



January 19<sup>th</sup>, 2017

Dear OSLN STEM School Selection Committee:

The Renewable Energy Program at Agricultural Technical Institute of The Ohio State University fully supports the Northwestern Elementary School selection for STEM School Designation. Northwestern is a leader in data driven, research-based PBL (Problem-Based Learning) and STEM education that involves businesses, post-secondary, and community partners with a focus on rigor, relevance, and relationships as vehicles for school improvement and authentic learning.

We have collaborated with Northwestern Schools for over four years, and during this time we have participated in curricular, equipment, software, decisions and have offered guidance in expanding their career pathways and elementary through high school student career plans and aspirations, as well as being involved in strategic planning as part of their STEM Advisory Council. We have also supported the district's STEM programs with in-kind or financial contributions, worked with the district collaboratively sharing expertise, job shadowing, and working with students in the schools through classroom experiences, career projects, 8<sup>th</sup> grade career capstone projects, senior career capstone projects, internships, "4-12 grade Science Fair" and "Believe in Ohio" judging, and/or "Future Fridays" presentations. Northwestern is unique in that they have created a truly comprehensive STEM education culture K-12 through their journey that began 12 years ago at the high school level, which has been cultivated at the middle school and in recent years at the elementary level as well. Their high expectations and sharing of their success has increased awareness of STEM education across this region of Ohio and has pressured other area schools to improve as well.

Having a large population of low wealth students the universal PBL makes Northwestern's success even more significant. The experiences received and student success achieved is remarkable - students as well as teachers - in all areas, including the fine arts, through authentic, problem-based learning that involve relevant research, technical writing, collaboration, process thinking through problem-solving, scientific inquiry, as well as presentation skills.

Northwestern School District is one of very few Ohio districts having multiple OSLN STEM Schools - Northwestern Middle School and Northwestern High School, which are renowned for high achievement, strong PBL focus, and pervasive STEM culture district-wide. Northwestern Elementary School possesses this same culture. Northwestern intends to become THE "Rural School STEM Model" for Ohio.

The Renewable Energy Program at The Ohio State University's Agricultural Technical Institute looks forward to further strengthening our partnership with Northwestern Elementary School and fully support their innovative efforts in preparing students for 21<sup>st</sup> Century and Career Skills



needed for future success through pursuit of Elementary STEM Designation. The skills developed will further build the necessary capacities for authentic career and skill development necessary to develop future economic growth and a prepared, educated, and innovative workforce.

Sincerely,

Victor C. Ujor, PhD.

Assistant Professor & Coordinator,  
Renewable Energy Program  
The Ohio State Agricultural Technical Institute (ATI)  
1328 Dover Road Wooster OH 44691  
Tel.: 1-330-287-1268  
[ujor.1@osu.edu](mailto:ujor.1@osu.edu)