

Budget

Chagrin Falls Exempted Village (045286) - Cuyahoga County - 2014 - Straight A Fund - Rev 0 - Straight A Fund - Application Number (406)

U.S.A.S. Fund #:

Plus/Minus Sheet (opens new window)

Purpose Code	Object Code	Salaries 100	Retirement Fringe Benefits 200	Purchased Services 400	Supplies 500	Capital Outlay 600	Other 800	Total
Instruction		0.00	0.00	0.00	495,038.00	1,537,378.00	0.00	2,032,416.00
Support Services		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Governance/Admin		0.00	0.00	80,000.00	0.00	0.00	0.00	80,000.00
Prof Development		390,054.00	60,458.00	213,803.00	0.00	0.00	0.00	664,315.00
Family/Community		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Safety		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Facilities		0.00	0.00	295,300.00	0.00	1,948,961.00	0.00	2,244,261.00
Transportation		0.00	0.00	0.00	0.00	25,000.00	0.00	25,000.00
Total		390,054.00	60,458.00	589,103.00	495,038.00	3,511,339.00	0.00	5,045,992.00
Adjusted Allocation								0.00
Remaining								-5,045,992.00

Application

Chagrin Falls Exempted Village (045286) - Cuyahoga County - 2014 - Straight A Fund - Rev 0 - Straight A Fund - Application Number (406)

Applicants shall respond to the prompts or questions in the areas listed below in a narrative form.

A) APPLICANT INFORMATION - General Information, Experience and Capacity

1. Project Title: S.T.R.E.A.M. (Science, Technology, Real-world applications, Engineering, Arts, & Mathematics) for Progress

2. Executive summary: Provide an executive summary of your project proposal and which goal(s) in question 9 you seek to achieve. Please limit your responses to no more than three sentences.

The "Creating a S.T.R.E.A.M. of Progress" project will partner with an existing provider of service to students with Autism Spectrum Disorder (ASD), the Cleveland Clinic Center for Autism in Shaker Heights, to create an innovative variation of STEM programming which also embeds the fine, performing, and language Arts and engages students in Real-world learning applications/experiences that will seek to provide additional collaborative learning opportunities for typical students within Gurney Elementary School, Chagrin Falls Intermediate Schools, Chagrin Falls Middle School, and Chagrin Falls High School (via additional S.T.R.E.A.M.-based courses/ programs/learning experiences/access to systemically employed collaborative technology resources designed to maximize student achievement, and internship/research opportunities throughout the year) and to both Chagrin Falls Exempted Village School District students and students from our Consortium partner (neighboring district, West Geauga Local Schools) who are currently receiving their instructional services through placement at the Cleveland Clinic Center for Autism in Shaker Heights and/or other private providers. This project will bring the district-enrolled students (for whom we currently pay to receive educational services from the current ASD provider, the Cleveland Clinic Center for Autism (CCCA) and pay to transport them to and from the CCCA for this year-round service) back to the district to receive the existing ASD services provided in addition to S.T.R.E.A.M.-programming which will be housed within our existing Chagrin Falls Middle School/High School campus. This project will establish a local ASD provider option, which has the potential to significantly reduce costs paid by the Consortium districts for our students currently served out of district and will re-purpose our current facilities, which will allow students with Autism Spectrum Disorder from our Consortium to be served locally at a minimum Consortium cost savings of \$53,104 per year for decreased transportation costs, a decrease of approximately \$245,000 per year (through approximately a 50% tuition reduction to what is currently paid to CCCA via the localized campus), allow other eligible students from surrounding districts to be served in a more local venue that provides enhanced programming via S.T.R.E.A.M.

1989 3. Total Students Impacted:

4. Lead applicant primary contact: - Provide the following information:

First Name, last Name of contact for lead applicant: Robert Hunt
Organizational name of lead applicant: Chagrin Falls Exempted Village Schools
Unique Identifier (IRN/Fed Tax ID): 045286
Address of lead applicant: 400 East Washington Street Chagrin Falls, OH 44022
Phone Number of lead applicant: (440) 247-5500
Email Address of lead applicant: bob.hunt@chagrin schools.org

5. Secondary applicant contact: - Provide the following information, if applicable:

First Name, last Name of contact for secondary applicant: Geoff Palmer
Organizational name of secondary applicant: West Geauga Local Schools
Unique Identifier (IRN/Fed Tax ID): 047225
Address of secondary applicant: 8615 Cedar Road, Chesterland, OH 44026
Phone number of secondary applicant: (440) 729-5900
Email address of secondary applicant: geoff.palmer@westg.org

6. List all other participating entities by name: Provide the following information for each additional participating entity, if applicable: Mention First Name, Last Name, Organizational Name, Unique Identifier (IRN/Fed Tax ID), Address, Phone Number, Email Address of Contact for All Secondary Applicants in the box below.

