Learning in Relationships: Science Education in an Urban Context

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During this session we will present findings and discuss implications of collaborative research projects centered on science and science education. This work began in 2005 when the American Center of Chicago (AIC), the Menominee Tribe of Wisconsin Language & Culture Commission, and Northwestern University partnered on the project called, Context of Learning: Native American Science Education (CCL). CCL is a *community-based design research* (CBDR) project focused on supporting students' navigation between and through Indigenous and western modern scientific ways of knowing. This project aimed to retool design methodologies that typically reify power paradigms and position non-community members as determiners of learning objectives, pedagogy, and assessments, into a method that helps to decolonize teaching and learning and move community towards self-determination in Indigenous education (Tippeconic, 2002).

This talk will focus on the work in the Chicago community, a culturally and socioeconomically diverse urban Native American community. Currently in the U.S. 70% of Native youth reside in urban communities, which is in part due to the assimilative federal policies of the mid-20th century, which aimed to remove Native people off reservation land and into urban communities. We recognize both the harmful impact research conducted by non-community members has had in Native communities as well as the paucity of research around science education in Native, especially urban Native, communities. Therefore we seek to understand everyday learning practices of our community while creating innovative learning environments to meet the needs of urban Native children and their families. More often than not, there is no more than one Native student per classroom. Therefore our work is operationalized in out-of-school contexts i.e. an afterschool program, the surrounding neighborhood of the community center, and local forest preserves. Our primary focus in programming is on building relationships to land, our ancestors, and each other through repeat engagement with land.

In the fall of 2011 we were funded to continue building upon this work, especially as it pertains to culturally based citizen science and early childhood education. This presentation will take up issues of early childhood science learning in Indigenous communities specifically and make connections to how the release of the new national science education framework will have massive impacts on science education across Indian country. Our methodologies broaden insights in the academic world while immediately contributing to the local Native community through our community developed programming.

The design of our research projects intentionally proposed reconfiguring teachers' and community members' role in the design of a learning environment integrating levels of classroom, content, and pedagogy. We wanted to open a space for community members to engage in reclaiming the classroom level of teaching and learning for Indigenous children (Tuhiwai Smith, 1999). Indigenous scholars have suggested that part of what is required in moving towards self-determination will be the reclaiming, uncovering, and reinventing of our theoretical understandings and pedagogical best practices at the classroom level (i.e Battiste, 2002; Bang, 2008). We propose that this methodology helps us to take seriously students' intellectual resources and their relationship to disciplinary knowledge, as well as community-based expertise. In short, community members engaging in the design process reconfigures power dynamics in formal education and the development of new theory and practice from community perspectives. Further our methodology helps to support communities' resilient, creative, and generative responses to national policies that may or may not have had our communities and ways of knowing in mind.

Our work engages various research methodologies to help us understand the complex layers of knowledge- and consensus-building within the context of our community. We conducted a close study of epistemological and ecological orientations in urban and rural Native-American and European-American children and adults. Our focus on epistemology has been shaped by Indigenous scholarship that suggests epistemology is the foundation of understanding teaching and learning in Indigenous contexts (Cajete, 1999; Meyer, 2002) as well as education research focusing on the impacts of epistemological orientations on reasoning (Hammer & Elby, 2003). Our findings reveal the importance of culturally-variable epistemological orientations and children's cognition and development. We have found striking convergences across studies and measures that have significant implications for the design of science learning environments and for issues of teaching. Our studies provide empirical evidence for a need to focus on the relationships between Indigenous ways of knowing and science learning.

This work contributes to a larger endeavor of reclaiming Indigenous ways of knowing and education at the community level. There are several compelling reasons why schools should pursue community based, project-based knowledge. First, it engages children and their families as producers of, as well as consumers of, knowledge. Second, it engages educators as learners as well as teachers. And finally, it places value on the funds of knowledge possessed by minority communities, including their technologies, by equalizing this knowledge with the 'official knowledge' transmitted in schools. It makes education into an equal, intercultural exchange between groups, rather than the hegemonic transmission of the knowledge possessed by those in power. (Hammond, 2003). Further, the release of the new science framework is the most significant shift in science education since the 1960s and marks a potentially dramatic and important opportunity for Indian country. Our findings help to make concrete potential pathways and steps towards this possibility.

We also recognize the importance of building meaningful collaborations between reservation and urban Native communities.

Our work has been addressing policy priorities in many ways. We've employed two related and mutually supporting panels of studies. The first is concerned that informal learning in contexts that are not explicitly designed but which support various forms of engagement with the

biological world. The second panel employs explicit design research methodology but is distinctive in being community-based. Typically, citizen science programs involve scientists presenting lay people with relevant projects that are well established (though they may certainly be modified by feedback from participants). These studies are important to both theory and policy because there is paucity of research in urban and reservation Native American communities and, to our knowledge, there is little work on culturally based citizen science programs, likewise with early childhood education programs.

Over the years we have reframed our views of land by seeing and living urban land as indigenous land. We exercise our sovereignty as Native people by harvesting and managing land in culturally appropriate and sustainable ways throughout Chicago. For example, we are using traditional burn practices as both learning and restorative tools at our community site and surrounding areas. Finally we are laying the groundwork for land-based educational practices, which we view as a potentially important learning and teaching tool at every level of academic institutions.




Acknowledgements

- * Indigenous peoples whom's homelands we are on.
- * NCAI for organizing and holding this meeting.
- * Elders, adults, & young people in the Chicago inter-tribal community and the Menominee Nation community
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Living and Learning in Relationships

NCAI tribal leader/scholar forum 2013



Dr. Megan Bang University of Washington
 Jasmine Alfonso Northwestern University
 Fawn Pochel American Indian Center of Chicago
 Lori Faber Northwestern University




Broad context of our work:
 Science and Science Education in Indigenous Communities

The need for improved science education in our communities is critical for at least the following reasons:


- Natural Resource Management
- Economic development
- Issues of climate change

We also think that science education is a critical site of identity development and cultural vitality – or unfortunately sites in which identity and cultural vitality is often undermined unnecessarily.

- Science classrooms typically are places in which children are directly or indirectly taught that our traditions and ways of knowing are wrong (e.g. water and rocks are non-living things.)
- Where European-american ways of knowing are privileged.
- Importantly, the science that is being taught is outdated (e.g. WOL/TOL).
- Science education needs improvement for all kids not just Native kids.



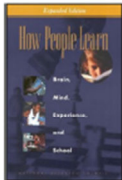
PART 1: A BRIEF LOOK AT THE NATIONAL SCENE IN SCIENCE EDUCATION RESEARCH AND EMERGING POLICY



Human learning and development are fundamentally cultural processes.

Identity is no longer a "variable" or categorical membership.

- More than the overlay or additive model – "Make the cultural connection" – it is the center.
- Nothing is acultural. Knowledge and knowing is always cultured – All people live culturally.
- Culture is conceptualized as the diverse repertoires of sense-making practices (tools, social arrangements, ways of seeing, explaining, talking, etc.) developed and dynamically shaped by communities in order to accomplish the purposes they value.
- Diversity/heterogeneity seen as a strength and opportunity rather than challenge to be overcome.



2004

Handbook of the Cultural Foundations of Learning

NEW BOOK 2015



What does this mean for Science Education?

- * Significant shifts underway...science literacy verses becoming scientist
- * NCLB – decline of STEM in K-8, at least.
- * Advances in understanding science education
 - Taking Science to Schools
 - Learning Science in Informal Environments
- * The New Framework
- * Next Generation Science Standards:
 - Scale up of early childhood's focus on academic readiness includes "early science".






Some key shifts in the Framework & NGSS

The "practice" turn: A focus on the practices of science and engineering – not just content;

- Inclusion of engineering;
- An attempt to incorporate these "new" views of learning and development;
- A recognition of science, and thus science education, as a cultural endeavor;
- A recognition of privileging of western-European science in school science;
- A challenge to deficit views of children.



Culture/Science

"Science has been described as being "heavily dependent on cultural contexts, power relationships, value systems, ideological dogma, and human emotional needs" [26]. Although this view is a contested one, seeing science as "a culturally mediated way of thinking and knowing suggests that learning can be defined as engagement with scientific practices" [27]. When people enter into the practices of science or engineering, they do not leave their cultural worldviews at the door. Instruction that fails to recognize this reality can adversely affect student engagement in science (NRC, 2012, p. 284)."



What?

While we are not necessarily advocating that NGSS is great, we are recognizing that it will be the dominant paradigm for science education for the next 10-15 years.

- How are these shifts aligned with or in conflict with what we know about education with Indigenous youth and in Indigenous communities?
- How do we strategically prepare for these shifts?
 - Changes in teacher education/professional development?
 - Conceptual/practice focus shifts?
 - Curricula shifts?
- How might we leverage these shifts within our own communities towards our own ends?



PART 2: OVERVIEW OF OUR RESEARCH



Broad context of our work:
Science and Science Education in Indigenous Communities

An overall concern and desire to change STEM achievement:

- Native peoples are severely **under-represented** in science, technology, engineering, and mathematics (STEM).
- There is an opportunity gap for Native students to have access to high quality instructions.
- Science education fails to engage Native students and their identities and thus there needs to be culturally responsive instruction.

All true and important dimensions, however in our work we focus on issues of culture and epistemology or what we might call Indigenous knowledge systems (IKS)...



Broad context of our work:
Science and Science Education in Indigenous Communities


STEM and CULTURE:

"The cold gave me my language. The cold gave me my culture. The cold makes me who I am. Without it, I am nothing."

Source: Karamahly, Tanya, Editor & Publisher, February 19th, 2016, Indigenous speech

Not just an issue of representation, fundamentally issues of survivance and sovereignty (Vizenor, 2002)

"Epistemology, the study of knowledge, is the starting point for any discussion of indigenous education. It is also a discussion of the priorities and need for identity. Understanding what Native peoples believe about their knowledge origins, priorities, context, and exchange teaches us more about its continuity. Knowing something, then, is a cultural experience that strengthens or fractures culture (Meyer, 2002)."



IKS as (in part) relational epistemologies

The ways in which knowledge, knowledge organization, knowledge construction, and knowledge dissemination are rooted in the premise that **"everything is related, that is, [everything is] connected in dynamic, inter-active, and mutually reciprocal relationships"** (Cajete, 2000).



Learning about the natural world



- Central to Indigenous knowledge systems and who we are as Indigenous peoples
- Human activity (all people do this in some form)
- Part of the developmental process
- Central to science education are constructions of nature and relationships between humans and nature: however they privilege particular forms of these.

Cajete, 2000; Daniels & Wilbur, 2001; Madh & Aron, 1988



Communities involved in research

- Inter-tribal Native community (Chicago)
 - Founded on federal relocation policies during the 50's & 60's
 - 32,000+ Native people, with over 100 tribes represented in Chicago-land area
 - 20+ community based organizations and institutions
- Rural Native community in Wisconsin (Menominee Nation)
 - Tribal Schools, Public Schools, Tribal College, and Private College
 - Primary source of employment is a logging company: received world recognition for its sustainability practices.
 - Still in economic recovery from federal termination policies
- Rural non-Native community in Wisconsin (Shawano)
 - "Border town"
 - Primarily European American
 - Middle Class & Working Poor
- Urban/Suburban communities around Chicago

• Sometimes we do cross-cultural studies however these are done not in a norming sense but rather as ways to make concrete cultural variability.




Collaborative capacity building research

• **Partners** between the American Indian Center of Chicago, Menominee Nation, Northwestern University and the University of Washington.

