

CMaP PROJECT

Project Title: Reducing Litter by Strategic Placement of Garbage Receptacles.

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Class: St. George CMaP 2010

Project Description	We will find out if the litter problem at our school can be fixed by having a different arrangement of trash cans. We will find out where the garbage is and the trash cans are. We will look for patterns and create a plan for making trash cans more convenient in the hope that litter will be reduced.
Community Issue or Problem Selected -How project evolved?	There is too much garbage at Sandstone Elementary, and a lot of it seems to be on the field, far away from the nearest trash cans. I imagine a lot of it is related to the weekend soccer games.
Community Partner(s)	The school. The Community Council. The PTA.
Project Objectives	Reduce the litter at Sandstone Elementary School. Provide the students with an interesting way to improve the school.
Utah Core Standards/Objectives	Educational Technology Standard 8: Use technology resources (e.g., calculators, data collection probes, videos, educational software) for problem-solving, self-directed learning, and extended learning activities. Mathematics Objective 2: Specify locations in a coordinate plane.
Essential Question(s) -Spatial Issue	Will better placement of trash cans improve the litter at Sandstone Elementary?
Assessments (rubrics, scoring guides)	Have the students found the garbage and cans? Have they been placed on the map accurately?
Project Products	Map with all of the litter and trash cans placed. Presentation to Principal and Community Council.
Project Timeline (include a step by step Procedures)	Day 1: Teach GPS Marking. Teach importing into the computer. Day 2-3: Send teams out to map locations of garbage. Upload data points to the computer. Day 4: Send out a team to map the location of all the trash

	<p>cans. Upload data points to the computer.</p> <p>Day 5-6: Begin compiling layers on the computer. Create the map.</p> <p>Day 7: Analyze the map as a class.</p> <p>Day 8: Presentation team begins preparing a presentation to the Community Council.</p> <p>Wait for word.</p> <p>Eventually: Place the new trash cans. Have a treat and be the first to put garbage in the cans.</p>
Resources Needed	<p>GPS Units. At least one, preferably multiple units (like 4?)</p> <p>ArcView on a computer. People with the skills to use the GPS units and software.</p>
Skills Required	<p>GPS unit operation and Software skill.</p>
Project Team Member Roles	<p>Teacher(s): Peter Skouson</p> <p>Students: Mr. Skouson's 5th Grade Class (Rm. 19)</p> <p>Partner(s): Sandstone Elementary School</p>
Celebration/Presentation	<p>We will place the trash cans ourselves and enjoy a treat so we can be the first to put garbage in the new cans.</p>
Project Evaluation	<p>Are the measurements correct? Are the maps accurate? Did the Community Council go for it?</p>
Project Bibliography	
Plans for Future CMAP Activities	<p>We should check later to see if the litter was reduced around the school. Especially in the areas where we placed trash cans.</p>