

Evaluation Strategy

GPS CLUB

A GPS based curriculum requires formative assessments to monitor student progress from the simplest functional level to the most complex use of a GPS receiver. Summative assessment is also required to see that all students become competent users of the technology within the context of their academic learning. Therefore, evaluation of the GPS Club curriculum will involve both formative and summative assessment in order to create the best possible curriculum that meets the needs of both teachers and students.

Formative evaluation would begin by giving the students an interest/needs survey that collects data regarding student attitudes toward using technology like GPS receivers and would include questions regarding students' familiarity with GPS and related concepts. This would allow the teacher to tailor the first few days that the club meets. For example, based on the data, a teacher may need to explain the way a receiver works with respect to satellites to clear up any misconceptions. Using this measurement, a teacher could more effectively pace instruction for his/her students.

Another formative assessment would include daily observations of the students utilizing the GPS receivers. After guided instruction, the students will be practicing skills in the field. The teacher chooses a centralized location in order to observe all teams. The data collected from these informal observations would include components of teamwork, comprehension of the GPS unit and its features/functions, ability to follow directions, and data collection by the students.

The latter mentioned would be yet another formative tool: the field sheet. A field sheet given to each team will serve as a running record of the data that each group collects. This measurement will allow the teacher to assess student comprehension of their tasks as well as the contextual learning (i.e. math problems, science experiment, etc.) taking place.

A final evaluative measurement is the summative student-based project. Each team will create a GPS based scavenger hunt just like the hunts that the teacher has prepared for each club meeting. This will show the teacher if the students can synthesize the entire skill set learned during the course of the club.