- Financially distributed (not just subcontracts).
- University IRB and Tribal IRB and Community approval, leadership, participation in, and feedback about research.
- Capacity building in community through community designers, teachers and researchers.
 - Community members take up these roles – become pathways to working with youth, teaching, college, and graduate level education
 - Community collects, analyzes, reports, presents findings



PART 3: TWO EXAMPLES OF LEARNING ENVIRONMENTS



**Strand 3: Community Based-Design Research:
Transforming Power Towards
Educational Self-Determination**





Informed by decolonizing methodologies:
"Design based experiments" intended to
engage at the classroom level event

- Deeply situated and historically rooted level in history of Indian education and the ways in which this history has impacted day-to-day classroom level events.
 - Classroom teachers still overwhelmingly non-Native
 - Learning goals overwhelming defined by federal government
 - Curricula still predominantly created outside of communities
 - Need to expand our collective "pedagogical reasoning"
 - Designing learning environments involves a wide range of decisions (e.g. what should be learned, how it should be learned, by whom, etc...). DBE is a research methodology that takes up these decisions and their impacts on teaching and learning in rigorous ways.
 - Research based benefits (i.e. teacher sense making of student ideas, and ways to shift thinking about culture) see Ball & Cohen, 1999, Rosebery & Warren, 2008, Nasir et al, 2006).
- Indigenizes the development of learning environments as well as the learning environments



"Land Based" learning environments

- Driven by community design process – learning goals determined by community members through series of meetings, talking circles, site visits, and other activities.
- Anchored in specific places – we develop curricula based on the places and community goals.
- Primary purpose is to rebuild relationships to land – even in urban environments.
- Engage students in traditional subsistence practices (e.g. harvesting) and other cultural practices (e.g. storytelling).
- Focused on understanding Native science and Western science.
- Two specific project for today:
 - 1 on early childhood science learning: Little Ones
 - 1 on intergenerational science learning: Community Based Citizen Science
- However these projects are intertwined.



Content/Disciplinary focus:
Biology and Ecology

Programming focused on:

- Land Management and ecological restoration
 - E.g. Mapping indicator species, prairie burns, clearing invasive species, and desalinating soil
- Food sovereignty and wellness
 - E.g. Community and home gardens
- Harvesting rights and practices
 - E.g. plant medicines, making soaps/scrubs, mats, and other everyday supplies

For today we thought we'd show you some examples.



Restoration and Land Management at Dunning
Reed

"Our work has unfolded and gained increasing visibility in the city...Eventually we became part of the management team for 25 acres – Dunning Reed – which now serves as one of our "classroom sites."


- Part of the goal is to restore Dunning Reed to prairie.
 - Some key challenges: Invasive species and soil composition
 - Engaging in burning practices to remove invasive and stimulate prairie plants.



Controlled Burns
at Dunning Reed


- Burn practices are old Indigenous technologies/land management techniques.





Dam Building at Dunning Read

- "Beaver dam technologies"
- Experimenting with practices to desalinate the soil

Harvesting and subsistence practices

Many of our activities situate things in the context of harvesting and subsistence practices – especially with early childhood programming.

- Foundations of food sovereignty.
- These are our traditional land management practices.
- These are rich learning experiences where children develop observation and explanation skills.
- Also ways for us to teach youth about traditional protocols.



Digging edible roots from community garden




Sopomah: Learning to tap trees for sugaring



Taking a science walk:
Observing plants, animals, water, and more



Learning about "invasive species" and "indicator species"





Making our indoor classrooms just as engaging!




Early science learning in indoor classrooms!




Enhancing science learning in the classroom through: ecological storytelling, perspective taking, critical science reading circles, ecology stations, garden and observing walks, intergenerational hands on fun!



What might be "scaleable" practices?

Land based pedagogies – science education rooted in our practices and ways of knowing.

- Has real and potentially transformative connections to the practice focus in NGSS.
- Re-engaging communities at the "classroom" level.
 - "New" instructional practices that improve academic readiness and strengthen community.
 - Engaging with technologies that are rooted in traditional technologies and developing them in contemporary contexts.
- Developing grassroots pathways towards education and research related professions.
- Research partnerships that build community capacity.



Some on-going challenges

We are always thinking about how to center heritage languages but there's much work here to be done.

- Community infrastructure and data security
- Funding
- Interfacing with public school teachers and administration
- Collaborative quality reciprocal relationships with non-Native organizations (e.g. Park districts)

Promoting Culture and Language Revitalization as a Community Health Measure

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- This panel will review the research on culture-based curriculum and instruction and language immersion schools to demonstrate the importance of tribal governments, communities and parents supporting tribal language and culture revitalization efforts, especially by supporting the establishment of language immersion schools.
- A review on the positive impact of language and culture revitalization efforts, especially immersion schools, on student and community wellbeing by healing communities, bridging generational gaps, and supporting children's learning. Studies that show the impact of culture-based curriculum and instruction and indigenous language immersion schools on student learning and behavior will be reviewed.

This panel examines how Indigenous language and culture revitalization programs are teaching tribal languages to develop a strong positive sense of identity in their children and improve their chances for success in school and in life. Midgette (1997, 39) writes, "I have heard several Native Americans speak feeling about their sense of rootlessness and despair, and how they recovered when their grandmothers taught them to speak Tolowa, or Navajo, and they regained a sense of themselves and their heritage." Interviewing Navajo elders, Parsons Yazzie (1995) found, "Elder Navajos want to pass on their knowledge and wisdom to the younger generation. Originally, this was the older people's responsibility. Today the younger generation does not know the language and is unable to accept the words of wisdom" She concluded, "The use of the native tongue is like therapy, specific native words express love and caring Knowing the language presents one with a strong self-identity, a culture with which to identify, and a sense of wellness" (p. 3). An elder told her stated in Navajo: "television is robbing our children of language" (p. 135). As indigenous children learn English or other "National" languages and cultures through the media and in schools, they increasingly become separated from their heritage, and some cannot speak to their grandparents. As one of Parson Yazzie's informants told her, "Older people who speak only Navajo are alone" (p. 4). Many American Indians see

language as the key to their identity, and they question whether one can be Navajo, Crow, Seminole, and so forth without speaking their tribal language.

Students of whatever race or culture who are not embedded in their traditional values are only too likely in modern America to pick up a unhealthy lifestyle of consumerism, consumption, competition, comparison, and conformity. Furthermore Hallett, Chandler and LaLonde's (2007), examining data from 150 First Nations communities in British Columbia, found that communities with less conversational knowledge of their native language had suicide rates six times greater than those with more knowledge.

In the 1970s, the Rock Point Community School Board felt "that it was the breakdown of a working knowledge of Navajo kinship that caused much of what they perceived as inappropriate, un-Navajo, behavior; the way back, they felt was to teach students that system" (Holm & Holm, 1990, p. 178). To counter the decline in behavior the Board established a bilingual education program that promoted literacy in Navajo and English along with an extensive Navajo Social Studies component that included the theory of Navajo kinship. This program has been modified and continued in the Window Rock Public School's Navajo Immersion School where it was found that, "More-traditional Navajo expectations of children were that they would work hard and act responsibly—in adultlike ways. Anglos tend to expect children to act in more childlike ways.... More-traditional parents tend to perceive such [childlike] behavior as self-indulgent and irresponsible. At worst, children come to exploit the gap between parental and teacher expectations" (Arviso & Holm, 2001, p. 209). At Window Rock, a researcher found, "Navajo values are embedded in the classroom pedagogy" (Reyhner, 2006, p. 79) and changed students' behavior for the better. The Navajo Nation's "*Diné Cultural Content Standards* [for schools] is predicated on the belief that firm grounding of native students in their indigenous cultural heritage and language, is a fundamentally sound prerequisite to well developed and culturally healthy students" (Office, 2000, p. v).

Other Native Nations have similar views. Janine Bowen's 2004 case study of an Ojibwe language program found that the decline in the use of the Ojibwe language was correlated "with a loss of Ojibwe traditions, the unraveling of the extended family, depression among Band members, high drop out rates among Ojibwe students, and an increasing amount of gang activity among youth" (p. 4). A former Ojibwe Commissioner of Education argued, "By teaching the language we are building a foundation for a lifetime of productive citizenship.... Ojibwe values are inextricably linked to the language. These values, such as caring for the environment, healing the body and mind together, and treating all creation with respect are taught most effectively when they are taught in Ojibwe" (p. 4).

Castagno and Brayboy (2008) review the extensive literature supporting culturally responsive education and find that recent educational reform efforts in the United States, including the No Child Left Behind Act of 2001 of the Bush Administration and "Race to the Top" of the Obama Administration are having a negative effect on Indian education (the new push for a "common core" curriculum also is likely to have a negative effect on culturally responsive teaching). The National Indian Education Associations *Preliminary Report on No Child Left Behind in Indian Country* (2005) also found negative consequences. Romero-Little, Ortiz and McCarty (2011), (Beaulieu and Figueira (2006), Reyhner (2011, 2010), Reyhner and Singh (2010a, 2010b),

Reyhner, Gilbert & Lockard (2011), and Reyhner and Lockard (2009) document extensive research supporting culturally appropriate education that includes utilizing indigenous languages as an instructional medium. Gilbert (2007) in his testimony to the U.S. House of Representatives Education and Labor Committee On the Reauthorization of No Child Left Behind in Indian Country, testified that Native children perform better academically when they are taught in a manner that is consistent with their traditions, languages, and cultures. McCarty (1996) states that data from the immersion school experience indicates that language immersion students experience greater success in school measured by consistent improvement on local and national measures of achievement. Finally, the 2007 Declaration on the Rights of Indigenous Peoples recently supported by President Obama Article 13-1 of the declaration reads “Indigenous peoples have the right to revitalize, use, develop and transmit to future generations their histories, languages, oral traditions, philosophies, writing systems and literatures, and to designate and retain their own names for communities, places and persons” and Article 14-1 reads “Indigenous peoples have the right to establish and control their educational systems and institutions providing education in their own languages, in a manner appropriate to their cultural methods of teaching and learning.”

A review of the extensive studies in the United States and New Zealand demonstrating that culture-based curriculum and instruction, Indigenous culture and language immersion schools, and indigenous language maintenance are associated with increased high school graduation rates, increased academic achievement, improved behavior of youth with related lowering of dysfunctional behavior, and lower suicide rates will be presented by the panel. The panel will describe immersion schools and revitalization efforts by Māoris (in New Zealand), Hawaiians, Navajos, Ojibwes, and other groups. Providing Indian nations and local communities with descriptions and results of model language and culture immersion and revitalization efforts can help them plan and implement their own educational programs better.

Based on the previous success of culture based curriculum and instruction and indigenous language immersion schools in the United States, New Zealand and elsewhere, Indian nations need to give increased consideration to founding, supporting, and expanding language and culture revitalization and immersion efforts in their communities and in public, charter and Bureau of Indian Education funded schools. This is in line with the United Nations’ 2007 Declaration on the Rights of Indigenous Peoples, the Native American Languages Act of 1990, the Esther Martinez Native American Languages Preservation Act of 2006, and other efforts.

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NORTHERN ARIZONA UNIVERSITY

Promoting Culture & Language Revitalization as a Community Health Measure

ASU ARIZONA STATE UNIVERSITY

Joseph Martin (Diné)
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Major Points for Discussion


Indian student failure attributed to an English-only emphasis & high stakes exams for promotion & graduation

Lack of highly effective Indian teachers (not just highly qualified)

Failure to recognize research on tribal language & its impact on learning & achievement

High stake exams & top down curriculum deemphasizing the "relational" aspect of learning valued by tribes

Relying heavily on standardized testing that produces unwise teaching for Indian students



History and Current State of Indian Education

Summed up in three words "battle for power"

Cannot talk accurately about Indian education, Indian youth & families or tribal nations without talking about power, sovereignty & self determination.

Since the civil rights movement, the emphasis has been on culture-based schools (but instruction has been in English)

New opportunities = new responsibilities

Point being: We alone are responsible for sustaining our tribal languages



BASICS

Systematic imposition by the majority culture robbing Indian children of their language, religion & values



Schools have disdained tribal culture

Teachers not knowing/ignoring tribal forms of knowledge (learning)

Indifference/neglect have prevailed

Education is supposed to put a stop to this!

Results: Tribal culture and language not emphasized leading to a major disconnect between education & tribal nation building






Highly Effective Indian Teachers are Critical (not just highly qualified)

One of the most critical but least considered re: improving education for Indian student is in the selection of teachers.

