Project Title: Utah Counties

Essential Question(s) -Spatial Issue	How can students let people know what to visit in their communities? Can students use technology to share what they learn with people from other areas?
Project Description	In fourth grade, all students are studying counties throughout the state. Often they write a report or make a PowerPoint presentation. Instead they could put their information on a website designed after a 4H website at http://www.youthfavoriteplaces.org. This could be done by a single class, all the fourth grade classes in a school, or one of the teams involved in a district history cohort. If the group also launches and tracks a "travel bug" that goes around the state using total strangers that visit hidden geocaches, it may keep students coming back to the website to watch the progress, help them become aware of the fun of geocaching, and further increase their spatial awareness.
Community Issue or Problem Selected -How project evolved?	Many communities depend on tourists to bring money into their economies. With higher gas prices, more Utahns are willing to stay within the state, but don't know where to go. Children could inspire each other and their parents to do more to explore Utah if there were a website that appealed to both students and parents.
Community Partner(s)	County information bureaus, as needed. Permissions to use photos from the internet could be especially important.
Project Objectives	Improve student engagement, motivation, and learning using projects that involve technology. Raise student awareness of spatial relationships by following a "travel bug." Understand latitude and longitude coordinates. Understand how to use GPS to locate areas.
Utah Core Standards/Objectives	Students will understand the world in spatial terms. Students will learn how to locate latitude and longitude

	coordinates on their computer.
	Social Studies - (Grade 4)
	Standard 1 : Students will understand the relationship between the physical geography in Utah and human life.
	Objective 1: Classify major physical geographic attributes of Utah. A. Identify Utah's latitude, longitude, hemisphere, climate, natural resources, landforms, and regions using a variety of geographic tools.
	Objective 2: Analyze how physical geography affects human life in Utah. A. Identify population concentrations in the state and infer causal relationships between population and physical geography.
	Objective 3: Analyze how human actions modify the physical environment. c. Outline the development of recreation in Utah since 1900 (e.g. sports, tourism, state, and national parks).
	Standard 2: Students will understand how Utah's history has been shaped by many diverse people, events, and ideas.
	Educational Technology - (Grade 4)
	Standard 4: Use content-specific tools, software and simulations (e.g., environmental probes, graphing calculators, exploratory environments, Web tools) to support learning and research.
	Standard 5: Apply productivity/multimedia tools and peripherals to support personal productivity, group collaboration, and learning throughout the curriculum.
	Standard 6: Design, develop, publish and present products (e.g., Web pages, videotapes) using technology resources that demonstrate and communicate curriculum concepts to audiences inside and outside the classroom.
	Standard 7: Collaborate with peers, experts, and others using telecommunications and collaborative tools to investigate curriculum-related problems, issues, and information, and to develop solutions or products for audiences inside and outside the classroom.

	Standard 8: Select and use appropriate tools and technology resources to accomplish a variety of tasks and solve problems. Standard 9: Demonstrate an understanding of concepts underlying hardware, software, and connectivity, and practical applications to learning and problem solving.
Project Timeline (include step by step procedures)	During the time of year that teachers plan to have students do research and reports on Utah counties: 1 hour to teach students about coordinates and how to use GPS. 2 hours for students to research their assigned county to gather data. 3 hours to create website with photos and data.
Resources Needed	GPS units available from district media center. Internet access for research for photos, county info, and coordinates. For software, we will use word processing, which is already installed on the computers in the lab where this class meets. We may need help from the tech office to create a website with an interactive county map, possible "showcase" like at the sample website at http://www.youthfavoriteplaces.org, and a way to track a geocaching "travel bug."
Skills Required	Show students how and where to save data. Use GPS unit to understand coordinates but use the internet to gather them for specific landmarks. Build a website with several pages, one for each county or landmark. Know rules for geocaching a "travel bug," sign up at geocaching.com for ability to track, get appropriate dog tag purchased, attach dog tag securely to object, prepare properly labeled container, store in a geocache, and update tracking on the class county website.
Project Team Member Roles	**Teacher(s):** Schedule GPS units and instruction. Help design a website. **Students:** Gather information about counties. Find coordinates for each landmark. Find a photo of chosen landmark. **Partner(s):** Students may contact individual counties for information.

Project Products	A website created to show favorite landmarks and travel bug. Photo of the "travel bug" and its dog tag, so children understand what is being tracked. Photos from internet of each landmark. Data displayed for each chosen landmark or favorite activity: Address: street, town, UT, zipcode Latitude: (e.g. 40.0362) Longitude: (e.g. 120.043) Description: Age Group: (e.g. all ages) Keywords: (e.g. desert Why this is a favorite place:
Assessments (rubrics, scoring guides)	Research photos and data. Completed website page.
Celebration/Presentation	Website is advertised within the school, district, and possibly other schools throughout the state.
Plans for Future CMaP Activities	As a district professional development specialist for technology, I will help with future trainings in the district for GPS, GIS, and CMaP. I will also support teachers who want to work with their students to design and complete a project.