ID: 52

	GPS: Geography Promotes Success **Mini/Resident:** minigrant
	ResidenceName: **ResidenceEmail:** **ResidenceEmail0:**
ProjectCategory:	InterDisciplinary
Number of Students:	300
Grades:	6th
Description:	West Hartford's 6th grade curriculum challenges students to grasp geography skills in order to understand spatial relationships. Teachers introduce and investigate geographic concepts and skills within the confines of their own classroom using wall maps, atlases, textbooks and the occasional image from the Internet. In this setting, students assume the role of "consumer of information" as opposed to constructing and applying their own awareness of geography. Ultimately, this present teaching method presumes students to better perceive their world while positioned behind a desk rather than experiencing Earth in real-life situations. By using a geographer's tool (Global Positioning System or GPS) students will apply their knowledge of latitude and longitude, physical features, scale, absolute and relative location, and the five themes of geography as they accurately map the world around them. Students, working as cartographers in collaborative groups, will be assigned a section of the school/school grounds that they will be required to map. The GPS units give students an in-depth look of the latitude and longitude of their school/school grounds. After examining these coordinates, the entire class will generate and justify decisions about scale, key creation, projection, and the absolute location of objects. Upon completion, the cartographic sections will be assembled to assess accuracy. Essentially, this project allows students to closely examine a three dimensional world and map it on two dimensional surface. Through the use of Global Positioning Systems, students gain powerful sight into the world at home and as a whole. As an extension to this in-class project, students will take the GPS units home on a rotating basis, record the absolute location of their homes and other town sites. The students will use their coordinates to create a detailed map of West Hartford. In addition to promoting success in geography, science teachers have expressed interest in utilizing the GPS units to enhance their curriculum. Students can utilize the GPS units on two specific 6th grade field trips: Sleeping Giant National Park ecology hiking field trip and Bluff Point field trip. During these educational adventures, the GPS units will assist students with locating the elevation of sea level, determining coordinates of rock formations in order to study the change of geology in Connecticut, orienteering themselves in the nature and engage in an exciting high-tech "treasure hunting" activity known across the planet as geocaching.
Goals:	The goal of this project is for students to use the actual tools of the geographic trade plus their knowledge of map skills, mathematics, and science to accurately map their own school, including the school grounds. The specific objectives are as follows: 1.Students will understand the purpose of geographic technology (GPS units). 2.Students will use geographic technology to create accurate maps of their physical world using their knowledge of latitude and longitude, map scale, map key, direction, etc. 3.Students will apply their geographic knowledge and use of GPS units to new situations in their Social Studies, Science and at home.
TimeLine:	September/October 2009
Evaluation:	Once the final map is completed, students will assess the accuracy of another group's created map. The final map will contain many plotted objects. Students will determine the distance between these objects by utilizing the distance scale and the latitude and longitude. They will then take the GPS units outside to measure the distance between objects and the absolute location. If their classroom and outdoor calculation match, the map is accurate. In addition, students will be complete a written assessment addressing the map skills applied during the project.

AmountRequested:	1800 **Other Requested:** 0	
Materials:		

Equipment	1800	12 Global Positioning Systems at $149.99 each
Supplies		
Honoraria		
Travel		
Shipping		
Mounting		
Installation		
Other		
Other		
TOTAL	1800	

PartialFunding: Yes, I will undertake project with partial funding. **ExplainNoReport:** **PrincipalReview:** YES **LessThreeGrants:** LessThanThreeGrants **Permission:** Yes, you have my permission to use my application. **AgreePostProjEval:** Yes, I will submit an evaluation.