CMaP PROJECT

**Project Title:** Project Bus Ride
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**Class: UEN** CMaP 2010

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| Project Description | Students will identify the GPS coordinates for all of the stops on the sSTEP Program bus routes. We have four busses that transport students from all areas of Granite District. Each bus has a specific route and specific bus stops. |
| Community Issue or Problem Selected<br>-How project evolved? | Due to the unique nature of our school, we have a unique bussing situation. Some of the issues we have had regarding the bussing include:<br>1. Student unfamiliarity with the process of riding a bus.<br>2. Parent and student unfamiliarity with the locations of the bus stops.<br>3. Non-English speaking parents.<br>4. Parent and student fear of riding the bus and the process of getting on and off the bus.<br><br>Through discussions with the program teachers, we decided it would be beneficial to have an interactive map that would identify each of our program bus stops. Students will be able to locate the bus stop that is closest to his or her residence, see a visual picture of the landmarks (stores, houses, schools) that are near the bus stops, and even see a picture of their bus driver. |
| Community Partner(s) | Granite District Transportation Department |
| Project Objectives | Students will understand and develop GPS and GIS related skills to produce a map that will assist all students (and their parents) in accessing the Granite School District provided bussing system.<br><br>Students will use 21st Century Skills including teamwork, problem solving and collaboration in addition to the technical skills they will acquire through the use of the GPS and GIS systems.<br><br>Students will be able to arrive to school on time and ready to work because they will have complete understanding of the bussing system.<br><br>Parents will be able to better help their kids make it to the bus stop on time and access the bussing system. |

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| | Parents will no longer be able to tell us “My kid didn’t know where to get on the bus.” |
| Utah Core Standards/Objectives | Geography for Life<br>**Standard 1**<br>Students will understand the world in spatial terms<br>**Standard 5**<br>Students will understand the interaction of physical and human systems.<br>**Standard 6**<br>Students will use geographic knowledge to connect to today's world.<br><br>Language Arts<br>**Standard 1**<br>(Reading): Students will use vocabulary development and an understanding of text elements and structures to comprehend literary and informational grade level text.<br>**Standard 3**<br>(Inquiry/Research/Oral Presentation): Students will understand the process of seeking and giving information in conversations, group discussions, written reports, and oral presentations.<br><br>Educational Technology<br>**Standard 1**<br>Identify capabilities and limitations of contemporary and emerging technology resources and assess the potential of these systems and services to address personal, lifelong learning, and workplace needs. (2)<br>**Standard 5**<br>Use technology tools and resources for managing and communicating personal/professional information (e.g., finances, schedules, addresses, purchases, correspondence). (3, 4)<br>**Standard 6**<br>Evaluate technology-based options, including distance and distributed education, for lifelong learning. (5)<br>**Standard 8**<br>Select and apply technology tools for research, information analysis, problem-solving, and decision-making in content learning. (4, 5)<br>**Standard 9**<br>Investigate and apply expert systems, intelligent agents, and simulations in real-world situations. (3, 5, 6) |

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| | **Standard 10**<br>Collaborate with peers, experts, and others to contribute to a content-related knowledge base by using technology to compile, synthesize, produce, and disseminate information, models, and other creative works. (4, 5, 6) |
| Essential Question(s)<br>-Spatial Issue | Where are the bus stops for the sSTEP Program busses? |
| Assessments (rubrics, scoring guides) | 98% of our students will be able to use the provided bussing.<br>Final project<br>Teacher observation |
| Project Products | Interactive map of bus routes and stops.<br>Video introduction of the bus drivers. |
| Project Timeline (include a step by step Procedures) | 1. Introduce GPS and GIS<br>Show Videos<br>2. Get new bus routes from transportation.<br>3. Assign students to a bus route.<br>4. In small groups students will locate each bus stop on GoogleMaps and mark a waypoint.<br>5. Students will have 4 weeks to complete the project. |
| Resources Needed | 1. Google maps<br>2. Mapping software<br>3. camera |
| Skills Required | Basic computer skills<br>Basic GPS and GIS skills<br>21st Century Skills |
| Project Team Member Roles | **Teacher(s): mentors and guides**<br><br>**Student(s): gather data, input data, analyze data**<br><br>**Partner(s): provide data** |

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| Celebration/Presentation | Students will present final project to the program teachers, Director, Transportation Director and employees.<br><br>Ultimately, the final project will be presented to all incoming students and parents and may be posted on the class website. |
| Project Evaluation | Project rubric<br>Teacher observation |
| Project Bibliography | |
| Plans for Future CMaP Activities | Students can identify where each student lives and where he/she gets on the bus to analyze current bussing needs.<br><br>Students can identify the shortest/safest routes to each bus stop. |