Comments from educators:

- "We need Indian teachers who are highly effective language teachers"
- "We want teachers who know how to teach within the framework of culturally responsive (They teach within the culture, not about the culture)"

Tribal Place-based Programs: A Grass Roots Initiative

- Tribal Language Programs
- Hopi Tribe Language Survey (1999)
- Western Influence
- Culturally-Based Education



Moenkopi, Arizona
Hopi Pueblo

Hopi Tribe Language Preservation Efforts

Hopi Lavayi Institute

- Goal: To Revitalize the Hopi Language
- Approach: Language Immersion

The Shooting Stars Hopi Language Radio Project

- Goal: To Develop an Educational Program for Young Children (Head Start)



Culturally-based Education: Promoting Healthier Communities



We Know That When:

- American Indian students will better learn the science curriculum in schools if they are grounded in their own traditional "Ways of Knowing."
- Students will acquire positive attitudes towards science and science education.


Connecting Traditional "Ways of Knowing" with Classroom Content (Food & Nutrition)

"Natwani" The Hopi Foundation

- Processes & rituals of the rejuvenation of all life.
- Intact web of obligation involved in the planting, harvesting, hunting & gathering of food.
- It is a physical & spiritual sustenance. "Promotes a Healthier Community of People"

Native Language, a Healthy Choice



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3 Critical Points

- Subtractive and Additive Education in Native America
- Examples of Additive Bilingualism
- What is Research Showing?

Subtractive and Additive Education in Native America

Lily Wong Fillmore

$$1 + 1 = 2$$

$$1 + 1 = 1$$

$$\sim 1 + \sim 1 = -1$$

Examples of Additive Bilingualism Arizona

- Native language is either the *medium* of instruction or *central* to instruction
- **Tséhootsooi Diné Bi' lóta' (TDB)**, Diné Language Immersion School, Fort Defiance
- **Puente de Hózhó Trilingual Magnet School** (The Bridge of Beauty), Flagstaff
- **Bahidaj High School**, Tucson
- **Rough Rock Community School – Dzill (dzil)**, strength or sacred mountains

Clear Evidence

- Community control *and* Native language immersion
- Well designed, planned and implemented academically challenging, additive schools or programs, where Native language is either the *medium* of instruction or *central* to instruction, *will* simultaneously create beneficial Native language *and* academic outcomes.
- Fundamental right to speak and teach their mother tongue to their children, *especially to the infants*.
- Keep the faith—speak or learn your Native language daily—“it’s good for you and your people!”
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Romero Little and McCarty (2006) reviewing Indigenous language immersion programs found:

- Time spent learning an American Indian language is *not* time lost in developing English.
- It takes approximately 5 to 7 years to acquire age-appropriate proficiency in a American Indian language when consistent and comprehensive opportunities in it are provided.
- American Indian language immersion contributes to positive child-adult interaction and helps restore and strengthen Native languages, familial relationships, and cultural traditions within the community.
- Literacy skills first developed in an American Indian language can be effectively transferred to English.
- Language and culture revitalization efforts are fundamental to tribal sovereignty and local education choice.

Ganado Mission School's Entrance About 1950



In 2007 the United Nations adopted the [Declaration on the Rights of Indigenous Peoples](#), which affirms, “Indigenous peoples have the right of self-determination.” Article 13 declares that they have the right to revitalize, transmit to future generations, languages, oral traditions, philosophies, writing systems and literatures, and to designate and retain their own names for communities, places and persons.”



Traditional vs. Television Values

A Diné elder told NAU Professor Dr. Parsons Yazzie, “You are asking questions about the reasons that we are moving out of our language, I know the reason. The television is robbing our children of language. It is not only at school that there are teachings, teachings are around us and from us there are also teachings. Our children should not sit around the television. Those who are mothers and fathers should have held their children close to themselves and taught them well, then our grandchildren would have picked up our language.”





Viewing photographs from her childhood Dr. Parsons Yazzie found no obese Navajos because Navajos used to eat a better diet and exercise more.

A nurse from the 1950s remembered a dentist saying he could tell how far Navajo children lived from a trading post by looking at their teeth. Those near the trading post had many cavities because of the soda and candy they ate.

Who Is Raising Our Children?

A Diné elder told Dr. McCauley, “television has ruined us. A long time ago, they used to say, don’t do anything negative or say anything negative in front of children. It doesn’t take that long for a child to catch onto things like this. Therefore a mother and a father shouldn’t use harsh words in front of the children.... These days...they see movies with people having sex in them and they’re watching. In these movies they shoot each other.... Movies are being watched every day, but there is nothing good in it.”

Dr. Parsons Yazzie found in her doctoral research that, “Elder Navajos want to pass on their knowledge and wisdom to the younger generation. Originally, this was the older people’s responsibility. Today the younger generation does not know the language and is unable to accept the words of wisdom.” She continues, “The use of the native tongue is like therapy, specific native words express love and caring. Knowing the language presents one with a strong self-identity, a culture with which to identify, and a sense of wellness.”

An Ojibwe Band saw the decline in the use of their language as correlating “with a loss of Ojibwe traditions, the unraveling of the extended family, depression among Band members, high drop out rates among Ojibwe students, and an increasing amount of gang activity among youth.”

The Ojibwe Commissioner of Education argued, “By teaching the language we are building a foundation for a lifetime of productive citizenship.... Ojibwe values are inextricably linked to the language. These values, such as caring for the environment, healing the body and mind together, and treating all creation with respect are taught most effectively when they are taught in Ojibwe.”

Respect and Self-Discipline

The Rock Point Community School Board felt in the 1970s “that it was the breakdown of a working knowledge of Navajo kinship that caused much of what they perceived as inappropriate, un-Navajo, behavior; the way back, they felt was to teach students that system.” Their answer was to establish a bilingual education program with an extensive Navajo Social Studies component that included the theory of Navajo kinship.




BIG BREAMS: Frank Lee, a second-grader at the Rock Point Community School on the Navajo Reservation, displays a book about himself, "I'll Be a Singer" (Stephen Yirinda photo)

The Rock Point Program was modified and continued at the Window Rock Public School’s Navajo Immersion School. There it was found that “More-traditional Navajo expectations of children were that they would work hard and act responsibly—in adultlike ways. Anglos tend to expect children to act in more childlike ways....” In the Navajo immersion school students tended to act more responsibly as that was the behavior that was taught and expected.


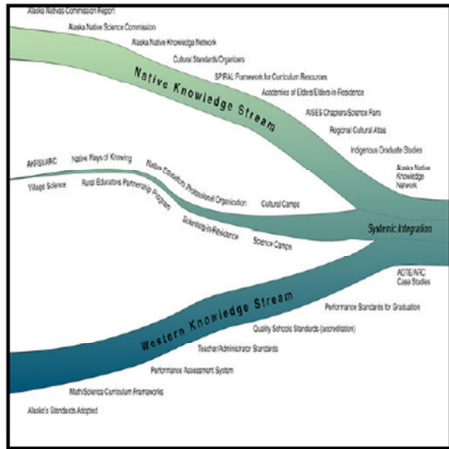


The Window Rock Navajo Immersion School emphasizes bringing traditional values into the classroom. "Navajo values are embedded in the classroom pedagogy." Teachers address their students according to Navajo kinship relations. A parent "noticed a lot of differences compared to the other students who aren't in the immersion program.... [The immersion students] seem more disciplined and have a lot more respect for older, well anyone, like teachers. They communicate better with their grandparents, their uncles and stuff. It seems like it makes them more mature and more respectful. I see other kids and they just run around crazy. My kids aren't like that.... It really helps, because it's a positive thing."

Sheilah Nicholas (2011) notes that her Hopi Elders link Hopi language loss to "un-Hopi" behavior by youth that includes "substance abuse, gang membership, and domestic violence" and how the "fundamental principles of the Hopi way of life are those of reciprocity and humility," which need to be transmitted to each successive generation to live a good life."



Sioux teacher and author Luther Standing Bear (1933) recalled being student through the doors of Carlisle Indian Industrial School in 1879 and taught in an American Indian day school; he concluded in his autobiography that young Indians needed to be "doubly educated" so that they learned "to appreciate both their traditional life and modern life."

Results of Assimilation on Immigrants to the United States
 The National Research Council (1998) found that immigrant youth tend to be healthier than their counterparts from nonimmigrant families. It found that the longer immigrant youth are in the U.S., the poorer their overall physical and psychological health. Furthermore, the more Americanized they became the more likely they were to engage in risky behaviors such as substance abuse, unprotected sex, and delinquency.

Hallett, Chandler and LaLonde's (2007) examined data from 150 First Nations communities in British Columbia and found that communities with less conversational knowledge of their native language had suicide rates six times greater than those with more knowledge.

Children who are not embedded in their traditional cultures are all too likely in modern America to join gangs, use illegal drugs, engage in other criminal activities, and drop out of school.

As former NCAI Executive Director Vine Deloria, Jr. (Standing Rock Sioux) wrote, "A society that cannot remember and honor its past is in peril of losing its soul."



Arizona State University for 50 years has helped support American Indian education with the Journal of American Indian Education.

<http://jaie.asu.edu/>

ASU JOURNAL OF AMERICAN INDIAN EDUCATION
Arizona State University, Tempe

Northern Arizona University for 20 years has helped support American Indian language revitalization through conferences, books, and a web site.

nau.edu/TIL

INDIGENOUS LANGUAGE REVITALIZATION
Encouragement, Guidance & Lessons Learned
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Positive Effects of Language & Culture Revitalization

1. Promotes healthier life styles, including eating traditional foods rather than less healthy processed and fast foods.
2. Promotes traditional values of respect, humility, hard work, generosity, etc. that lead to safer, stronger communities.
3. Develops a strong positive sense of identity that leads to perseverance and resiliency .
4. Supports academic success.

Recommendations

1. Support tribal elders teaching tribal language in schools.
2. Improve coordination between the BIE/DOI and USOE/OIEP to provide grants for tribes to prevent the loss of language and culture.
3. Support funding support for full immersion schools.
4. Support scholarships and loan forgiveness for Indian language teachers under the OIEP Professional Development Grant program.
5. Support development of a clearinghouse for an Indian language curriculum center and continuing education specifically for Indian language teachers.
6. Expand the role of tribal colleges and universities as primary training campuses for tribal language and culture teachers.

For Further Reading

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BREAKOUT SESSION: Advancing Health from Within

Walatowa RezRIDERS: Extreme Sports & Native Youth

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The purpose of this National Institute on Drug Abuse (NIDA) funded pilot grant is to test the feasibility of implementing the RezRIDERS prevention program curriculum, an extreme-sports experiential-education intervention aimed at reducing substance abuse and depression while encouraging pro-social relationships and positive youth development. While experiential outdoor education (less risky than extreme sport) has shown promise as a prevention strategy, systematic evaluation of its effectiveness is weak or often lacking. RezRIDERS is one of the first systematically evaluated outdoor positive youth development projects utilizing more risky extreme sport. Directed at youth and community outcomes, it is built on evidence--based intervention theories and guidelines (T2 translational research); and is grounded in a ten-year Community-Based Participatory Research partnership between the UNM Center for Participatory Research and the Pueblo of Jemez-Department of Education. The overall goal of RezRIDERS is to expose Jemez youth to positive experiences that challenges them both mentally and physically and addressing disparities.

This project presentation connects to two NCAI Forum Themes of 1) Grassroots community movements and new types of civic engagement, and 2) Innovations in technology. As a grassroots community movement, the RezRIDERS program contributes to the Jemez Department of Education's agenda by introducing a high school-young adult intervention that links individual physical and psychological health to the community, thus adding to the promotion of ecological well-being.

Furthermore this program applies an integrated approach (prevention programming spanning from early childhood - high school - young adult) called for by the drug prevention literature "to engage diverse supportive environments, foster empowerment, and knowledge and skills to achieve individual and community-level change" (Cuijpers, 2003). This project also encourages a new type of civic engagement. Tribal Research Team members serve as mentors, who work directly with the students during all activities including the youth-determined, organized and implemented community action projects (CAPs). In these roles adult mentors work to understand and develop youth values and motivation and collectively, adults and youth - work to make a difference in the community through the CAPs mechanism.

