## CMaP PROJECT

Project Title: Whose Garbage is This? Author: Brian Ailshie

Author: Brian Ailshie Class: Heber CMaP 2010

| Project Description   | Students will collect waypoints with a GPS of where garbage is found on our school grounds. They will also mark what type of garbage it is. We will attempt to decide how much probably came from the school population, and how much came from other sources.  |
|---|---|
| Community Issue or<br>Problem Selected<br>-How project evolved? | Across the street from our school are a baseball park complex and the county rodeo grounds. Sharing our lot is the Middle School. Of course we are also surrounded by houses. Since we are close to these locations, our fields and playgrounds are used by a variety of other populations besides our students and staff.  I would like to see if there is a disparity in the types of garbage our students leave on the school grounds, and the garbage left by other visiting populations.  Along with this, I would like to see the possibilities of better garbage receptacle placement in relation to a cut down of the garbage left across the school grounds. |
| Community Partner(s)  | Heber Valley Elementary (Principal Eric Campbell) Rocky Mountain Middle School (Principal Jim Judd) Janitorial Staff at each school. Wasatch County Parks and Recreation  |
| Project Objectives  | To reduce the amount of garbage left on the school grounds, as well as possibly at the neighboring sites (Middle School, ball park, etc.)   |
| Utah Core<br>Standards/Objectives                               | Technology Standards 3, 8, & 9 Math Standard 3 Obj. 1 & 2; Standard 5 Obj. 1 & 2 Social Studies Standard 3 Obj. 1e Health Standard 7 Obj. 1b&c  |
| Essential Question(s) -Spatial Issue                            | Is there a difference in the types of garbage found on the neighboring fields and the school grounds? Will changing the distribution (placement and/or numbers) of garbage receptacles change the amount of garbage found?  |
| Assessments (rubrics, scoring guides)                           | Are the students effectively picking up, marking the location of, and describing the garbage? Was there wide ranged involvement? Group presentation on findings.  |

|                              | Map with data comparing trash found at all three neighboring facilities and Heber Valley Elementary School.  Student presentations to the School Community Council, Principal, school Janitorial Staff, and Parks & Recreation Staff.  Greater student awareness of garbage and its affect on the community. |  |  |  |
|------------------------------|--|--|--|--|
| Project Timeline             | Training on GPS use and how to mark waypoints.   |  |  |  |
| (include a step by step      | Training on Excel and how to import data into a computer.  |  |  |  |
| Procedures)                  | Go out to the various fields and collect data (garbage) in   |  |  |  |
|                              | groups of 3 or 4 (1 for GPS, 1 with data sheet, 1 or 2   |  |  |  |
|                              | collecting garbage). Entering data into the computer.  |  |  |  |
|                              | Create Class Map and analyze data over time.   |  |  |  |
|                              | Class works together to complete presentation on completed   |  |  |  |
|                              | data set.  |  |  |  |
|                              | Presentations to other students for revision ideas.  |  |  |  |
|                              | Presentations to community partners.   |  |  |  |
| Resources Needed             | GPS Units – class set available from District Office.  |  |  |  |
|                              | Computer with ArcView loaded on it (Mr. Ailshie's laptop)  |  |  |  |
|                              | Student Computer Lab at HVE with Excel loaded on them. Garbage bags  |  |  |  |
|                              | Data sheets & pencils for recording data   |  |  |  |
|                              | Presentation software (Powerpoint on Lab & Mr. Ailshie's laptop)   |  |  |  |
| Skills Required              | Tutorial/ lesson on the uses of GPS units  |  |  |  |
|                              | Instruction on Excel data entry  |  |  |  |
|                              | School safety review (for garbage pick-up times)   |  |  |  |
| Project Team Member<br>Roles | Teacher(s): Brian Ailshie  |  |  |  |
|                              | Students: Heber Valley Elementary 4 <sup>th</sup> Graders  |  |  |  |
|                              | Partner(s): Mr. Campbell, Principal HVE<br>Mr. Judd, Principal RMMS  |  |  |  |
|                              | Wasatch County Parks & Recreation.   |  |  |  |
| Celebration/Presentation     | Write-up(s) for local newspaper (Wasatch Wave)   |  |  |  |
|                              | Grade party to celebrate their hard work.  |  |  |  |
| Project Evaluation           | As a class, we will discuss if the project was worthwhile and  |  |  |  |
|                              | what they learned as they participated.  |  |  |  |
|                              | Each student will write a short response on what they gained   |  |  |  |
|                              | from the experience and share it with me.  |  |  |  |
| Project Bibliography         | •  |  |  |  |
| Plans for Future CMaP        | Playground safety evaluations.   |  |  |  |
| Activities                   | 'Safe walking' routes for the school's pedestrian traffic.   |  |  |  |
|                              |  |  |  |  |