

No Child Left Inside

Section 1: Justification

A. Project Need: As children's lives become ever more inundated with technology, it is increasingly more important that educators increase our involvement with their exposure to the outdoors. There is a great concern among many experts, educators and parents that the lack of time spent outdoors by our children may lead to devastating effects on healthy physical, social and environmental development.

It is the responsibility of the adults to teach our children how to balance the amount of time they spend indoors and outdoors. It is possible to use various technological tools outdoors to pursue both recreation and social activities. Geocaching is one such example of this technology-nature hybrid.

Hidden all over the world are 'geocaches'; sealed containers of various size with a logbook, pencil and various items intended for trade inside. Geocaching is the activity in which a person, or group of people, retrieve the coordinates of a geocache from www.geocaching.com, and then using a Global Positioning System (GPS) receiver, locate the container. Once found, the group or individual signs the logbook, trades a trinket, and then replaces the geocache back where they found it. The "Find" is logged under their unique username on the computer and the experience is shared with the entire world.

B. Purpose of Project: The purpose of this project is to encourage children to develop a positive attitude towards being outdoors, and connect to nature, while enhancing the balance between healthy living and engaging with a variety of digital tools. This project's purpose includes a collaborative effort locally with Helena area teachers and globally as students interact with "geo-pals" from around the world. This project satisfies district and national standards in the areas of health, science, social studies, writing and technology.

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According to the a National Wildlife Federation article published September 18, 2008, “Passage of the bill (No Child Left Inside Act of 2008) is especially timely given that today's kids spend half as much time outside as children did 20 years ago and an average 44.5 hours a week in front of some type of electronic entertainment. Not surprisingly, recent studies confirm that children are increasingly disconnected from nature. Furthermore, the research shows that kids who have a significant outdoor experience before age 11 are more likely to have a life-long conservation ethic.”

Section 2: Relevance to Great Ideas Grants Program Goals

A. Creativity and Innovation: Traditional classroom methods are limited in the amount of movement and technology that take place while exploring a new concept. Students may learn about mapping skills by doing a worksheet, and about science by reading from a book. Innovative lesson plans will include experiences where students are actively engaging in their learning by operating a compass and a GPS receiver to navigate their learning outside the classroom. Students will be provided opportunities to actively apply science, social studies, math, problem solving, and communication arts in a creative and intriguing way.

B. Extension of Student Learning: As students develop skills using GPS receiver they will broaden their knowledge in basic mapping skills, including cardinal directions and longitude and latitude. These skills are included in our district’s newly developed social studies' critical competencies. As students engage in off-site geocaching, they will develop science inquiries about the natural world, record observations and make predictions about natural phenomena.

A Travel Bug is a trackable item that is moved by geocachers from cache to cache. Students will create travel bug identities, set destination goals, and keep monthly logs of their Travel Bug's journey. Examples of bug objectives are to travel to the states that border Montana or to another continent.

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C. Collaboration: "No Child Left Inside" will provide an opportunity for the two facilitators, who currently teach in separate elementary buildings, to convene once a month to design and implement new lessons. This project will allow students to reach across district boundaries as the three classes of students create and stash caches for others classes to discover.

D. Availability of Funding: At this time, Helena School District does not have the funding to procure additional GPS receivers. There are currently twenty-six GPS receivers assigned to the IMC (Instructional Media Center) which are in popular demand and are often unavailable for continuous use. These units also require skills and knowledge generally well above that of primary age children. Geomates are specifically made for younger children, or less experienced geocachers, who may not be familiar with the more advanced features of a regular GPS receiver. This grant would provide Helena School District with additional resources, and children with a fun, easy-to-use learning tool that would help meet the goals of "No Child Left Inside."

The Base Camp, a local outdoor retailer, has agreed to provide Helena area maps and compasses. Future funding for procurement of new Travel Bugs and Official Geocache containers, will be sought through other local donations.

Section 3: Project Description

A. Design: Students will focus on basic mapping skills and gain compass familiarity, during January and February. The Geomates will be introduced in March, and their focus will be turned towards learning about longitude, latitude and elevation. During the month of April, students will become familiar with the geocaching website, create their classroom username and account, and personalize their Travel Bugs. May will provide time for the students to be able to apply the skills and knowledge gained in the previous months by going outdoors and actively geocaching. Each class will have five Travel Bugs, with their own individualized destination goal. The students will track travel bugs on-line

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with the students writing in their journals about the Travel Bug's adventures. The culminating activity for both classes will be for each to place their own geocache, list it on geocaching.com, and attempt to find each other's cache.

B. Budget: Please see the attached Budget Form sheet. The funds sought for this project totals \$3,000.

Section 4: Evaluation, Dissemination, and Future Plans

A. Evaluation: An initial and final survey of classroom families will be conducted to determine the amount of time they spend outdoors together and the amount of time their children spend indoors, pursuing non-physical activities such as watching television, gaming, or using the computer. At the end of the project, a follow-up survey will be created and distributed to students and parents, focusing on the way the children feel about geocaching and being able to utilize technology outdoors. Students' knowledge of basic mapping skills and use of a GPS receiver will be assessed to determine future lesson plan design.

B. Dissemination: The two facilitators of this project will offer professional development at Helena Tech Camp 2010 for other teachers in the Helena School District. An informal session will be offered to members of staff at these two separate schools. The equipment will be available for check out to all teachers at both site locations.

C. Future Plans: Off-site geocaching events for both schools will provide families an opportunity to meet and talk about their experiences with geocaching. This event will include further information about the benefits of geocaching, spending time with children in natural surroundings, and engaging in healthy lifestyles. The two facilitators will explore an on-line geocaching class at Fresno Pacific University.

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BUDGET FORM
2009 – 2010 Grants

	Budget Code	Budget Item	Vendor	Unit Cost	Shipping	Qty	Total Cost
1		GPS receiver	rei.com	\$70	FREE	42	\$2,940
2		Update Kit Data Cable	rei.com	\$25	FREE	2	\$50
3		Travel Bugs	geocaching.com	\$5	\$5	15	\$80
4		Compasses and Maps	The Base Camp	Donated	Free	TBD	\$0

Total -Teacher Funds = Grand Total:	\$3000.00
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