



Statement of Purpose

GPS CLUB

Now more than ever, a challenge for students is needed. We live in a rapidly evolving world of cell phones, iPods, and other digital technologies where children have taken the lead and actually utilize these tools to impose culture on everyone else. Think about it...the Net generation, that is, the 81 million children born between 1977 and 1997 can google, text, facebook, and twitter about anything and everything and get immediate results at their fingertips while previous generations are still trying to program their VCR's so that 12:00 will stop flashing. Furthermore, children born in this decade have never known a world without affordable and accessible handheld technology. If children are engaged in and bombarded by these technologies outside the classroom, then it is time for the schools to create curricula that utilize these devices to create meaningful learning experiences inside the classroom.

Curricula that are not interesting have the potential to consume precious learning time and sap the energy and motivation of students¹. Students must be placed into environments where they are able to take control of their academic work and not simply placed in front of a lecturer. The latter can lead to sedentary and stagnant half-listeners who are simply not engaged at all. Using electronic media to heighten student-control in a subject will result in more intense engagement by the student.² Also, by going beyond the classroom walls, we greatly increase the probability that achievement will increase.³ The Geographical Positioning System (GPS) is a marvelous example of the technology necessary to move students beyond the four walls of the classroom and into an environment that is challenging, integrative, and exploratory.

The GPS club challenges young learners to come along on a geo-adventure as imaginary lines of longitude and latitude spring to life. Using high-tech GPS units and multi-million dollar satellites spinning the globe, students will explore our planet like never before. Capturing the spirit of the risingly popular adventure-sport Geocaching, the students will search for their knowledge as they learn about waypoints, hidden caches all over the world, mysterious puzzles, and even create their own educational cache that others can find.

Over the course of the club, the students will learn the basics of mapping, latitude and longitude, and how to use a GPS receiver. Then, the students will apply these basics three-dimensionally as they use the GPS units in our very own schoolyard to find hidden math problems, navigate to science experiments, and even locate hidden "treasure." The students will problem-solve, practice making good decisions, learn how to communicate and cooperate as a team. These are all skills, as well as using technology, that will aid in their journey of lifelong learning. Students will also learn how to mark and save their own geographical waypoints in order to send each other on student-constructed adventures. On rainy days, the students will use the Internet and work with programs that will increase their sense of spatial awareness and mapping and will help tie together what they have learned. GPS Club will offer a stimulating learning environment that will challenge students as well as motivate them with today's latest technology.

¹ Witte Mary, Ed. D. (2004). Engaging students in interdisciplinary curricula. *Gifted Child Today*, 27 (2), 52-53.

² FitzPatrick, S. (2001) Students' experiences of the implementation of an interactive learning system in their eighth grade mathematics classes. ERIC (ED470137).

³ Lieberman, G. A., and L. L. Hoody. (1998). Closing the achievement gap: Using the environment as an integrating context for learning. San Diego, Calif.: State Education and Environment Roundtable.