

CMap-Pleasant Grove High School

Summary

We are working with Pleasant Grove City Police Department in locating accidents that have occurred, this past year, within a mile and 1/2 radius of Pleasant Grove High School. Once we receive the information, we will have our students mark waypoints with GPS units so we can map the accidents surrounding our high school. They will also be taking photographs of their experience. Students will be involved in transferring this information from our GPS units onto the ArcMap.

Time Frame

8 class periods of 90 minutes each

Group Size

Small Groups

Life Skills

Thinking & Reasoning, Communication, Character, Social & Civic Responsibility, Systems Thinking

Materials

GPS Units

ArcMap

Camera

Computer/internet access

Police reports

Background for Teachers

GPS knowledge

Typing skills

Powerpoint knowledge

Student Prior Knowledge

none

Intended Learning Outcomes

This will make our students more aware of their responsibility to be a safe driver, as well as driving conditions. Increase safety awareness around our school and in the community.

Instructional Procedures

Step 1 - Gather police reports. We had anticipated the accidents to be separated into categories such as pedestrian, auto, bicycle etc. Once we received the reports all accidents were grouped together, no separation that is why there is only one marking on our map.

Step 2 - GPS training for our students. We used a small group rather than a class. If you do this with a large class, make sure you contact the district and check out enough GPS units for every student to have one.

Step 3 - Create a data gathering sheet.

Step 4 - Collect data - students mark waypoints as well as write information down on gathering sheet. Works best if you use teams.

Step 5 - Transfer data to ArcMap system. Make sure you have the map up and running beforehand. Make sure your projections are accurate with your map, this insures that the waypoints will show up on map.

Step 6 - Create powerpoint presentation. We had planned on creating a powerpoint to present to the Dr. Ed classes regarding our accident report. Due to lack of time we were unable to do so.

Step 7 - Present and publish results. We gave an informal presentation regarding our accident report.

Step 8 - Send results to UEN

Strategies for Diverse Learners

Teaming up gifted students with struggling students. Using students knowledge of technology and digital photography.

Extensions

Health classes - research initial police report to determine cause of accident.

Drivers education

Bibliography

Pleasant Grove Police Report 87 E. 100 S. Pleasant Grove Ut. 84062 801-785-3506 Garmin 1200 E. 151 Street, Olathe, KS. 66062 913-8282 ArcMap/GIS ESRI 380 New York Street, Redlands CA. 92373-8100 USA 252-227-7015

Authors

[Stephanie Cottam](#)

[Janalene Houle](#)