College of Food, Agricultural, and Environmental Sciences

THE OHIO STATE UNIVERSITY

Ohio State ATI

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January 21st, 2017

Dear AEOP Grant Selection Committee:

The Renewable Energy Program, Agricultural Technical Institute, The Ohio State University fully supports the Northwestern-led 4-district, 6-county collaborative of Loudonville-Perrysville, Mapleton, Black River, and Northwestern School Districts in their pursuit of the eCybervision and Jr. Solar Sprint educational programs and competitions. This collaboration is being written and coordinated in partnership with HSTW (High Schools that Work) and MMGW (Making Middle Grades Work), as an additional support for these programs. HSTW and MMGW and the parent organization SREB (Southern Regional Education Board) is a national leader in data driven, research-based school improvement with a focus on rigor, relevance, and relationships as vehicles for school improvement and authentic learning.

Planning and organization, oversight, professional development, sustainability, as well as outcomes measurement will be conducted by HSTW and MMGW. These are verifiable, reputable organizations that are heavily research-based and experienced and successful in national school improvement efforts.

We are convinced that this grant will provide needed experience for unrepresented students as well as teachers in STEM focus areas through authentic, problem-based learning that involve relevant research, technical writing, collaboration, process thinking through problem-solving, scientific inquiry, as well as presentation skills. The challenges presented through the competitions and adaptation through required modifications will certainly advance 21<sup>st</sup> Century, higher order thinking skills and expand STEM participation by traditionally unrepresented students in STEM programs.

This consortium is led by Northwestern School District, one of few Ohio districts having OSLN (Ohio STEM Learning Network) certified STEM Schools in both Northwestern Middle School and Northwestern High School, which is renowned for excellence, a strong PBL focus, and pervasive STEM culture, district-wide. Northwestern Elementary School has also recently applied to be one of the initial OSLN Elementary STEM Schools in Ohio this spring, 2017! Various levels of STEM programs exist in the districts where the lead district currently has several middle school through high school STEM

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program pathways, Loudonville has a strong middle school-high school Engineering and robotics

pathway, with the remaining district programs in their infancy or non-existing. This consortium intends

to become THE collaborative "Rural School STEM Model" for Ohio. This initiative will benefit students

through rigorous, authentic instruction in Science, Technology, Engineering and Math content in these

collaborative school districts.

The Renewable Energy Program at Agricultural Technical Institute of The Ohio State University looks

forward to further strengthening our partnership with the Schools involved and applaud their innovative

efforts in preparing students for 21st Century and Career Skills needed for future success. The skills

developed will build the necessary capacities for future economic growth and a prepared, educated, and

innovative workforce.

These districts are making a concerted effort to systemically implement or expand STEM programming in

their districts through professional development, implementation, and looking at sustainability.

Yours sincerely,

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