



# Including GPS in O-instruction

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Okay, since we brought it up in May, it is only fair that we discuss the idea of technology in the classroom and its relationship to orienteering. As of this writing, I am still anticipating my online GIS course. However, there have been a few incidences that have pointed up the need for some GPS instruction.

First, land managers and parks people have indicated to me some unhappiness with the Geocaching community. As one local club officer has told me, it is easier to give an apology than to seek permission to place a cache.

This can lead to unfortunate circumstances beyond removal. One park person has recommended keeping caches a minimum of 100 meters from sensitive and/or dangerous areas like steep embankments, nesting sites and rare plants. This information is easily and willingly shared by those responsible for the land.

The second point involves map usage. We want to sell the map. It is our specialty to develop map reading skills. GPS is only safely and accurately done in conjunction with a map.

There are some caches that I know of that have been removed from parks because cachers made poor decisions based on straight-line navigating. We should teach how to utilize the map with GPS.

Here is a method for the proper use of GPS with a scaled map: 1) Orient the map, 2) identify where you are on the map, 3) set your waypoint for the cache, 4) take a reading for direction and distance, 5) mark the vector on the map, 6) measure the distance according to the scale, 7) mark the target area with a circle, 8) then go find the cache or control.

One possible game for teachers and others trying to attract the caching community is to create event caches. It can be done just like our usual O-courses with minor adjustments. Instead of marking the maps, note the waypoints on the clue sheets. Make sure the participants take a pen or pencil along so they can take readings out in the field. They will find they need strategies for getting accurate readings during their run.

A special note is in order at this time. It is still best to start with the magnetic compass. It is not the purpose of this article to advocate abandoning any previous instructional methods. Establishing the link between the land and its symbolized form, the map, is still paramount. Object (land, vegetation, etc.) recognition from abstract symbols and the development of sequential organizational strategies is the inherent learning skills offered through orienteering. GPS is just a fancy compass prone to its own eccentricities. Yet it has charisma.



To quote GOA's Junior Mapper's Guide website (<http://www.gaorienting.org/Education/MapGuide/basemap.htm>) regarding GPS and accuracy: "You must be aware of the many situations in which a GPS may not record data with adequate accuracy for map making.

- Cloud cover will absorb and reflect satellite signals
- Leaf cover will block the view of the satellites.

- At any one time, satellites may be positioned poorly for optimum reception.

To judge the accuracy of your GPS, follow a trail up and back to your start. The two track plots should follow each other precisely. If successive recordings of a trail do not match very closely, do not use the GPS data on your map. In many situations, traditional methods (compass bearings and pacing) may be more accurate than GPS data."

Still, the No Child Left Behind Act and the Technology Initiative make certain requirements that are sometimes difficult to fill. Some of these requirements make a virtue out of any high-tech application. This is largely based on the view that we just don't know what will develop into the necessary skill of tomorrow. Twenty years ago I was still claiming that I would never need a PC.

An advantage that orienteering has is that the texts and curricula are being developed around "the Test." It is becoming harder for teachers to find outlets for teaching thinking and organizational skills. Experiential learning is still sought after, but becoming harder to find. In the end, that makes what we teach more valuable. The trick is getting the word out.

## NOD and Seminars

Ostensibly, you will have received this issue of ONA before your local NOD event. I would like to take this opportunity to encourage you to set a date for a Teacher's Seminar.

If you don't have anything together yet that could serve as a seminar, set a date and make a leaflet. Mail the leaflet to any teachers, schools and Boards of Education that you can. Invite them to come to the NOD event to sample what the seminar is all about. Map out for them how you and/or your club can put the excitement back into learning for their students through orienteering.

National Orienteering Day was moved to September in part to encourage school participation in the form of teams and curricular development. Let's take advantage of this opportunity. Encourage the inclusion of an event cache or GPS course in the NOD events. Then sell the map! ▲