As an innovation in technology, the RezRIDERS program supports positive youth development by providing an intervention program that combines extreme sports with a psychosocial, cognitive behavioral curriculum. Experiencing extreme sports with culturally connected

mentorship and Indigenous values returns these activities to the historical and traditional ways of youth challenging themselves in the environment, coupled with learning stories and practices from adult mentors. The program structure has four activity clusters that follows the water cycle from mountain snow to river water flow and back to clouds: 1) snowboarding with core values; 2) white water rafting with optimism/hope for the future, 3) rock climbing and self-determination and; 4) youth-determined, organized and implemented community action projects (CAPs) The RezRIDERS Program aims to:

1) Use a Community Based Participatory Research (CBPR) process to strengthen the Tribal Research Team (TRT) by adding youth representation. TRT oversees all grant activities: cultural refining, pilot implementation, analysis, interpretation and program dissemination. TRT members serve as mentors who work directly with the youth. Additional responsibilities include oversight of grant activities, culturally refining the curriculum, data analysis and interpretation, along with program dissemination. The TRT consists of the following individuals: Sherwin Sando (Jemez Tribal Youth Project), Kaitlyn Yepa (UNM Undergraduate Research Assisatnt), Brophy Toledo (Traditional Leadership Representative), Estevan Sando (Jemez Wellness Program), Loveinia Romero (CNM student), Bethany Garcia (NM Highland University student), Khaila Gachupin (Youth Representative and Mentor), and Janice Tosa (Jemez Dept. of Education, TRT leader). Additionally, TRT members gain experience and trainings that support sustainability and intertribal collaborations. **2). Pilot-test and test for feasibility full RezRIDERS program with 8-10th–grade high-risk American Indian (AI) adolescents.** The program has just completed its first year; graduating its first youth cohort. All activities have been fun and challenging in many ways and is unique to each student as well as mentors. An essential part of the program is the Community Action Projects (CAPs). Students chose to focus their CAPs on strengthening their traditional Jemez ties. The youth decided to make head dresses also known as Pabilitas to be used during traditional dances. Before they could begin, they had to get permission from Traditional leadership. Upon approval of the project the students begin to start the process of making head dresses, which took 1 month to complete. Students were taught by a spiritual leader of the pueblo who mentored them throughout the entire process. The students learned the history of the headdresses while getting a deeper understanding of the traditional way of life through song and dance. In all the student made 72 headdress, which were worn by the women of Jemez on November 12, 2012. The headdress will remain in the traditional community home for generations to come. The head dresses serve a greater purpose in the community of Jemez, as it brings with it new life every single time it is worn. **3). Assesses additional program effects on non- participating youth, families of participating youth and other programs and Pueblo of Jemez leadership.** Currently the program is described by parents as a confidence and esteem building program, and less so in regards to substance abuse prevention. This observation speaks to social structures and protection of participant’s privacy with regard to stigma. How the image of RezRIDERS will matriculate over time as a substance abuse program remains to be seen, early indicators suggest a focus on the positives i.e. promotion of program (Extreme Sport activities) and participant strengths (tribal/individual core values, and cultural identity) are clearly evident and preferable.

Significant Implications:

The first year of the RezRIDERS program has just completed and data analysis is in the early stage of this mixed method study design. However, it is believed through this program

experience youth gain a better perspective of their community, and learn to serve in a more proactive role. TRT member, Kaitlyn Yepa, stated “Throughout the activities we have done, I have come to realize that every student has the ability to accomplish the things they want. RezRIDERS has brought out the best out in the students, by challenging them to take part in activities beyond their comfort zone. I believe that RezRIDERS is helping them realize that there is a lot to experience out there and not to be afraid to take on a task, no matter how hard it may seem”. This is the type of outcome that reflects the programs benefit for youth. This also exemplifies adult co-learning with community youth. Effectively resulting in enhanced prevention strategies and increased mentor knowledge of contemporary native youth that are maintaining traditional links. TRT members are also co-learning with each other, and this has led to increased collaboration between TRT member organizations thereby fostering effective workforce development through collaboration. Furthermore, TRT and youth participants have reported positive results including; increased optimism, increase pro social networks, improved cultural knowledge, and improved community participation. These intermediate outcomes are believed to be critically important to achieving long term outcomes around substance (ab)use, educational attainment and meaningful experiences that translate to success in life – truly working towards improved overall community health.

POWERPOINT PRESENTATION WITHHELD TO ENSURE CULTURAL PROTECTIONS

Lessons Learned from a Community Based Approach to Research in the Adaptation of an Intergenerational Family Prevention Program

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Ardena Orosco, Director of Substance Abuse Prevention, Mescalero Prevention Program

Willymae Smith, PhD, Family Project Manager, Mescalero Systems of Care
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Utilizing a Community Based Participatory Research (CBPR) approach, a University of New Mexico (UNM) research team has been actively engaged with a research team from the Mescalero Apache Nation in the adaptation of an existing evidence-based Southwest American Indian Family prevention curriculum (Pueblo/Navajo) to reduce the onset of risky behaviors among third, fourth and fifth grade youth in the community. The presentation will cover the principles of CBPR/Tribal Participatory Research, the process of co-adaptation and piloting of an Apache family prevention program, an overview of the curriculum, and lessons learned about a CBPR partnership.

Our work addresses change in Native communities through the expansion of culturally centered evidence-based prevention programs, developing instruments for generating meaningful data, and creating lasting research partnerships for the continued benefit of tribal nations.

The curriculum itself emphasizes the use of traditional language and includes the session topics: Mescalero Apache History, My Family, Mescalero Apache Way of Life, Mescalero Apache Vision, Community Challenges, Communication and Help Seeking, Recognizing Types of Anger/Managing Anger, Problem Solving, Being Different, Positive Relationships, Building Social Support, and Making a Commitment. Participating families plan and implement their own service projects in their community, preparing youth and families to create positive changes at a community-level.

Year one – active recruitment of community members to a Tribal Research Team; Year two – curriculum adaptation from a Pueblo/Navajo focus to a Mescalero Apache version; Year three – continued curriculum adaptation, development of process and outcome measures and the administration of a youth focus group discussion in a review of the developed curriculum; and Year four – finalization of family curriculum, pre/post-testing, and piloting of prevention program with 10 participating families.

Lessons learned from this project will be shared from the perspectives of both university and community research team members and include strengths and challenges in building tribal research teams, navigating university and tribal research approval processes, and adapting curriculums to create culturally-centered prevention programs.

Policy priorities include establishing equitable partnerships between tribes/Tribal Research Teams) and university researchers, integrating partnered programs into tribal departments, and continued funding support for CBPR.

POWERPOINT PRESENTATION WITHHELD TO ENSURE CULTURAL PROTECTIONS

Developing Community-Based Researchers

Stephen Wall, Chair, Indigenous Liberal Studies Department, Institute of American Indian Art
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Rowena Carlyle, Hiaced O'odham Coordinator, Tohono O'odham Nation
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Eva Jewell, MA, Community Development Coordinator, Chippewa of The Thames
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- Developing capacity for community-based research to address community problems is a problem for many tribal communities. Often research education is done in a way that marginalizes the direct application community knowledge to resolve community issues. The Indigenous Liberal Studies curriculum at the Institute of American Indian Arts (IAIA) has an extensive research component that privileges indigenous and community based research methodologies. This presentation will provide an overview of the ILS curriculum and 2 graduates who are currently working in their communities in positions that rely heavily on community research will discuss their work and how research and research planning figures into their work.
- Each of the 2 IAIA graduate will discuss their work and how that work is addressing change in their communities. Each will be looking at how their research has ben a part of planning for changes in the communities they serve. The IAIA Department Chair will reflect on the process of developing a program that meets the research needs of tribal communities.
- Discuss the development of the Indigenous Liberal Studies Curriculum at the Institute of American Indian Arts.
- The focus of the discussion will on be the curriculum as a research based course of study. There will also be an overview of the research projects from various graduates of the program not present for the panel.

Eva Jewell, who holds a Master of Arts in Indigenous Governance and is a graduate of the Indigenous Liberal Studies program, will discuss her experience with the Chippewas of the Thames First Nation (COTTFN) which “has engaged its citizens in a community-inclusive, rights-based agenda of Nation building and transformation from poverty to prosperity. This process includes building upon our greatest asset: the people. COTTFN was host to a Residential School for 100 years, and as a result, community research has shown that a methodology based in healing and restoration of wellness will be most effective in capacity building and transformation. Just as assimilation policies are intergenerational, so too must be the restorative process. Thus far, our findings have led to the development of a Comprehensive Community Plan (CCP) from community voices and story, and we have now moved to implementation stages which include measuring and recording techniques that will determine actual outcomes of the goals and strategies outlined within the CCP.”

Ilona Spruce, a graduate of the ILS program at the Institute of American Indian Arts, will discuss the role of research and planning the ongoing operations and development of the Tourism Department for the Pueblo of Taos. Taos Pueblo is a UNESCO Cultural Heritage Site and operates a number of tourism-based program and derives a very large portion of the tribal income from tourism.

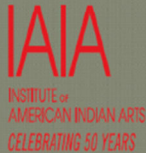
All three presenters will be discussing their experience in research and how that has impacted their communities and the changes within the community. Each presentation will address the work that has been done in each community, IAIA, Taos Pueblo and COTTFN. Lastly each presenter will address what direction their work is taking them and implications beyond their immediate communities.

Stephen Wall will discuss how the ILS program as a whole provides a foundation for policy analysis and development, looking to the career paths and research projects of the ILS graduates. Eva Jewell will discuss how research has influenced the decision to develop a Community Consultation and Accommodation Policy to ensure transparency and accountability into the future. Additionally, the work has led COTTFN to the undeniable fact that they must restore jurisdiction and governance capacity to be a partner in the current dialogue happening at the three tiers of government in the territory (Municipal, Provincial, and Federal). Through this, we are developing our governance structures through internal policies first with the intention of influencing external process in the future.

Developing Community Based Researchers

Stephen Wall, J.D.

Chair, Indigenous Liberal Studies
Department
Institute of American Indian Arts



Presented to
Mid-Year Conference 2013
National Congress of American Indians
Reno, Nevada

Developing Community Based Researchers

IAIA Mission:

To empower creativity and leadership in Native arts and cultures through higher education, lifelong learning and outreach.

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Developing Community Based Researchers

Why IAIA for the development of a research based Indigenous Studies program?

- Values inherent in art school:
- Identity
- Culture
- Self Expression
- Other factors:
- Clean slate
No pre-existing program to fit into
- Control of curriculum
- Indigenous community

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Developing Community Based Researchers

The Core Indigenous Liberal Studies Degree Plan

- | | |
|--|--|
| ANTH102 Survey of American Indian Culture Areas | EDUC230 Issues in Indigenous Education |
| HIST101 Survey of Native American History | POLS240 Contemporary Tribal Government |
| LANG I & LANG II | ENGL260 Introduction to Native American Literature |
| MUSI104 Numbers and Society | IDST290 Internship I |
| TRDA101 Traditional Arts and Ecology | MUSM280 Oral Histories Research |
| ARTH211 or ARTH212 Native American Art History I or II | MUSM320 Research Methods |
| Native Eyes Interdisciplinary courses: 6 hours | LEST101 Senior Seminar |
| PHIL201 Native American Philosophy | IDST498 Senior Project |
- Plus 27 hours of electives, 21 of which have to be 300+ course level

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Developing Community Based Researchers

Indigenous Liberal Studies Department


Leadership and Scholarship through Indigenous Knowledge

Degree plan approved 2007
 1st graduates 2009
 By 2013: 6 BA's, 3 Minors
 6 are working toward or have attained Master's degree
 3 Work for their tribe
 1 self-employed
 Remainder still in school



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Developing Community Based Researchers



IAIA
 INSTITUTE OF
 AMERICAN INDIAN ARTS
 CELEBRATING 50 YEARS

Thank You

Stephen Wall
 swall@iaia.edu

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A PLACE TO CALL HOME



Rowena Carlyle
 HIA-CED O'ODHAM PROGRAM
 PROJECT COORDINATOR
 TOHONO O'ODHAM NATION

National Congress of American Indians
 2013 Mid-Year Conference

Wednesday, June 26, 2013


A PLACE TO CALL HOME

AGENDA

- Hia-Ced O'odham
 - History
 - Committee
 - Tasks
 - Accomplishments
- How did I get here?
 - Culture
 - Awareness
 - Research
 - History
 - Identity



