

Connecting Project-Based GIS Curricula with Secondary Students

Robert Kolvoord, Professor, Integrated Science and Technology

James Madison University, MSC 4102, Harrisonburg, VA 22807

e-mail: kolvoora@jmu.edu

Abstract

In American secondary schools, the final semester is often uninspiring and disconnected to the future tertiary education of many students. The Geospatial Semester is a project devoted to reinvigorating the final semester of secondary school for students in Virginia high schools. By developing skills in geospatial technologies, the students are able to engage in problems of local interest, typically focused on the environment or the geography of development. This engagement in extended projects is new to the students and builds both problem-solving and project management skills. As the students complete their secondary coursework, they can also earn tertiary credit at James Madison University. This dual enrollment effort is part of a growing trend in American secondary education, but the project and geospatial focus are unique features of this effort.

The project is starting its third year and has grown from the initial cohort of four high schools and 40 students to more than 12 school districts and 300 students. The student work so far has been of high quality and the students and teachers report high engagement throughout the course. Students are also finding opportunities to use their new-found geospatial skills after they've completed the course, including paid internships. We'll discuss the details of this project and demonstrate examples of student work.