## TEMPLATE FOR CMaP PROJECT

Name: Audrey Boone Class: Moab 2007

Project Title: Navajo Clan Concentrations in the Monument Valley High School

Service Area

Project Description	This project is specific to the Navajo reservation. It's a project that collects data to identify where Navajo clan concentrations are geographically located on the Navajo reservation. This project specifically focuses on the local communities that Monument Valley High School services in San Juan County but may be applied to other schools servicing communities on the Navajo reservation or other Indian reservations in Utah.
Community Issue or Problem Selected -How project evolved?	The project came up during a discussion with Monte Wells who owns Off The Beaten Path Maps. Monte suggested the projected because it was one that has been of interest, but low on the priority list because of other major projects in the making. It's a project that also didn't necessarily have all the community connections being from outside of the reservation. Linking with Monument Valley High School now gives the project the bridge it needs to move forward.
Community Partner(s)	Off The Beaten Path Maps, Monte Wells-owner P.O. Box 192, Monitcello, Utah, 84535  Monument Valley High School PTA, Darlene Holiday-President Oljeto Chapter, James Black-Chapter President
Project Objectives	Understand how to use GPS and GIS to map clan concentration locations.      Research reasons for locations of concentrations.      Present findings to local organizations.

Utah Core Standards/Objectives	Reading Class Students will use vocabulary development and an understanding of text structures to comprehend informational text.  Notes:  1. Reading standards/objectives are slightly different by in grades 7-12, but all address vocabulary development and text structures.  2: I am highly interested in team teaching with a Social Studies, Utah History, or Navajo Cultural teacher who can bring in their core standards to align with this project.
Essential Question(s) -Spatial Issue	Where do the different concentrations of Navajo clans reside on the Navajo reservation?     How many different clans are there in the San Juan County reservation area?     Has there been movement of the concentrations of clans over the years?
Assessments (rubrics, scoring guides)	Formative and summative assessments will be applied to students and the project throughout the year; and will include the following types:  • Selected response (MC, T/F, Matching) • Performance assessment • Personal Communication • Progress Reports • Portfolios • Assessment Guides (rubrics) • State Content Standards  A summative project assessment will lend to an analysis of the process and the product; and will include the following types:  • Project Assessment Sheet • Formative and Summative Project Assessment
Project Products	Create an ArcGIS9 inventory map of the regional clans     Create a poster containing the map and a color coded legend of the concentrations of clans     Write a report describing project findings
Project Timeline (including step by step Procedures)	Note: Time allotted students for fieldwork and in-class work will be on going throughout the school year. This timeline would work best for students at Monument Valley High school for two reasons: 1) the distance traveled in the high school service area is great, and 2) other curriculum standards and objectives need to be on going as well.  OTR1: Survey and GPS data points, download GPS points, place on map  OTR2: Create map and add layers  OTR3: Proof and edit map layers  OTR4: Present information at various community events

D	• GPS units
Resources Needed	<ul> <li>ArcGIS and DNR Garmin software installed and working</li> <li>Clipboards and data table for fieldwork</li> <li>Survey questions</li> <li>File management folders created and organized ahead of time</li> </ul>
	San Juan County Aerial image file
Skills Required	Show students how to use:  • Shared folders, and save date, etc.  • GPS skills  • Waypoints  • Tracks  • Navigation  • Work in collaborative teams  • Add data on ArcGIS9  • Collect data using data tables  • Create tables in ArcGIS9  • Create a map layout
Project Team Member Roles	Teacher(s): Teach students GPS and GIS skills, communication skills, reading skills, coordinate community partners with project.  Students: Learn GPS and GIS skills, communication skills, reading skills, working with community partners, doing field work and class work related to project.  Partner(s): Off The Beaten Path Maps, Monte Wells-owner Assist students in class learning GPS and GIS, and guide project to completion.  Monument Valley High School PTA, Darlene Holiday-President Assist in project awareness and organizing survey implementation. Oljeto Chapter, James Black-Chapter President Assist in project awareness and organizing survey implementation.
Celebration/Presentation	Present information at:  • Monument Valley High School's PTA meeting  • Oljeto Chapter meeting  • San Juan County Cultural Week
Project Bibliography	Texts: Gierow, A. J. W., Linn, Sophia E., Community Mapping Institute: Project-based Training for Educators, 2005. (Other text references TBA)  Websites: www.uen.org www.uensd.org/gis
Plans for Future CMaP Activities	Brainstorm CMaP activities with students, faculty, and community members.
Project Evaluation	Receive feedback from: • students and faculty • community partners • community presentations