



November 9, 2015

Ohio Department of Education  
25 South Front Street  
Columbus, Ohio 43215-4183

RE: Straight A Grant Proposal

Dear Sir or Madam:

Please accept this letter of support and partnership for the Mahoning Valley STEM+ME2 Straight A Innovation Grant proposal. Advanced Methods in Innovation (AMI), a non-profit organization, fully supports the MCECSC and partnering districts' efforts to provide a seamless STEM curriculum for students in the Mahoning Valley.

AMI offers the INVENTORcloud Program - a comprehensive, standards-aligned program for inquiry and problem based learning in a unique, technology-rich environment that reinforces STEM disciplines. INVENTORcloud Program was initially developed with funding from the U.S. Department of Defense's DARPA in 2012, and has a current DARPA contract to extend the program for post-secondary education. INVENTORcloud offers an innovative, digital learning program with rich, relevant subject matter, reinforced 21<sup>st</sup> century skills and the design process to solve real-world challenges in which students use CAD programs to design solutions that are produced using rapid prototyping equipment such as INVENTORcloud's INVENT3D Printer which was partially funded by America Makes, the national laboratory for additive manufacturing and is manufactured by high school students in after-school work program. INVENTORcloud also offers its unique STORM technology which allows for virtual, remote operation of rapid prototyping equipment from any location, thereby removing barriers of access, economics and lack of expertise, including its own INVENT3D MakerSpace.

The goal is to inculcate an interest and skills in K-12 students for STEM and related disciplines which aligns with the STEM+ME2 School. INVENTORcloud seeks to improve students' occupational and higher academic knowledge and skills for success in high-wage, high-skill positions in the growing, in-demand fields that align with the State of Ohio's technology, education and industryfoci.

AMI is collaborating with partners in this grant on various initiatives to extend opportunities for training and education in STEM and advanced manufacturing. The second DARPA contract is underway to develop a career pathway through post-secondary degrees with an emphasis on both STEM and CTE disciplines. The creation of STEM+ME2 will provide an additional pathway for these deliverables which also include Knowledge, Skills, Aptitude and Assessment (KSAA) and Design Basis Analysis tools. AMI also has expertise in developing and operating fixed, mobile and/or virtually accessible rapid prototyping facilities in educational environments and is partnering with OBOR's Believe in Ohio program to support its entrepreneurial program by providing prototyping services to participating students.

Thank you for your consideration of this Straight A Grant proposal. If awarded, it will provide immense benefit to this region's students and industry in a model that can be replicated and sustainable throughout the State of Ohio.

A handwritten signature in black ink, appearing to read "Julie Michael Smith".

Julie Michael Smith  
Executive Director

*Advanced Methods in Innovation, a 501 (c) 3 organization*  
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***INVENTORcloud developed by Applied Systems & Technology Transfer, LLC***