Consortium Partner Entity: West Geauga Local Schools IRN:047225 Geoff Palmer, Superintendent 8615 Cedar Road Chesterland, OH 44026 Phone number: (440) 729-5900 E-mail address: geoff.palmer@westg.org Partner Entity #1: Case Western Reserve University Gelfand STEM Center James Bader, Executive Director Leonard Gelfand STEM Center College of Arts and Sciences and Case School of Engineering Case Western Reserve University 10900 Euclid Avenue Cleveland, OH 44106-7158 phone number: (216) 368-5289 e-mail address: jxb14@case.edu Partner Entity #2: Cleveland Clinic Center for Autism Thomas W. Frazier, PhD, Director Center for Autism Cleveland Clinic Assistant Professor of Pediatrics Cleveland Clinic Lerner College of Medicine 2801 Martin Luther King Jr Dr Cleveland, OH 44104 phone number: (216) 448-6440 e-mail address: FRAZIE2@ccl.org

7. Partnership and consortia agreements and letters of support: - (Click on the link below to upload necessary documents).

* Letters of support are for districts in academic or fiscal distress only. If school or district is in academic or fiscal distress and has a commission assigned, please include a resolution from the commission in support of the project.

* If a partnership or consortium will be established, please include the signed Straight A Description of Nature of Partnership or Description of Nature of Consortium Agreement.

UploadGrantApplicationAttachment.aspx

8. Please provide a brief description of the team or individuals responsible for the implementation of this project including relevant experience in other innovative projects. You should also include descriptions and experiences of partnering entities.

The team will include Robert Hunt, who brought the "Project Move" program to Chagrin Falls EVSD, Chris Woofter and Michael Daugherty (who has recently successfully implemented a 6th grade Chromebook Initiative in Chagrin Falls), Chris Woofter (who participated the Project GRAD program funded by the Bill and Melinda Gates Foundation empowering urban high school students for college and career-readiness and has also led the Safe Routes to Schools Initiative as the district liaison), Becky Quinn (who has received a Knowledgeworks Foundation grant which supported the creation of innovative summer programming within the Cleveland Height-University Heights City School District, has received multiple Jennings Foundation grants in both Cleveland Heights - University Heights City Schools and in Willoughby-Eastlake City Schools designed to grow the capacity of both teachers and students in elementary and middle school science, and several ODE Research grants which included innovative assessment and instructional programming in gifted education for students in elementary and middle school), Geoff Palmer (Superintendent of West Geauga Local Schools), James Bader (Executive Director, Leonard Gelfand STEM Center at Case Western Reserve University, who has led K-12 outreach programs such as Environmental Heroes, the Gelfand Science and Engineering Fair program, and Robert Noyce Scholarship program at CWRU), Dr. Thomas Frazier (who has been an ad hoc reviewer for over 40 professional and peer-reviewed journals, previously served as an associate editor for Assessment, is a member of the International Society for Autism Research, has published more than 80 research articles in peer-reviewed journals, contributed more than 100 abstracts and presentations at national and international professional meetings, has been an invited speaker at multiple local, national, and international professional organizations as well as local and national media outlets on topics concerning autism, and has received a National Institute of Health career development award (KL2) to train as a multidisciplinary clinical researcher studying the downstream effects of genetic changes leading to autism)

B) PROJECT DESCRIPTION - Overall description of project and alignment with Outcomes

9. Which of the stated Straight A Fund goals does the proposal aim to achieve? - (Check all that apply)

- Student achievement
Spending reductions in the five-year fiscal forecast
Utilization of a greater share of resources in the classroom

10. Which of the following best describes the proposed project? - (Select one:)

- New - never before implemented
Existing and researched-based - never implemented in your district or community school but proven successful in other educational environments
Mixed Concept - incorporates new and existing elements
Enhancing/Scale Up - elevating or expanding an effective program that is already implemented in your district, school, or consortia partnership