HIA-CED O'ODHAM HISTORY



- ✘ Hia-Ced O'odham- "Sand People"
- ✘ 1917- Reservation Boundaries being established
- ✘ Hia-Ced O'odham overlooked
- ✘ Hia-Ced O'odham pronounced extinct.
- ✘ Hia-Ced O'odham no longer have a home.
- ✘ Hia-Ced O'odham struggle to survive

HIA-CED O'ODHAM TIMELINE

- ✘ 1984- The Tohono O'odham adopted the Hia-Ced O'odham and they are now able to enroll.
- ✘ 1993- Hia-Ced O'odham Alliance (a non profit organization) was re-instated.
- ✘ 1996- Hia-Ced Alliance obtained 20acre cemetery near Darby Wells from the Bureau of Land Management by supporting Resolution of the T.O.N.
- ✘ 2003-T.O.N. purchases 642.27 acres of land to become a land base for the Hia-Ced O'odham.
- ✘ 2005- Drachman Institute in Collaboration with Hia-Ced O'odham Committee and Program complete a land use plan.
- ✘ 2009- Land base goes into trust and the Enumeration Project ends.
- ✘ 2011-T.O.N. Executive and Legislative Council Domestic Affairs Committee established the Hia-Ced O'odham Committee
- ✘ 2012- Reservation Proclamation is put into place.
- ✘ 2012- The 12th District "Hia-Ced District" of the Tohono O'odham Nation is created
- ✘ 2013- The Hia-Ced land base of 642.27 acres is officially a part of the Tohono O'odham Nation Reservation as of February 26, 2013
- ✘ 2013- The 12th District has its VERY FIRST General Elections



- ### CURRENT PROJECTS
- ✘ Establishing a District Membership list
 - ✘ Continue establishing a Voter list
 - ✘ Preparing for the Transition
 - ✘ Providing information to the Hia-Ced O'odham
 - ✘ Working with I.H.S. on water study
 - ✘ Keeping track of Hia-Ced O'odham using a database created
 - ✘ Using "The Books" to make connections between lineages.

- ### HOW DID I GET HERE?
- ✘ 1st- Struggled with self-identity
 - ✘ Applied for College
 - + Studio Arts
 - + Indigenous Liberal Studies
 - ✘ Cultural awareness
 - ✘ Historical events and trauma
 - + Tribes in U.S. as well as other Countries
 - ✘ Research: based on our assignments- various topics
 - + Similarities/differences between cultures and tribes.
 - + Studied various models of living. Implementing tradition/culture.

- ### IDENTITY
- ✘ Connection
 - ✘ O'ODHAM
 - ✘ Simple living
 - ✘ Ani to A:CEM "I to WE"
 - ✘ Importance of an educated O'odham!
-

Comprehensive Community Planning


Nation Building through Community Inclusion

Chippewas of the Thames First Nation

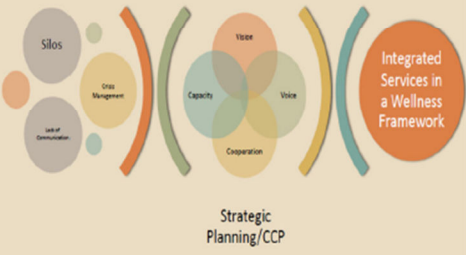
Deshkaan Zibing Anishinaabeg

NCAL 2013 Mid-Year Conference
 Eva Jewell, M.A. Indigenous Governance
 Comprehensive Community Development Coordinator

*"We see the way things are;
 let's talk about how they should be,
 and together let's make them so."*



Paradigm Shift



Strategic Planning/CCP

The Process of Empowering Community Voice



Step 1:
Community of People lend voice to create the Plan

Step 2:
Community Plan informs Leadership

Step 3:
Community Plan informs all work plans, community work

Step 4:
All services are structured using the community intent


Change has been hard on us

Acknowledging historical trauma


- Invasion (forced relocation)
- Disempowerment (invalidating Anishinaabe way of life)
- Assimilation (pressure to yield to colonial authority)
- Integration into mainstream (under duress)

Reinstating Trust in Change

Through community wellness and healing



Mt. Elgin Indian Industrial School



Commemorative Monument


Stepping into Quality of Life

Restoring balance in our community



3 Stages of Consciousness

From Paulo Freire, author of *Pedagogy of the Oppressed*



What do we do?

Facilitating ownership over one's wellness path



Reinstating Trust in Change

If we've never encountered positive change, it can be difficult to build the trust needed to create positive change.



Success Stories, Current CCP Initiatives

- **Youth Development Initiative**
 - REAL School, Youth Engagement through Summer & Wellness programs
- **Healthy Families Initiative**
 - Anishinaabe Food Rights Program
- **Life Path Wellness**
 - Addictions Strategy, Life Path Development Program
- **School Wellness Strategy**
 - Children's Wellness Action Team (CWAT)
- **Post-Secondary Institute (Lifelong Learning)**
 - Community Economic and Social Development Training in Partnership with Algoma University
- **Governance statement of Inherent Rights, Constitution, Self-Determination**
 - Connecting Laws and Policies with Rights-based agenda, resurgence of Anishinaabe Governance methods
- **Collaborations across Departments (no more silos!)**

Comprehensive Community Planning

Made possible by:

- The citizens, community members, and staff of Chippewas of the Thames First Nation
- Four Worlds Center for Development Learning
- First Nations Market Housing Fund



What's Governance Got to Do with It? Tribes as 'Gateways,' 'Gatekeepers,' or 'Guides'

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The philosophy driving sovereignty and self-determination is that communities with decision-making authority over their own futures will produce better outcomes for their members. Communities have the clearest sense of their priorities and of responsibility for their members' wellness. Research suggests that tribes who invest in changing their governance infrastructure – such as constitutional reform – can create more stable political environments in tribes to foster sustainable economic development and generate better outcomes for their people (Jorgensen, 2007; Lemont, 2006). Many federally-recognized tribes in the US have exercised their sovereignty by securing authority over the administration of health care services provided to their citizens through mechanisms like the Indian Health Service Self-Determination Program (also known as 638 contracts). In this way, sovereignty as expressed in governance reform has been seen as essential in improving the experiences of Native people in economic and health contexts.

Several tribal nations have also begun to invest in governance reform in the context of research regulation to ensure that research that happens on tribal lands and with tribal citizens protects and has the greatest benefit for their people. Research has been a much contested site, or a site of struggle, in American Indian and Alaska Native contexts. However, in recent times, it has also emerged as both a site of strength and a site of possibility for tribal nations that recognize the value of research conducted in an ethical manner in relation to their community planning goals.

This manuscript presents a framework for exploring the role of governance in community-based research in order to inform the development of meaningful research partnerships and research outcomes. Specifically, this manuscript provides a discussion of the concept of governance in research; describes the landscape of community governance of research – with a particular emphasis on the state of tribal research regulation; and synthesizes past research and current practice in order to identify critical elements and processes that inform an understanding of how governance matters in generating meaningful research outcomes. Research literature surveyed include: work on community-based participatory research, partnership research, and research ethics. These research areas were selected because governance has been identified as a key contextual element in a conceptual model of community-based participatory research, and this manuscript is particularly concerned with the role of governance in partnerships and with the ethics of decision-making in research contexts (Wallerstein, et al., 2008; Wallerstein & Duran, 2010). It is important to note that while current conversations about research ethics – particularly

when tribal contexts are discussed – are situated within a context of historical violation, this discussion of ethics is situated in a broader context that also allows for understanding how research ethics can be used both to protect *and* benefit community members.

Concepts of Governance in Research

Governance is often described as the authority to decide. In a community-based research context, this authority refers both to the power to decide and the responsibility for the results (and consequences) of decision-making. Decisions in a research context are driven by a range of ends, including: to produce new scientific insights; to generate wealth; to protect humanity; and to benefit humanity. In this way the nature of research governance is intimately connected to research outcomes. But there is often an over-simplification of **governance as regulation**, existing on a continuum between extreme poles of innovation and harm to humans, where too much regulation constrains innovation and too little regulation leads to danger to humanity.

Figure 1: Governance as Regulation



With this conception, the role of governance becomes two-fold: 1) to prevent against harm for humans; and 2) to limit excessive burdens on researchers that limit scientific innovation. For example, consider the “Advance Notice of Proposed Rulemaking (ANPRM), *Human Subjects Research Protections: Enhancing Protections for Research Subjects and Reducing Burden, Delay, and Ambiguity for Investigators*”¹ published in the *Federal Register* on July 25, 2011. This puts protection and innovation at odds and can frame community governance bodies as **gatekeepers**.

Where governance as regulation acknowledges the power component of authority, it does not always take into account the responsibility component when it comes to impact on communities and research rigor, for example. Unfortunately this is often the case because this concept of governance is situated within a paradigm where research inquiry is about the consumption of knowledge, and thus requires a steady supply of research participants and centers around data. Tribal councils and organizations responsible for tribal research regulation become merely **gateways** to research institutions – seen as providing access to research ‘participants’ rather than seen as contributing in substantive ways.

Instead, a concept of **governance as stewardship** is based in a paradigm where research inquiry traces relationships and accounts for both power and responsibility in the authority to make research decisions. Stewards have particular roles and responsibilities for decision-making to protect *and* benefit. Their roles require that they have particular, local knowledge, as well as a somewhat global perspective to carry out their responsibilities and **guide** the research in a broader context. At some level, stewards must understand relationality and complexity and make decisions that balance a range of interests.

¹ <http://www.hhs.gov/news/press/2011pres/07/20110722a.html>

This concept of governance has the potential to frame research regulation, design, ethics, and outcomes in a different way. In particular, the concept of governance as stewardship works to:

- Build from local cultures and strengths;
- Acknowledge the interdependence between individual and collective ethical principles;
- Value cross-disciplinary, mixed and multiple method research that allows for a balance between human and environmental health;
- Establish research regulatory bodies as guides throughout the research process rather than checkpoints for access; and
- View research governance as a dynamic process that must be engaged and developed over time.

Presenters will use an interactive format, acting out various scenarios of research partnership that highlight the complex tensions and governance paradigms at work.

The Role of Governance and Trust in Research Partnerships. Tribes as 'Gateways,' 'Gatekeepers', or 'Guides' in research.

Malia Villegas, NCAI Policy Research Center
Julie Lucero, University of New Mexico
Bonnie Duran, University of Washington
2013 Tribal Leaders Scholar Forum
Reno, NV



Tribally-Driven Research

National Congress of American Indians

Research for Improved Health Project Aims

- Describe the variability of Community Based Participatory Research (CBPR) characteristics.
- Describe and assess the impact of governance on CBPR processes and outcomes.
- Examine associations among context and partnering processes with major CBPR outcomes.
- Identify, translate, and disseminate best practices in CBPR for tribal leaders and other community and academic partners.



Tribally-Driven Research

National Congress of American Indians

Partners

- National Congress of American Indians Policy Research Center
- University of New Mexico Center for Participatory Research
- University of Washington Indigenous Wellness Research Institute
- Community partners who volunteered to be case study and survey participants



Tribally-Driven Research

National Congress of American Indians

Research Scenario

WAS THIS SCENARIO FAMILIAR? LIKES AND DISLIKES?



Tribally-Driven Research

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Governance

THE RESEARCHER THOUGHT OVERSIGHT AND APPROVAL BY THE UNIVERSITY WAS ENOUGH, IS IT?



Tribally-Driven Research

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Variability of Governance in Research Regulation

- Tribal Council Approval
- Tribal Institutional Review Boards
- Tribal Research Review Boards
- Tribal College Institutional Review Boards
- Tribal Advisory Boards
- Community Advisory Boards




Tribally-Driven Research

National Congress of American Indians

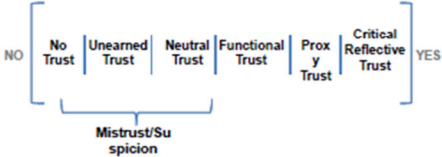
Trust

WHAT BEHAVIORS MIGHT INFLUENCE OR UNDERMINE TRUST?




