

## Ecotek Opens Affiliate Lab at Nolan Elementary-Middle School



**Above:** Nolan Elementary student scientist learning about butterfly habitat and conservation at the Michigan Science Center.

The science, technology, engineering and mathematics (STEM) revolution is moving at lightning speed. Decisions regarding product innovation, human resource alignment and the flow of capital investment are being made within hours rather than in days or months. If this is what living in the 21<sup>st</sup> century is going to be like, then having a solid understanding of scientific concepts and the ability to perpetually apply them is no longer optional, it is required.

Students living in challenging socio-economic situations are being left behind. In many cases the students have never participated in a science fair; gone on a science field trip; visited the science center or even used a microscope. One way to provide a pathway to success for those interested in STEM is to provide them with a place where they can hone their craft and test out their ideas.

On January 6, Ecotek Lab signed a partnership agreement with the Michigan Educational Achievement Authority (EAA) to setup an affiliate research laboratory at Nolan Elementary-Middle School in Detroit, Michigan. This was due in large part to the leadership provided by Ms. Angela Underwood, principal at Nolan Elementary-Middle School, and Dr. Mary Esselman, Deputy Chancellor of Instructional Support and Educational Accountability at the EAA. The partnership has already started bearing fruit. On January 10, twenty five (25) third graders from Nolan Elementary attended a private unveiling of the *Wish Upon a Butterfly* exhibit at the Michigan Science Center.

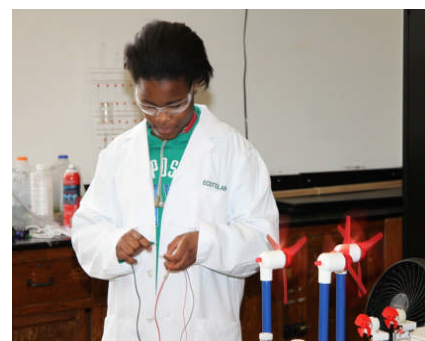
At 2pm on January 30, Nolan sixth grade students, Davonte White, Serenity Hatcher, and Xzavier Spraggins walked into the lab. They spent 30 minutes reviewing the concepts of soil porosity, soil moisture, osmotic processes, and the physical traits of super absorbent polymers (SAP). By 3pm the students had designed an experiment to investigate how SAPs can be used to address agricultural challenges caused by drought conditions. By the time the dismissal bell had rang, the project abstract had been written and approved to be entered into the Metro Detroit Science and Engineering Fair.



Nolan student scientists observing the physical characteristics of superabsorbent polymers



Nolan student scientist conducting experiment to demonstrate Bernoulli's Principle



Nolan student scientist conducting a test to measure the voltage being generated by model wind farm

**About the Ecotek Science Program-** Ecotek is a science research lab program for young inventors and researchers in grades 5 thru 12. Student scientists work on projects aligned with the issues being addressed by world leaders at the United Nations. To learn more about Ecotek Lab go to <http://www.ecotek-us.com>