Over the summer, an educator from the high school in my hometown approached me about creating an environmental educational guide for their new campus. In 2002, Dorman High School moved from W.O. Ezell Boulevard to a 300-acre campus sandwiched between Interstate 26 and S.C. Highway 221. Two new schools were built on the property, a ninth-grade building as well as the main campus housing grades 10-12. This past year over 200 trees were planted on the campus to enhance the beauty of the property. However, I believe that the wide variety of tree species made the campus an ideal classroom for teaching tree identification techniques to high school students. Using aerial photographs of the Dorman High School property, and the Google Earth application, I created an educational tool that hopefully will give students hands-on learning experiences about the nature around them. The map locates and identifies individual tree species across the campus, and at the click of a button gives common characteristics, and traits about each species.

How did I do it?

First, I spent many hours contemplating the best and most efficient way to create an interactive tree identification map of Dorman High School.

Next, I met with Dr. Suresh to discuss my ideas and get feedback. After a long discussion we decided that using Google Earth would create the best map and not only expose students to trees on campus, but also a new, amazing, and free GIS application.

I placed Spartanburg County’s aerial photograph of Dorman High School over the Google Earth program, and joined the two images together by georeferencing the aerial photograph with the satellite images provided by Google Earth.

I created web pages for each of the different tree species, defining traits and characteristics of the species as well as giving links to photographs of the trees. Finally, I added the web addresses to the placemarks on the map, making the information easily available to the students.

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