

## Science Team

### Project 3



**Excellent  
Award**  
SEFMD 2009-10

**Title:** Ethanol, the Automobile and  
Anthropogenic Contributions

**Developed by/Contact info:** Kenneth Williams (kennethwilliams15@ymail.com)

**Location/School:** Northwestern High School

**Grade Level:** 11<sup>th</sup> Grade

**Design Team Membership:** Science Design Team

**IT/STEM Tools Used:** STELLA

**Project Overview:** The purpose of my experiment was to evaluate how the use of ethanol alters the contribution of anthropogenic carbon dioxide relative to petroleum products such as gasoline. This was a modeling study where we used STELLA to produce and display various data. STELLA was the main component of my experiment because I planned to generate a model showing the damage of the atmosphere using regular gasoline, as we had over the past century. Then, I generated another model showing what the atmosphere would be like if we had used ethanol from the invention of cars.