

# RESEARCH JUSTICE TRAINING AT DINÉ POLICY INSTITUTE



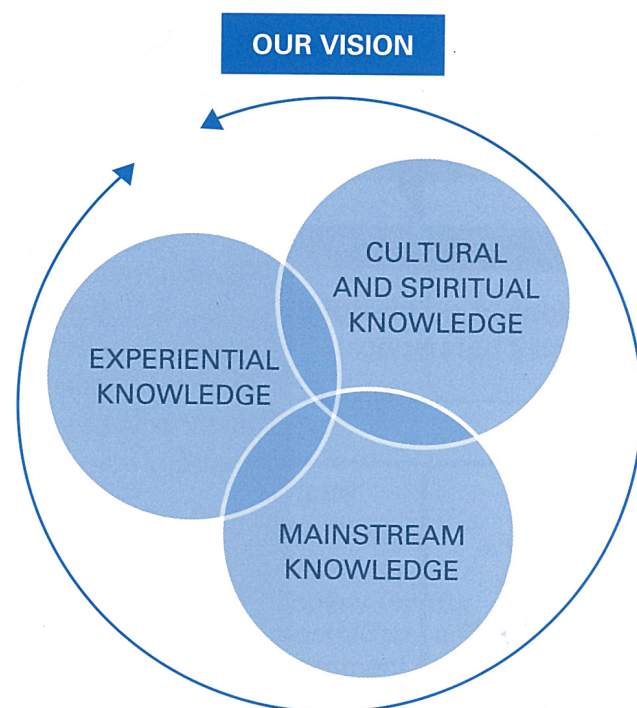
## Solidarity Research Center

Yvonne Yen Liu and Diana Benitez with the Solidarity Research

Center (SRC) led a participatory training for Diné Policy Institute staff and interns. The three day training covered material on research justice, solidarity economies, GIS, and statistical analysis. The training focused on Diné Policy Institute's ongoing land reform project and included discussion about pressing social and economic issues within the Navajo Nation.

## Research Justice

Yvonne and Diana led a discussion about research justice and how it ties into indigenous research. Research justice values cultural, experiential, and mainstream knowledge equally, as opposed to dominant research practices that privilege professionalized knowledge over local knowledge. An example brought up in our discussion was the contrast between scientific agricultural knowledge and the Navajo elders' knowledge about the corn field planting. The Navajo Nation Government brought in outside "experts" who attempted to teach the Navajo elders their scientific way of seeding corn however, the elders already knew this way of seeding through their oral teachings and experience. This demonstrates the hierarchy of knowledge, as the Navajo Nation Government valued "expert" scientific knowledge above the traditional knowledge. DPI intends to use the tenets of research justice as we survey communities in the Shonto region, recognizing that all forms of knowledge deserve equal political power and legitimacy.



Equal political power and legitimacy

*"Our Vision" Image from DataCenter Research for Justice.*



*Diana Benitez and Ashley Gray at the Research Justice Training.*

## Solidarity Economies

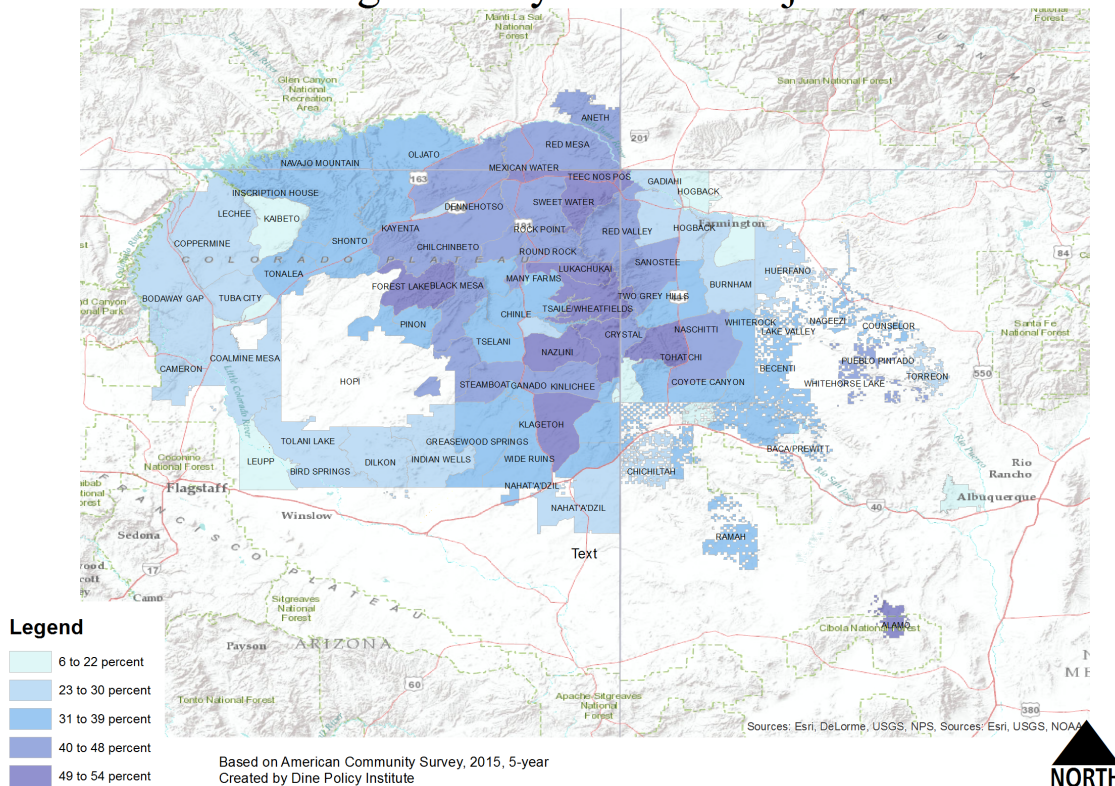
Solidarity economies recognize and valorize the various components of the social economy, including informal labor and unpaid work such as childcare and volunteerism. The Solidarity Economy movement seeks to build economic systems based on cooperation and mutual aid that benefit a majority of people (see <https://ussen.org/solidarity-economy/> for more information on solidarity economies)



