

## What is in our school? CMAP Project

Each participant who participated in the CMAP workshop signed an agreement to conduct a CMAP project and write up. This template is provided to you as a guide for the CMAP project you agreed to conduct with your students.

Please complete a detailed write-up of your CMAP project using this template. Use the kind of language and detail so other teachers can take your project to conduct in their classrooms. An archive of CMAP projects will be made available for Utah educators.

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**Project Title: What is in our school?**

**Created by: Syndi Morris for Math 6th grade Special Education class**

**Class: St George, Utah**

Project Description	Students in 6th grade Special Education class will mark computer lab, library, restrooms, gym, lunch room, and play area to create map of the school and school grounds enabling them to get to know the school and its resources based on the waypoints.
Community Issue or Problem Selected  -How project evolved?	Students will need to learn important areas and resources within the school for new students entering Fossil Ridge as new 6th graders. Teacher and students will work together with community partner to create a map of the school grounds to learn as new students where important resources are located and share with their parents to acquaint them with the school.

Community Partner(s)	School counselor, and Dale Stapley, District GPS District Media Center in Woodward Building for GPS devices, school employees and instructors in the areas that the students will find
Project Objectives	Students will learn the basics of mapping with GPS and create a map of the school grounds. Students and teacher will work with a community partner to create the map by following coordinates of the points of interest in the school. The map will be available to students, their parents, and community. The map would be used to acquaint new students and parents to the school.
Utah Core Standards/Objectives	Mathematical Practices from the Utah Core Standard: 1. Make sense of problems and persevere in solving them 5. Use appropriate tools strategically 6. Attend to precision
Essential Question(s) -Spatial Issue	What are the various resources on the school grounds and buildings and their relationship to each other in the school building? Where can students play, eat, etc..? Which areas should students not be in? What areas are important to their learning and will be used on a daily basis?

<p>Assessments (rubrics, scoring guides)</p>	<p>Students will be assessed by informal teacher observations and a school map marked correctly.</p>
<p>Project Products</p>	<p>Create a map of the school with important locations, classrooms and areas and resources for new 6th graders entering Fossil Ridge Intermediate using GPS units and waypoints.</p>
<p>Project Timeline (include a step by step Procedures)</p>	<p>Teacher:</p> <ol style="list-style-type: none"> <li>1. Map points on GPS and save on that device</li> <li>2. Download and save into <a href="#">Garmin Base Camp</a> in folder (Label waypoints by color)</li> <li>3. Plug student GPS units</li> <li>4. Clear all existing waypoints on each student GPS units</li> <li>5. Download folder of waypoint onto student GPS units.</li> <li>6. Produce blank map of Fossil Ridge Intermediate School with classrooms but no labels. Provide list of important areas and resources that they will choose from</li> <li>6. On blank maps, put colors of waypoints in different order so that groups don't go to same place.</li> <li>7. Make first waypoint a "practice" waypoint that whole class participates in and shows understanding</li> </ol> <p>Students:</p> <ol style="list-style-type: none"> <li>1. Discuss the proper use of the GPS unit.</li> <li>2. Learn the basics of using a GPS unit (specifically " where to and "waypoints".. Show video <a href="http://gmapk12.wikispaces.com/Instructional+Videos-GPS">http://gmapk12.wikispaces.com/Instructional+Videos-GPS</a></li> <li>3. Assign to work with partners.</li> <li>4. Students will practice as a class finding the "Practice" waypo so they know how to follow the GPS and show understanding</li> <li>5. Students will walk the school finding the important resources using the waypoints that are already entered in the GPS systems</li> <li>6. Using a blank map of the school, they will mark on the map t</li> </ol>

	important resources from the waypoints given in the GPS taken from the list given.
Resources Needed	Dale Stapley, District GPS District Media Center in Woodward Building for GPS devices, blank map of Fossil Ridge Building,
Skills Required	Use of GPS units, following directions, working with partners a small groups, how to collect data needed, marking a map, reading waypoints
Project Team Member Roles	<p><b>Teacher:</b> Teaching, modeling how to use GPS unit as well as teaching how to mark and create a map with accuracy</p> <p><b>Students:</b> Following directions, using GPS, following compass, collecting data, and creating map</p> <p><b>Partner(s):</b> Teaching, modeling and creating map with the students</p>
Celebration/Presentation	Students will present the map to other students in the class and share what they have learned about their new school. During parent night, students can share and use their map with their parents.
Project Evaluation	Students created an accurate map of the school grounds containing the important resources that were given in the GPS.
Project Bibliography	<p><a href="http://www.garmin.com/en-US/shop/downloads/basecamp">http://www.garmin.com/en-US/shop/downloads/basecamp</a></p> <p><a href="http://schools.utah.gov/curr/mathelem/core-curriculum.aspx">http://schools.utah.gov/curr/mathelem/core-curriculum.aspx</a></p>

	<a href="http://gmapk12.wikispaces.com/Instructional+Videos-GPS">http://gmapk12.wikispaces.com/Instructional+Videos-GPS</a>
Plans for Future CMAP Activities	Using the GPS units, students will use them to find the area and perimeter of the school and classroom in “area calculation” mode when learning how to solve for area and perimeter of shapes.

Optional:

- Lesson Plans
- Student Artifacts
- Publicity