Leonard Gelfand STEM Center

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Robert Hunt, Superintendent
Chagrin Falls Exempted Village Schools
Chagrin Falls, OH 44022

Dear Mr. Hunt,

The Leonard Gelfand STEM Center at Case Western Reserve University is pleased to support your application to the Ohio Department of Education Straight A Fund. I have had several very productive meetings and conversations with your leadership team within the Chagrin Falls Exempted Village Schools to discuss and begin planning for this partnership in the work described within the ***"S.T.R.E.A.M. for Progress"*** project. The Gelfand STEM Center supports this collaboration and is excited about the activities that will seek to more effectively and efficiently meet the needs of all K-12 students, including those students who will be served via the grant-funded localized Cleveland Clinic Center for Autism (CCCA) - Chagrin Falls Satellite Campus.

Representing both the College of Arts and Sciences and Case School of Engineering, the Gelfand STEM Center is prepared to mobilize CWRU faculty and students to create S.T.R.E.A.M. learning labs throughout the district. We will provide guidance on the renovation of two existing classrooms within the 7-12 Chagrin Falls Exempted Village School District campus to become S.T.R.E.A.M. labs that will be accessible to all 7-12 Science teachers and will house the new *Project Lead the Way* courses to be offered, beginning in the 2014-15 school year. We will also draw upon the university's experience creating think[box], a state of the art fabrication facility on our campus, in creation of a Mobile Fabrication Laboratory which may be driven to the Chagrin Falls Intermediate School campus and may provide additional learning space for students on the 7-12 campus. The enhancement of existing laboratories within the Intermediate building will also be informed by our extensive work on science teaching spaces in schools across the Midwest. The design of a S.T.R.E.A.M. Junior Lab within a modular unit will provide a learning space for K-3 students at Gurney Elementary to engage in S.T.R.E.A.M. learning.

The Leonard Gelfand STEM Center will build on our many years experience to provide high quality professional development sessions with teachers during the summer of 2014. We will provide five full days of training for all teachers relative to understanding STREAM learning and how Science, Technology, Engineering, the Arts (language, fine, and performing), and Technology can be connected to promote 21st Century learning and problem-solving skills. We will also train all teachers on use of the ***"****Great Lakes in My World****"*** program offered through the Alliance for the Great Lakes, to provide ongoing real-world applications of STEAM approaches, thus making it

S.T.**R**.E.A.M. programming. Additionally, we will provide four days of training to all K-6 Science teachers on use of the ***"Engineering is Elementary"*** program in grade level groups.

This innovative project promises to provide increased learning opportunities that are framed in real-world applications for K-12 students relative to Science, Technology, Engineering, the Arts, and Mathematics. We have long recognized the value of interdisciplinary education, a perspective supported by research that indicates the inclusion of the Arts to promote creative thinking and innovation increases the value of STEM learning. In addition, we are intrigued by your hypothesis that S.T.R.E.A.M. programming will also provide unique and varied opportunities for students with Autism Spectrum Disorder. We recognize that many students that fall under this diagnosis are tremendously talented and often limited by the structure of a traditional school day and curriculum. I am very hopeful these students will shine in an innovative, problem-based, and tool-rich environment.

We are invested in supporting the work articulated within the ***"S.T.R.E.A.M. for Progress"*** project and look forward to partnering with the Chagrin Exempted Village Schools, West Geauga Local Schools, and the CCCA. This project will undoubtedly increase student achievement and increase access for currently enrolled students and students currently served via CCCA's Shaker Heights campus with to S.T.R.E.A.M. learning and shared resources.

Sincerely,

James M. Bader

James M. Bader, Executive Director
Leonard Gelfand STEM Center
Case Western Reserve University