Tribally-Driven Research National Congress of American Indians

Trust Scale



NO [No Trust | Unearned Trust | Neutral Trust | Functional Trust | Proxy Trust | Critical Reflective Trust] YES

Mistrust/Suspicion



Tribally-Driven Research National Congress of American Indians

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Dr. Bonnie Dumas, University of Washington
 Add Bonnie info



Tribally-Driven Research National Congress of American Indians

Discussion

- Where do you feel you are in the existing process of research?
 - Decision-making, approval process, partnership development, etc?
- To you, what is the most interesting or needed aspect of research?
 - Evaluation of existing programs, identification of issues, identification of co-occurring conditions/ contributing factors, approval processes, other?
- What incentives have you received for the transfer/reception of knowledge and participation?
 - Gift cards, meals, money, conferences, etc.
- Does Culture matter in research? If yes, how?



Tribally-Driven Research National Congress of American Indians

POSTER SESSION: Native Voices Shaping Research & Policy

“Community Indicators” in Planning for Economic Change for the Upper Columbia Tribes

Margo Hill, JD, Eastern Washington University
Margo_hill@msn.com

American Indian successful expansion of tribal government and economic enterprises including gaming has created almost 5,000 jobs in rural Northeast Washington, and the emergence of successful tribal economies is establishing tribes as leaders in regional economic development. Data on tribal business and economic development is linked to socio-economic assessments of change as part of a tribal “Indicators” demonstration project. Detailed economic data is compiled and presented to tribal councils for the Colville Confederated Tribes, the Spokane Tribe, and the Kalispel Tribe, and used for strategic assessment and development of plans for economic development. The project demonstrates the role for indicator data for tribes, and also, potential linkages tribes may wish with regional economic development.

Economic Indicators is a nation-wide initiative to document existing conditions and annual change within communities around key data, and to use that data for assessment and strategic planning. The Eastern Washington University Policy Institute has created indicators for cities and counties in the region. This project has established Indicators data analysis for three tribes based on detailed assessment of critical community social and economic data, including annual business change. This data was presented to tribal councils to provide detailed data analysis of changes over the past decade, and to identify economic and community strategies for community action, and to consider formalizing community indicators within tribal government.

This study was conducted over a two-year period. An initial report to tribal councils was followed up with a detailed assessment of annual business and related employment data that was presented for tribes, including assessment by academic economists. This presentation led to an assessment of the potential for “community indicators” for tribal governments, as well as strategies and planning for economic and community development.

This research directly supports capacity building in the collection of critical tribal data organized around “community indicators,” and demonstrates the application of detailed data and annual assessments in strategic planning for tribal governments.

Key policy priorities from the findings indicate the importance of detailed, annual data for economic and community planning that can come from “community indicators” data reporting for tribal governments. Findings include the successful operations and expansion of tribal governments and businesses, and the need for data from community indicators to develop strategies for on-going plans and projects.

POSTER IMAGE NOT AVAILABLE

Community Engagement: A Novel Approach Promoting the Development of American Indians in the Biomedical Workforce

Richard White, University of Utah
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The presentation topic is about the Native American Research Internship (NARI) at the University of Utah. NARI is an NIH funded summer research program for Native American college undergraduate students who are interested in health science and biomedical research and careers. The poster presentation will address the unique design of the NARI program, the outcomes and findings of NARI participants, the future direction of the NARI program, and how tribal and federal policy could potentially enhance the creation and sustainability of similar education/research program.

The NARI program addresses ‘change’ in Native communities in that it was created from a community dialogue with members of American Indian communities, and the Department of Pediatrics at the University of Utah. NARI was created as a response and a resource to: 1.) Address the lack of American Indian representation within the health science/biomedical workforce. 2.) Foster and support the need for more American Indian scientists and health professionals. 3.) Address health disparities of American Indian communities by supporting NARI interns in their goals to contribute their wisdom, resources, and experience back to their respective communities. NARI’s research program design is unique in that it utilized principles of community engagement and consultation from tribal elders, American Indian faculty, staff, and students to develop the 10-week summer program that provides hands-on research opportunities while supporting American Indian cultural values and knowledge, and addresses the clinical research priorities of American Indian focus groups. Participants engage in weekly talking circles with cultural, community, peer, and research mentors. In addition to research, students have educational opportunities including national conference attendance, test-taking and writing workshops, community health outreach, Native Youth mentorship, and physician shadowing. The holistic approach engaging American Indian students and communities was a critical factor in the creation of a successful program that supports biomedical workforce diversity through developing American Indian students who can envision careers as biomedical scientists and professionals. A 2011 student noted: “More than enlarging an AMCAS application, more than money, even more important than the networking this program has provided, is the great job it has done in fostering and strengthening our self-identity as future physicians. The fires ignited here can bring light to our tribes for generations.”

Over the 3 years NARI has operated, there have been a total of 30 students from 14 tribal nations across 10 states that have completed the program. Since 2011, NARI has sent a total 22 students to the Society for the Advancement of Chicanos and Native Americans in Science (SACNAS) national conference to present their summer research at the SACNAS undergraduate poster competition. In 2011; one student was awarded best medical abstract and poster presentation. NARI students have also attended and/or presented their posters at the Native Research Network, Association of American Indian Physicians, American Indian Science and Engineering Society national conferences, as well as other local/regional scientific meetings. Six NARI participants have completed degrees in science and continue to pursue graduate/professional training in their respective disciplines. Four students have applied for medical or graduate school; two have been

accepted to medical school. 24 students remain in college and 23 are pursuing science or premedical degrees. Finally, in October of 2012, the Program received the University Of Utah Beacon Of *Excellence Award*, which recognizes excellence in providing transformational experiences to undergraduate students. (<http://advising.utah.edu/beacons-of-excellence/native-american-research-internship.php>). Each year, the NARI program received more recognition within Indian Country, and abroad, as a resource that aims to support the future scientist and health care professional of Indian Country

Through continual follow up with past and present NARI students, the program is beginning to show positive results as they pertain to 1.) Addressing the lack of American Indian representation within the health science/biomedical workforce. 2.) Foster and support the need for more American Indian scientists and health professionals. 3.) Address health disparities of American Indian communities by supporting NARI interns in their goals to contribute their wisdom, resources, and experience back to their respective communities. Additionally, NARI continually engages in dialogue with American Indian communities and tribal government representatives in order to support the planning and implementation of additional American Indian scientists and health care professionals.

Given the short, yet successful history of the NARI program it is hoped that other programs, like NARI could become permanent options for American Indian students and communities. These programs have great potential to expand and be modified to serve specific tribal community needs. Not only is there great potential for programs, like NARI, to be implemented at the state and tribal university/college level, but also at the tribal government and community level. There is promising potential for tribal organizations and governments to collaborate with educational institutions in order to create educational programs that serve American Indian students in urban, rural, and tribal schools.



Community Engagement: A Novel Approach Promoting the Development of Native Americans in the Biomedical Workforce

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Introduction

- Native Americans (NA) represent ~1% of the United States population but only 0.3% of physicians and medical school faculty, and 0.05% of the science and engineering workforce
- In Utah, ~2% of the total population is NA, yet there is only one medical school faculty member who is Native American (0.08%)
- Nationally, 55% of NA students who begin post-secondary education will graduate
- Sixteen of 28 (62%) Utah counties have Native American populations that exceed 1% and there are four counties with proportions >5%, including San Juan County with a population that includes 54% Native Americans.
- Students from tribal lands frequently attend tribal schools that lack the financial resources and human capacity required for science and health education
- These persistent disparities negatively influence the Native American biomedical workforce and health equity for Native American populations

Objective

- To support undergraduate students who are interested in pursuing a biomedical career and consequently increase Native American representation in the biomedical workforce

Methods

- The University of Utah Department of Pediatrics, using principals of community engagement, developed a research internship for Native American undergraduate students
- Tribal elders and Native American faculty, staff, and students participated in designing of this program
- A 10-week summer research internship was developed providing hands-on research opportunities where a principal investigator was paired with a student for roughly 30 hours a week
- Students chose basic or clinical research opportunities based on their interests
- Students were also paired with cultural mentors who met with the students three times over the summer
- Required and elective community outreach and volunteer opportunities were offered that included health-related community outreach at the Urban Indian Center of Salt Lake
- Participants engaged in weekly talking circles with research and cultural mentors, community members, program staff, and other NA interns
- Required and elective educational opportunities were offered that included travel to a national conference, test-taking classes and writing workshops
- Physician shadowing opportunities were available with their Research Mentor as well as other physicians within the hospital
- Students were able to provide mentorship and leadership to other Native American students in junior high and high school through the Urban Indian Center of Salt Lake
- The Principal Investigator and Program Director were awarded a National Institute of Health, National Heart, Lung and Blood Institute (NHLBI) grant to support students interested in research related to these fields
- The Principal Investigator and Program Director were awarded a National Institute of Health, National Institute of Child Health and Human Development (NICHD) grant to support underrepresented NA students interested in a biomedical career

Results

- The University of Utah has held three Native American Summer Research Internships
- Thirty students have participated since 2010 (Table 1)
- Six students from 2011 returned in 2012 and completed two consecutive summers
- All the Native American Interns attended the Native Research Network National conference
- Twenty students submitted 28 abstracts to SACNAS (Society Devoted to Advancing Hispanics, Chicanos and Native Americans in Science) conference (Table 2)
- One student was awarded the best medical abstract at the 2011 SACNAS conference
- Four students are presenting their abstract at the American Indian Science and Engineering Society (AISES) meeting in Anchorage, Alaska in 2012
- One student has completed a graduate degree in Molecular Biology from Tulane University
- One student is currently in graduate school in Public Health at Westminster College, Utah
- Three students are currently applying to medical school
- The Native American Summer Research internship received a "Beacon of Excellence Award", one of six awards (out of 270 nominations), given annually, that recognizes excellence in creating and offering a transformational experience to undergraduate students at the University of Utah



Table 1: Number of Students since 2010

Year	# of Students
2010	4
2011	6
2012	20
Total	30
Completed 2 Internships	6

Table 2: Abstracts at the SACNAS Conference

Year	Abstract Submitted	Abstract Accepted	Travel Scholarship *	Attended
2010	0	0	0	0
2011	6	6	6	5
2012	20	19**	10	17
Total	26	25	16	22

*Students who were not awarded a travel scholarship from SACNAS, had their travel paid for by the NHLBI or NICHD/NIH grant

**One student withdrew her abstract from SACNAS after it was submitted

Table 3: Students who have completed undergraduate degree

School	Major	Tribal Affiliation
Southern Utah University	Human Nutrition	Diné (Navajo)
New Mexico State University	Exercise Science	Diné (Navajo)
Southern Utah University	Physical Education/Exercise Science	Diné (Navajo)
Montana State University	Microbiology	Blackfeet
Dixie State College	Biology	Diné (Navajo)
University of Minnesota	Political Science	Oglala Lakota

Table 4: Students working on their undergraduate degree

School	Major	Tribal Affiliation
University of New Mexico	Biology	Diné (Navajo)
University of New Mexico	Biology	Diné (Navajo)
University of New Mexico	Biology	Turtle Mountain Chippewa
University of Wisconsin	Biology	Ho-Chunk
University of Wisconsin	Biochemistry	Ho-Chunk
University of Montana	Human Biology	Blackfeet/Shoshone-Paiute
University of Montana	Pre-Medicine	Chippewa Cree
Utah State University	Biological Engineering	Muscogee (Creek)
San Juan College	Nursing	Diné (Navajo)
University of Minnesota	Chemistry	Sisseton-Wahpeton Ojate
Oregon State University	Public Health/Health Promotion	Confederated Tribes of Siletz
Louisiana State University	Pre-Medicine	United Houma Nation
Yale University	Biology	Crow
Fort Lewis College (Colorado)	Cellular & Molecular Biology	Diné (Navajo)
Southern Utah University	Psychology	Diné (Navajo)
Westminster College	Neuroscience	Northern Arapaho
California State University	Psychology	Hopi
University of Utah	Chemistry	Diné (Navajo)