11. Describe the innovative project.

The S.T.R.E.A.M. of Progress project will partner with the Cleveland Clinic Center for Autism (CCCA) and include work with the Leonard Gelfand STEM Center at Case Western Reserve University (CWRU). It will create an innovative variation of STEM programming which also embeds the Arts (language arts, fine arts, performing arts) and engages students in Real-world learning. It will provide additional opportunities for all K-12 typical regular education students within the Chagrin Falls Exempted Village Schools (via courses, programs, and internship/research opportunities with CWRU and/or CCCA) and to students with disabilities who are currently receiving their instructional services through placement in the CCCA in Shaker Heights. This project will bring the district-enrolled students for whom we currently pay CCCA to provide educational services and for whom we pay for transportation to/from the CCCA (approx. 30 mi roundtrip per day) for this year-round service back to the Chagrin Falls EVSD for localized services provided within our existing 7-12 campus. This project will also provide localized services to students with ASD from our Consortium, at the matching reduced rate of service and at a minimized cost for their transportation. This project will provide an innovative, effective, and efficient environment that will not only save the Consortium districts money, but will also best-prepare all of our students with ASD to receive the existing educational services (currently at the Shaker CCCA Campus) in addition to STREAM-programming (research indicates that 34.31% of students with ASD chose STEM majors) housed within our existing Chagrin Falls 7-12 campus. This project will provide a Chagrin Falls campus for an enhanced ASD program which will allow students from our district to be served within our schools and allow students from surrounding districts to be served in a more local venue. The provision of programming via STREAM will enhance student learning and achievement, promote college/career readiness through exposure to 21st century skills, and ensure we are able to maximize the potential of all of our students, via research-based instruction. Project funds will be used to renovate an existing portion of the current 7-12 Campus of the Chagrin Falls EVSD to house the localized program. The CCCA will partner with us and serve as consultants to ensure that the facility renovations will support programming currently available to students with ASD via CCCA's Shaker campus. Another portion of the 7-12 Campus of the Chagrin Falls EVSD will be renovated to construct 2 STREAM labs to provide programming for all 7-12 Chagrin Falls students and all students enrolled in the new ASD program. These labs will include the technology and instructional resources needed to support 4 Project Lead the Way (PLTW) courses. Teachers will be trained during the summer of 2014 via PLTW at Sinclair Community College. A Mobile Fabrication Laboratory (Fab Lab) will be created with guidance of Leonard Gelfand STEM Center consultants. The Mobile Fab Lab will provide opportunities to our students at not only the 7-12 Campus, but also our Intermediate School to foster STREAM literacy. A modular unit will be purchased to house a K-3 STREAM Lab at Gurney Elementary which will serve as a place for K-3 teachers to bring students for hands-on STREAM instruction. The project will fund instructional materials and hands-on kits from the Engineering is Elementary program as well as teacher training. To ensure Real-world applications, the "Great Lakes in My World" K-12 curriculum, which provides real-world problems relative to the Great Lakes will be purchased and Leonard Gelfand STEM Center consultants will provide teacher training through Real-world applications. All Chagrin Falls EVSD and ASD Center teachers and students will receive Chromebooks to enable collaboration within this project to occur and STREAM programming to be systemic.

12. Describe how it will meet the goal(s) selected above. - If school/district receives school improvement funds/support, include a brief explanation of how this project will advance the improvement plan.