## Geographic Information Systems

Diana Benitez led a session on Geographic Information Systems (GIS) and its research application in examining social problems. Participants found GIS to be a powerful tool for analyzing data and producing informative maps. Below is a map we made examining housing vacancy on the Navajo Nation with data collected by the American Community Survey.

### Housing Vacancy in the Navajo Nation



## Statistical Analysis

Yvonne Liu introduced software called Statistical Package for Social Sciences (SPSS). This is an analytic statistics software that allows us to run tests on mass data sets. Statistical tests such as T-tests, frequencies, Chi squared, and multiple linear regressions can be performed through this software. We created various tables and charts using data from IPUMS USA. These tests allow for conclusions to be drawn about the data sets, which we will utilize in our land reform study. We all learned a great deal from her lesson.

## SPSS

We created the following table in SPSS with data on the Navajo Nation from the IPUMS website. We ran a crosstabs analysis between employment status and tribe affiliation. From the Chi-squared value in the bottom table we can conclude that there is a significant difference in the likelihood of being Navajo and being unemployed. Yvonne synthesized our findings and prepared the second table with data analyzed in SPSS that shows being Navajo predicts the lack of plumbing, dropping out of the labor force, and being self-employed.

Summary.

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Employment status [general version] * Recode TRIBE into Navajo	170771	100.0%	0	0.0%	170771	100.0%

Employment status [general version] \* Recode TRIBE into Navajo [count, column %].

Employment status [general version]	Recode TRIBE into Navajo			Total
	No tribal affiliation	Navajo	Other tribal affiliation	
N/A	24486.00 18.45%	7103.00 26.75%	3365.00 29.18%	34954.00 20.47%
Employed	53592.00 40.39%	6780.00 25.53%	3578.00 31.03%	63950.00 37.45%
Unemployed	4451.00 3.35%	1893.00 7.13%	928.00 8.05%	7272.00 4.26%
Not in labor force	50155.00 37.80%	10781.00 40.60%	3659.00 31.73%	64595.00 37.83%
Total	132684.0 100.00%	26557.00 100.00%	11530.00 100.00%	170771.0 100.00%

Chi-square tests.

Statistic	Value	df	Asymp. Sig. (2-tailed)
Pearson Chi-Square	3967.18	6	.000
Likelihood Ratio	3865.23	6	.000
Linear-by-Linear Association	139.28	1	.000
N of Valid Cases	170771		

Assumptions	Findings	Conclusion
<b>PLUMBING</b> 40-70% of Navajo households lack plumbing	83%	Reject null hypothesis that being Navajo is not significantly correlated with lack of plumbing
<b>NOT IN LABOR FORCE</b> 30-40% of Navajo individuals are not in the labor force (unemployed or long-term unemployed)	48%	Reject null hypothesis
<b>SELF-EMPLOYED</b> (possible measure of informal economy participation) 20-50% of Navajo individuals are self-employed	3%	Reject null hypothesis

## Future Collaboration

The SRC training provided DPI with a new set of skills for data analysis. During the training, we engaged in valuable discussions about research justice and solidarity economies, and discussed how we can incorporate those ideas in our research on the Navajo Nation. Ashley Gray, an intern with DPI and Diné College Student, said about the training, “I learned a lot and was exposed to so much going on in our tribal government, land sovereignty, and the water issues happening here. There was so much to absorb during those three days and it changed my perspective on the Navajo Nation and what I want to pursue for my future career”.

DPI is excited for continued collaboration with SRC as we engage in research that addresses social and political issues within the Navajo Nation. Participants formed meaningful connections during the training, and look forward to working together in the future.