Table 8: Quotes from Former Students about the Internship

- "More than enlarging an AMCAS application, more than money, even more important than the networking this program has provided, is the great job it has done in fostering and strengthening our self-identity as future physicians. The fires ignited here can bring light to our tribes for generations." -2011 NARI Intern
- "The internship is something that I will never forget. It has surpassed any expectations that I had and has taught me so much about research, medicine, and culture while allowing me to have fun and experience it all. I am excited for next year and only hope that we can have a group as strong as this one." -2012 NARI Intern
- "Overall, the internship was an incredible experience. My goal was to strengthen my application to medical school. Through research, volunteering, the national conference, mentoring and shadowing I have been able to accomplish that goal." -2012 NARI Intern

Discussion

- The holistic approach engaging NA students and communities was a critical factor in the creation of a successful program
- Continued outreach to students during the academic year helped recruit all six who participated in the summer of 2011 for a second internship in 2012
- We have seen some positive short term benefits for these students but will have to follow these students for at least a decade to see the long-term outcomes of our efforts
- The Native American Summer Research Internship supports biomedical workforce diversity through developing NA students as future clinician-scientists
- For more information about the Native American Summer Research Internship visit our website at: http://medicine.utah.edu/pediatrics/research_education/native_american/index.htm



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Evaluation of a Targeted Approach to Increasing American Indian Tissue Donation

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End-stage renal disease disproportionately affects American Indian and Alaska Native people, yet the data shows us they do not donate organs at a rate that is commensurate with the need in the American Indian and Alaska Native population. Nationally, approximately 1,000 American Indian and Alaska Native people are on the kidney transplant waiting list and 300 are added to this waiting list each year. Data is currently showing each year there has been a gradual decrease in American Indian and Alaska Native living and deceased kidney donors. Therefore, increasing awareness of the importance of organ donation in American Indian and Alaska Native communities is urgently needed. Key informant interviews were conducted with Tribal College and University project partners and other tribal leaders (including elected tribal officials, health professionals, elders, individuals with chronic kidney disease, individuals with risk factors for chronic kidney disease, and community members) to assess their experiences with organ and tissue donation awareness activities in their local communities.

This is an example of a research project that will have a significant impact for American Indians and Alaska Natives. This research project is the evaluation of a targeted approach to increasing American Indian tissue donation. The aim was to identify and evaluate strengths and challenges as well as opportunities to improve organ and tissue donation awareness and registration in American Indian and Alaska Native communities. The results will inform future organ and tissue donation awareness efforts in American Indian and Alaska Native communities.

This study was a supplement to a parent study that worked with Tribal Colleges and Universities to create a targeted approach to increasing organ donor ship. In this supplemental study, a qualitative research approach was used to describe and understand the processes and activities of tissue and organ donation education and awareness in American Indian and Alaska Native communities. A semi-structured interview guide to facilitate discussion was used with the participants. The 10-question interview guide focuses on key strengths, challenges, and barriers to tissue and organ donation education and awareness strategies and activities conducted at sites. Two key informant interviews were conducted and transcribed. The key informant interviews focused on identifying strengths and challenges and also future opportunities to improve organ and tissue donation in American Indian and Alaska Native communities. The interviews also identified an evaluation on the current materials used in the parent grant's organ and tissue donation campaign.

Successes and strategies that worked in engaging community discussion about tissue and organ donation included engaging with the community and active listening. Challenges included fear of the topic of organ donation and cultural beliefs. Thoughts on the current education materials that were created as part of an aim for the parent grant were positive. Thoughts on other materials that would like to be seen in the future were digital stories. Thoughts on living donation were positive and the key informants felt that living donation should be included in future efforts with tissue and organ donation in American Indian and Alaska Native communities.

Practical Implications of the Research or Work for Tribal Communities

The lack of American Indian and Alaska Native tissue and organ donation continues. Practical implications include culturally based education and outreach on living and deceased organ donor ship at the tribal level including tribal leaders, health programs and community health workers. It is integral to address the fear that was expressed by both the key informants and the student workers, the key informants suggested digital stories from living donors and donor recipients as a practical strategy.

Next steps for this research include seeking funding, in partnership with several tribal sites, will include a multi-level intervention with rural American Indian and Alaska Natives to increase kidney donation.

Evaluation of a Targeted Approach to Increasing American Indian Tissue Donation

Corinna Tordillos^{1,2}, Dedra Buchwald² MD

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Introduction.

End-stage renal disease disproportionately affects American Indian and Alaska Native people, yet the data shows us they do not donate organs at a rate that is commensurate with the need in the American Indian and Alaska Native population. Nationally, approximately 1,000 American Indian and Alaska Native people are on the kidney transplant waiting list and 300 are added to this waiting list each year. Data is currently showing each year there has been a gradual decrease in American Indian and Alaska Native living and deceased kidney donors. Therefore, increasing awareness of the importance of organ donation in American Indian and Alaska Native communities is urgently needed. Key informant interviews were conducted with Tribal College and University project partners and other tribal leaders to access their experiences with organ and tissue donation awareness activities in their local communities.

Parent Grant.

This study was a supplement to a parent study that worked with Tribal Colleges and Universities to create a targeted approach to increasing organ donorship. The aims of the parent study are:

- To examine the knowledge, attitudes and behaviors regarding organ donation and transplantation among American Indian/Alaska Native tribal college students
- To develop culturally tailored media materials to heighten awareness of the need for donation and the benefits of transplantation
- To increase the number of American Indians/Alaska Natives who consent to become organ donors

Methods.

A semi-structured interview guide was used to facilitate discussion with key informant participants.

Key informants inclusion criteria included:

- Experience working with American Indian/Alaska Native populations
- Knowledge of tissue and organ donation in American Indian/Alaska Native communities
- Knowledge of health or health education activities in American Indian/Alaska Native communities
- Individuals with chronic kidney disease or risk factors for chronic kidney disease
- Individuals on dialysis
- Individuals with transplant
- Individuals with a person approaching dialysis or transplant
- Kidney donors

Initial interviews were conducted with Tribal College and University staff whom had previously established a relationship with study staff.

A snowball sampling technique was used for recruitment.

Study staff conducted semi-structured phone interviews lasting 45-60 minutes.

With permission of the study participants, interviews were audio taped and transcribed.

Limitations.

Recruitment was exhausted with an email and two telephone calls with voice mails.

Participants that were interviewed were given study staff information to disseminate to potential participants; however study staff did not receive contact from other potential participants.

Due to a college and university setting, potential participants had a difficult time scheduling interviews.

Results.

Two key informant interviews were conducted and transcribed. The key informant interviews focused on identifying strengths and challenges and also future opportunities to improve organ and tissue donation in American Indian and Alaska Native communities. The interviews also identified an evaluation on the current materials used in the parent grant's organ and tissue donation campaign.

Successes and strategies that worked in engaging community discussion about tissue and organ donation included engaging with the community and listening:

...dinner in which the local organ donor and recipients came and told their stories...

...to not come off as offensive because it is kind of a touchy subject for a lot of people in Indian country...just be a good listener and have the information available if they do have questions...

...before I was introduced to this program I was not a tissue or organ donor and then when I learned more about it, I became one. In my family, my grandmother lost both of her legs because of diabetes and both my parents had diabetes. Yet, when I saw the box to check on driver's license I skipped over it until I learned more about it. So I believe the program works. I don't think it's going to work all the time.

Challenges that were faced in engaging community discussion about tissue and organ donation included fear and cultural beliefs:

Probably the biggest challenge was fear and the next being conceptions about spirituality being prohibited towards organ donation...

...the biggest challenge would be that it is against a lot of tribes beliefs...communities where it is very against their religion and very against their beliefs...

Challenges in fear and cultural beliefs included challenges in student assistants at the Tribal College and Universities retention:

I went through a number of students [assistants] where they would go out and they'd watch the training videos and we'd practiced in and it appeared as though they were ready, but when they got in the community often if I wasn't there and leading them, they wouldn't want to engage the public...I didn't realize how uncomfortable it made some of the students to engage the public about this particular topic.

Thoughts on the current education materials that were created as part of an aim for the parent grant were positive:

It seemed the biggest draw with the posters were for people who already had friends or relatives who were somehow in the process, either diabetic or needing an organ or in dialysis. It seems like people who had their relatives in those situations were the ones who approached, who would come to read the posters and it would grab their attention and then they would want to talk about it.

I think that the artwork on them is amazing and that it was a good ice breaker. It definitely got people's attention to come to the table.

Thoughts on other materials that would like to be seen in the future are digital stories.

Thoughts on living donation were positive and agreeable that living donation should be included in future efforts with tissue and organ donation in American Indian/Alaska Native communities:

I think that it should be, but I also believe it's contextual. I think that some, they have the belief that the only type of donation they can make is a living donation and it's very frightening for them. So they learn that there are other ways to donate, that's better. Usually it's someone that feels they have a vested interest, like it's their relative or somebody that there's a familiar sense of almost an obligation to help somehow, when it's their relatives, even a close neighbor or a tribal member.

I do think that it would be beneficial to spread more word on living donations...I think that that's really important. Really important.

Interview Guide.

1. What is your experience with tissue and organ donation?
2. Are there strategies that worked particularly well to engage your community in discussion about tissue and organ donation? If yes, what are they?
3. The education materials and outreach efforts for our current project include posters, brochures, bookmarks, notepads, and pens. What are your thoughts about these educational materials?
4. The materials currently focus on deceased donation. Do you think messages about living donation should be included in education and outreach efforts?
5. What are some successes you experienced while discussing tissue and organ donation with people from your community?
6. What are some challenges you encountered while discussing tissue and organ donation with people from your community?
7. Do you think there are future opportunities for tissue and organ donation work in your community?
8. Before we close, do you have any additional comments to share about the topic?
9. Can you recommend additional people we should talk with about this topic?
10. Do you have any additional questions about the project and its goals?

Discussion.

A qualitative research approach was used to describe and understand the processes and activities of tissue and organ donation education and awareness in American Indian/Alaska Native communities.

The 10-question interview guide focuses on key strengths, challenges, and barriers to tissue and organ donation education and awareness strategies and activities conducted at sites.

Regarding future opportunities in tissue and organ donation, a participant stated, "it's always going to be an issue and it's always going to be something that we're going to need to educate people about."

Register as an Organ, Eye and Tissue Donor

More than 900 American Indian and Alaska Native people in the U.S. are on the waiting list for organ and tissue transplants, and 300 more are added each year. But there were only 68 American Indian and Alaska Native donors in 2008. It takes only one donor to save or improve the lives of 50 people.

You can help today!

Register as a donor online or in person at the Department of Motor Vehicles.
Talk with your family about your decision to donate.

For more information visit www.DonateLifeToDay.com
or call 1-877-275-5269.



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Survey of At-Risk Youth in Tribal Communities

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Preliminary Research Findings on Attitudes and Experiences of At-Risk Youth in Tribal Communities

- This project is driven by the need to develop comprehensive, verifiable data which identifies causative factors which contribute to youth in Native American communities engaging in at risk behavior
- How does the child view their sense of safety, security and community
- How these factors are related to the child's experiences in terms of exposure to violence or crime
- How this information can be used by community leaders to reduce factors that place young people at risk for exploitation, victimization or engaging in high risk behavior

A select committee has been established for project oversight and guidance. The committee consists of the following;

- Tribal Leader
- Tribal Youth Programs Official
- Tribal Law Enforcement
- Tribal Social Services/Courts
- AMBER Alert Training and Technical Assistance Program Director
- Academic Faculty Advisor
- Field Research Team Leader

The interview questions and process were developed by the research group and Subject Matter Experts (SMEs) on child protection. Additionally, all interview materials, protocols and procedures adhere to the Code of Federal Regulations "Title 45, Part 46; "Protection of Human Subjects". Procedures comply with Southern Methodist University (SMU) Policy and are reviewed by SMU's Human Subjects Committee prior to use. In addition to the Human Subject Committee's review, a group of tribal leaders and elders provide guidance on cultural considerations.

In order to develop a better understanding of the conditions facing young adults in tribal communities, it is necessary to hear from the children themselves. Their experiences, observations, fears and even past victimization can help community leaders and policy makers better understand the problem on their reservation so they can identify effective strategies to strengthen child protection programs in Indian country. Input into the process and the responsibility for developing solutions for their communities provides the youth with ownership of the problems, making them part of the long-term solution.