The S.T.R.E.A.M. of Progress project will meet all 3 of the goals identified within the Straight A Fund. First, it will improve student achievement for all students currently enrolled in grades K-12 within Chagrin Falls EVSD and improve the achievement of students with Autism Spectrum Disorder from Chagrin Falls EVSD and from our Consortium district who are currently served via the Cleveland Clinic School of Autism in Shaker Heights. The provision of project-funded S.T.R.E.A.M. training for K-6 teachers via the Case Western Reserve University's Leonard Gelfand STEM Center, coupled with the provision of teacher resources, technology, and equipped labs to support this instruction will ensure students are able to access interdisciplinary 21st century learning which integrates Science, Technology, Engineering, Arts (performing, fine, and language), and Mathematics within the context of Real-world problem-solving. Similarly, the project-funded training for 7-12 Science teachers, via the "Project Lead the Way" program and relative purchase of technology and instructional resources to support new courses will provide increased rigorous learning opportunities for students. The infusion of the Arts will help our students to see firsthand how the Arts are interconnected to STEM- studies and careers. The project-funded purchase of "The Great Lakes in My World" curriculum will ensure that our S.T.E.A.M. learning is anchored in Real-world problem-solving that has a local connection. Research indicates that 34.31% of students with ASD chose STEM majors, yet many programs which service students with ASD provide little if any access to STEM programming. (The CCCA does not provide STEM programming to students with ASD on the Shaker Heights campus.) Through our proposed localized campus, students with ASD would be able to maximize the S.T.E.A.M. offerings available. Similarly, these students would be able to learn alongside typical regular education students and access all courses (including art and music courses which are successful in therapy with students with ASD). This environment would promote maximized student achievement for these students. The project will renovate 2 existing classrooms to create S.T.R.E.A.M. labs on the 7-12 campus and will renovate a larger space to accommodate the localized programming for students with ASD on the 7-12 campus. These renovated spaces, in addition to the provision of a Mobile Fab Lab and the creation of a S.T.R.E.A.M. Lab on the K-3 campus will allow resources to be shared, with classes rotating through labs rather than each teacher needing "siloeed" resources within individual classrooms. The provision of 1:1 Chromebooks to support collaborative STREAM learning will save \$20,000/yr as lab desktops will not need to be replaced. Discontinued use of desktop computers will save \$42,000/yr. in energy costs. The S.T.R.E.A.M. of Progress project has the potential to cause additional significant Consortium spending reductions in the 5-year fiscal forecast. First, this project will return the district-enrolled students (for whom we currently pay to receive services from the current ASD provider, to transport these students to & from the CCCA for this year-round service) to a local venue to receive the existing ASD services provided in addition to S.T.R.E.A.M.-programming within our existing Chagrin Falls 7-12 campus. This project will establish a local ASD provider, which has the potential to significantly reduce costs paid by the district for our students currently served out of district and will re-purpose our current facilities, which will allow students with disabilities from our district to be served within our schools at a cost savings of \$251,256 per year, allowing students with ASD from the identified Consortium Districts to be served at a cost savings of 50% tuition (approximately \$35,000/student) and will allow other eligible students from surrounding districts to be served.

C) SUSTAINABILITY - Planning for ongoing funding of the project, cost breakdown

13. Financial Documentation - All applicants must enter or upload the following supporting information. Responses should refer to specific information in the financial documents when applicable:

a. Enter a project budget

b. Upload the Straight A Financial Impact Template forecasting the expected changes to the five-year forecast resulting from implementation of this project. If applying as a consortia or partnership, please include the five-year forecasts of each school district, community school or STEM school member for review.

c. If subsection (b) is not applicable, please explain why, in addition to how the project will demonstrate sustainability and impact.