By developing a better understanding of how Native American youth perceive their own lives and the degree to which exposure to violence and crime fashions their views of the community, leaders can take steps to reduce risk to children, develop policy that address high risk behavior and improve communications and coordination among child protection organizations in the community.

While this project is still in the first year of a four-year research plan, initial findings are significant, and show promise. To facilitate the collection of this information Southern Methodist University and its project partner, the National Criminal Justice Training Center, initiated a project to reach out to tribal youth in their communities to determine their attitudes, exposure, observations and past victimization. Participants are asked to provide ideas and solutions to the threats facing tribal youth and their communities. The project, a four-year effort to interview at least 1,000 youth between the ages of 16 and 21 years will be conducted by region to ensure a representative sample: Southwest, West, Midwest, Southeast, Northeast/Mid Atlantic.

To date, interviews have been conducted in nine (9) Native American communities as well as urban areas with high concentrations of Native American youth in the Southwest United States. Through these interviews, several dynamics emerged. Although these findings are preliminary, they point to an emerging picture of Native American youth who are exposed to violence or crime at an early age.

Some preliminary results based on interviews with 160 young people who identified themselves as Native American and living on tribal lands:

- 71% identified their community as a place where people help each other
- 66% have witnessed a violent crime such as an assault, robbery, or homicide in their lifetime
- When asked; “Do you feel that you will be the victim of a crime in the next 12 months?,” 68% answered “Yes”
- When asked; “During the past 12 months, did anyone threaten to hit or attack you, or threaten you with a weapon?,” 55% answered “Yes”
- When asked; “In the past 12 months have you run away from home?” 40% answered “Yes”

The findings of this research project are directly relevant to the development of programs within Native American communities which address the safety and welfare of Native American youth, while also providing tribal leaders with comprehensive data which shows the perceptions of safety that the community’s children have in their community. The project provides a realistic look at behaviors, experiences and perception of youth in the community, providing opportunities for conducting intervention, prevention and reintegration for the at risk youth. Additionally, data derived from the research may be utilized by community leaders to allocate existing resources, justify request for additional resources, and develop policy to address the needs of youth within their communities.

Research material and recommendations obtained through this project will be utilized to better inform tribal leaders, service providers and policy makers on threats to young people in Indian Country, their attitudes about victimization and their ideas on addressing the issues.

Communities are then able to develop policy that addresses factors, which impact the experiences, attitudes and ultimately behaviors on youth in the community. Using research findings, communities will be able to:

- Identify factors that lead to runaway incidents among Native American youth
- Prevent abuse/exploitation within tribal communities and urban areas where youth gather
- Intervene prior to and during the high risk behavior episode
- Redirect children from future delinquent conduct
- Develop alternatives to running away, delinquent activity or other forms of destructive behavior
- Reintegrate these children back into their tribal community and connect them with cultural support networks
- Identify and prosecute those who would exploit high risk victims from tribal communities

Upon completion of the research project SMU will host a joint session with members of the project advisory committee and research group to conduct preparatory training, cultural awareness and project logistics.

Members of tribal communities, elders and community leaders will be invited to interact with the project team. This group will provide background and guidance on cultural issues specific to tribal communities participating in this project. Research team members will be housed in tribal communities during the project and will have the opportunity to interact with community members and to observe customs, activities and events.

The process will culminate with a Symposium on Child Protection in Indian Country. During the symposium youth from the participating communities and members of the research team will provide feedback to tribal leaders, federal policy makers, law enforcement and social services from throughout Indian Country. Selected tribal youth will be asked to participate in panels, provide presentations and brief participants on possible solutions for problems identified during the research.

TO BETTER UNDERSTAND THE CONDITIONS FACING YOUNG PEOPLE IN TRIBAL COMMUNITIES:

1

IT IS NECESSARY TO HEAR FROM THE CHILDREN THEMSELVES

- TRIBAL YOUTH AGES 15 TO 23 WERE INTERVIEWED IN THEIR COMMUNITIES
- THEY WERE ABLE TO SPEAK FREELY IN AN ENVIRONMENT WHERE THEY FELT SAFE AND COMFORTABLE
- SPEAKING DIRECTLY TO VICTIMS AND POTENTIAL VICTIMS WE RECEIVED AN UNFILTERED, DIRECT SOURCE OF INFORMATION



2

LEARNING ABOUT THEIR EXPERIENCES, STORIES, LIVES, OBSERVATIONS, & FEARS

- WE ARE ABLE TO DETERMINE THEIR ATTITUDES, EXPOSURE, OBSERVATIONS AND PAST VICTIMIZATION
- YOUTH ARE ABLE TO OPEN UP AND HELP US DISCOVER ISSUES THAT ARE IMPORTANT TO THEM
- THE RESULTS BECOME REAL AND NOT ANECDOTAL SINCE THEY ARE BASED ON ACTUAL EXPERIENCES



3

LEADERS & POLICY MAKERS CAN THEN IDENTIFY EFFECTIVE STRATEGIES TO STRENGTHEN CHILD PROTECTION PROGRAMS

- TAKING REAL, UNFILTERED INFORMATION LEADERS CAN DEVELOP EFFECTIVE AND APPLICABLE STRATEGIES
- THERE IS NO GUESS WORK INVOLVED
- A TRUER VISION OF THE PROBLEM IS ESTABLISHED AND A CLEAR PATHWAY TO A SOLUTION EMERGES



4

YOUTH & LEADERS COME TOGETHER AND TAKE OWNERSHIP OF THE PROBLEMS

- WORKING TOGETHER FORMS BONDS AND UNITY
- SOLUTIONS ARE NO LONGER MANDATES FROM AUTHORITY BUT GOALS WORKED TOWARD TOGETHER
- ALL PARTIES ARE INVESTED IN A SUCCESSFUL OUTCOME TO REAL PROBLEMS



5

MAKING THEM PART OF THE LONG TERM SOLUTION

- TRIBAL YOUTH ARE PART OF THE SOLUTION AND REAP A GREAT REWARD
- FOCUS IS MAINTAINED ON REAL SOLUTIONS TO REAL PROBLEMS
- CYCLES OF ABUSE ARE BROKEN AND FUTURE GENERATIONS ARE BENEFITED



Partnering with American Indian Tribes in Arizona to Analyze US Census Data, Consider Tribal Indicators, and Promote Tribal Sovereignty

Emery Tahy, Arizona State University, American Indian Policy Institute
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The American Indian Policy Institute at Arizona State University is dedicated to promoting tribal sovereignty. One way that the Institute fulfills its mission is to support tribally-driven, transdisciplinary research initiatives. For this reason, the Institute recently invited several of Arizona's tribes to participate in a stakeholder group. Tribally appointed representatives to this group will assist in analyzing the U.S. Census Bureau Data. The stakeholders will also collaborate with demographers and social scientists at Arizona State University to explore methods for obtaining data that more accurately reflects tribal communities and reservations. This tribally-driven data is essential to pursuing research initiatives that promote tribal sovereignty and shape meaningful tribal indicators.

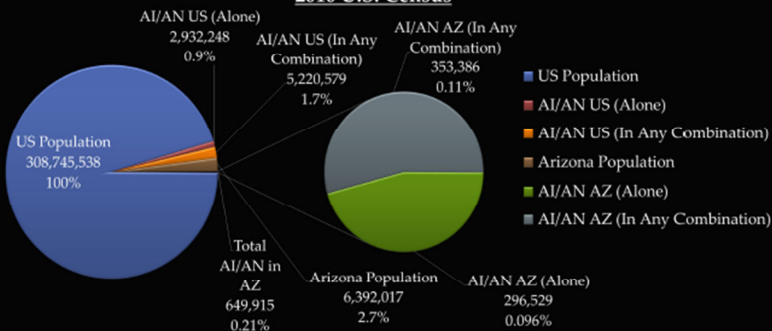


American Indian Policy Institute

ARIZONA STATE UNIVERSITY

Objective: Partnering with American Indian Tribes in Arizona to Analyze U.S. Census Data, Consider Tribal Indicators, and Promote Tribal Sovereignty

American Indian and Alaska Native Population In US and AZ 2010 U.S. Census



Objective:
American Indian Tribal Nations are focused on sustainable futures and many tribal governments are developing and implementing innovative plans and policies to achieve their goals. However, according to the 2010 census, American Indians and Alaska Natives living on reservations are the poorest people in the U.S. Achieving tribal goals for the future will require resources and efforts to change long-standing economic and social challenges. A key and significantly under-studied challenge is simply accounting for the demographic status of the American Indian population in the United States in general, and in tribal communities, particularly over time. The proposed project is designed to provide a comprehensive evaluation of existing data on American Indian populations, starting with tribes in Arizona, expanding to the Southwest and subsequently, the entire U.S. The project will also conduct innovative, transdisciplinary policy analysis of U.S. Census and American Community Survey (ACS) data concerning American Indians and Alaska Natives (AI/AN). In addition, the project will develop new data collection tools, in partnership with tribes, that will be useful for tribal governments in tracking the efficacy of various efforts as well as progress towards their own, culturally-appropriate goals. (American Indian Policy Institute)



- Image of population bar graph by: DeWeaver, Norm. 2010.
- Content of Abstract, Intellectual Merit, and Objective by: American Indian Policy Institute. (Information gathered from U.S. Census website.)

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Researching Historical Trauma – a Blackfeet Student’s Perspective

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USDA Outreach Efforts in Indian Country

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American Indian farmers and ranchers are socially disadvantaged due to the impacts of historical federal Indian policies, income levels, and issues that accompany geographic isolation and Indian land tenure designations. While American Indian farmer and ranch operations contribute significantly to the economic base of rural reservations, opportunities exist to increase the profitability and sustainability of operations. USDA programs are designed to sustain rural reservation communities and grow reservation economies. The 2010 Farm Bill provisions offer considerable opportunities for American Indian tribes and individual farmers and ranchers to participate in USDA assistance programs. On most American Indian reservations, however, these programs were underutilized.

Reaching the American Indian population can be difficult for USDA program staff. This aggressive community-based research addresses why these programs are under-utilized in a six-state area of the Western United States. The American Indian agricultural industries in the targeted six-state region (Nevada, Oregon, Washington, Idaho, North Dakota and South Dakota) are important to the economic sustainability of rural communities on reservations. According to the U.S. Census of Agriculture (2007), approximately 8,515,189 acres of land in farms are operated by American Indian farmers and ranchers in this six-state region.

Secondary data collection identifies which American Indian farmers and ranchers are utilizing the different programs within USDA, compared to the number of American Indian farmers and ranchers in the six-state area. Challenges that Indian producers face on reservations in sustaining agricultural enterprises and utilization of USDA programs are identified, specifically Natural Resources Conservation Service, Farm Service Agency and Rural Development programs. Recommendations are made to improve outreach efforts to American Indians by creating outreach opportunities, communication systems, trust-building and establishing a written outreach plan.

The American Indian Farmer and Rancher Outreach Assistance Improvement Project identified and examined the underlying factors and potential obstacles to successful utilization of USDA programs by American Indian farmers and ranchers. Focus groups were completed as an efficient technique to collect a substantial amount of data in a relatively short period of time about the utilization of USDA programs. This research also included a needs assessment conducted between 2011 and 2012, using primary data collected from interviews with individuals living on Indian reservations in a six-state study area: Idaho, Nevada, North Dakota, Oregon, South Dakota, and Washington.

USDA Secretary Tom Vilsack called for an independent assessment of USDA's program delivery in 2009. The assessment focused on the effectiveness of USDA's programs (NRCS, FSA, Rural Development, and Risk Management) in reaching America's diverse population in a non-discriminatory manner. Recommendations were made to create a process for dramatic

change in the way USDA addresses bias, discrimination, and a lack of access to programs by socially disadvantaged farmers and ranchers.

The USDA assessment focuses on the delivery of programs, accountability of programs being delivered and the impact of USDA programs to the socially disadvantaged. To look at program delivery and access, it must be recognized that there are particular social systems in dealing with socially disadvantaged populations. The American Indian population is impacted by hundreds of years of federal policy that created the agricultural social systems on reservations. It is this social system that adopts or rejects USDA programs regardless of potential benefits to the producer and profit potential for the agricultural business.

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