Information regarding the project budget is organized by USAS PURPOSE. The following will be purchased for the purpose of supporting INSTRUCTION within the project. SUPPLIES K-6 Engineering is Elementary program - \$22,500; teacher guides, kit supplies 7-12 Campus STREAM. Lab Resources - \$41,438; robot kits, lab-equipment needed for "Flight and Space" and "Energy and the Environment", kit supplies Real-World within STREAM. K-12 Interdisciplinary Instructional Resources - \$8,100 Instructional Supplies to Support Students with ASD Instruction as Recommended by Cleveland Clinic Center for Autism (CCCA) Consultants - \$423,000 CAPITAL OUTLAY 7-12 STREAM Lab -\$136,454: 30 ThinkPads, charging cart, Autodesk Inventor licenses, 3D printers, laser cutter, vinyl cutter, computerized router, large format printer, desktop 3D scanner, supplies (tech-related), hand tools, 2 Interactive Whiteboards, 16 lab tables, 60 stools Chagrin Falls Intermediate School STREAM Labs - \$106,160: 4 3D printers, 60 ThinkPads, 2 charging carts, large format printer, desktop 3D scanner, Autodesk Inventor licenses, 4 Interactive Whiteboards 7-12 Campus - localized provider of service for students with ASD technology/furniture to support instruction to students with ASD - \$ 523,845 Mobile Fab Lab - \$101,200: fab lab trailer, wireless access point STREAM Lab Junior - \$37,487: science tables, 30 primary stools, 3 3D, 30 iPads, charging cart, wireless access point, 2 interactive whiteboards Systemic Implementation of Collaboration within STREAM \$632,232: HP Chromebooks for all Chagrin Falls Exempted Village Schools (EVSD) students/teachers/administrators and all Chagrin Falls ASD Program students The following items will be purchased for the purpose of project GOVERNANCE via CWRU and CCCA relative to the project: PURCHASED SERVICES CWRU Leonard Gelfand STEM Center Lab Design Consulting - \$60,000 CCCA - consultation on renovations/instructional program - \$20,000 The following items will support the purpose of PROFESSIONAL DEVELOPMENT (PD) provided to support STREAM and to serve students with ASD: SALARIES STREAM Training for all K-12 Teachers, training on Great Lakes in My World via CWRU - \$147,000 7-12 STREAM Lab Project Lead the Way (PLTW) Training - \$7,000 Engineering is Elementary PD for K-6 teachers via CWRU - \$60,200 "Students with ASD" Teacher Training- \$29,400 Principal Salaries for Summer STREAM Training (for 220-day employees) - \$10,000 STREAM Course/Curriculum writing for grade level teachers - \$136,454 RETIREMENT FRINGE BENEFITS Approx. 15% of the proposed \$390,054 Salaries paid to Teachers/Principals for project-related PD = \$60,458 PURCHASED SERVICES 7-12 STREAM Lab Teacher PD via PLTW Summer Institutes - \$13,802 K-12 STREAM Training and Training on Great Lakes in My World via CWRU - \$120,000 STREAM Training of ASD Teachers - \$10,000 Engineering is Elementary for K-6 teachers via CWRU -\$56,000 STREAM Curriculum Writing with CWRU - \$4,000 Training for K-12 teachers on Supporting Students with ASD via CCCA - \$10,000 The following will support the purpose of FACILITIES to support the project: PURCHASED SERVICES Lease agreement - temporary location - Chagrin Falls EVSD Central Office - to create localized ASD service provider in Central Office current location on 7-12 campus - 5000 sq. ft. - \$150,000 7-12 STREAM Labs - renovations/wireless upgrades - \$100,000 STREAM. Lab Junior - \$45,300: installation, wireless upgrades to support 1:1 STREAM CAPITAL OUTLAY Renovations to current Chagrin Falls Central Office to create localized ASD service provider - \$1,332,661 STREAM Lab Junior - \$216,300: modular unit, sinks/plumbing, storage, wiring, ADA ramp Wireless upgrades to K-3, 7-12 Campus to support 1:1 STREAM = \$400,000 The following items will support the purpose of TRANSPORTATION provided to support STREAM development: CAPITAL OUTLAY Mobile Fab Lab - \$25,000: used pickup truck to pull Fab Lab trailer = \$25,000

14. What is the total cost for implementing the innovative project?

5,045,992.00 * Total project cost

* Provide a brief narrative explanation of the overall budget. The narrative should include the source and amount of other funds that may be used to support this concept (e.g., Title I funding, RttT money, local funding, foundation support, etc.), and provide details on the cost of items included in the budget (i.e. staff counts and salary/benefits, equipment to be purchased and cost, etc).

The S.T.R.E.A.M. of Progress project budget thoughtfully uses funds in a way that builds our physical, technological, and teaching capacity to support current and future learning opportunities for our students. (SEE BUDGET DETAILS IN RESPONSE #13.) First, our use of funds to support the creation of a localized center within the Chagrin Falls 7-12 Campus to serve students with Autism Spectrum Disorder will promote cost-savings that will continue to grow over time for Consortium districts and other local districts who opt to send their students with ASD. The development of this program will be complemented by the development of a S.T.R.E.A.M. program which will provide systemic training to all teachers and create S.T.R.E.A.M. learning labs available to all students, including students with ASD. The systemic inclusion of Real-world problem-solving as it relates to the Great Lakes in tandem with the creation of a 1:1 learning environment will promote collaboration across all grade levels and content areas. The proposed grant budget earmarks a large portion (\$2,032,416) for the purchase of supplies and technology that will support instruction relative to STREAM and to meeting the needs of students with ASD. Instructional materials that support STREAM courses will be added to our district adoption cycle, with new materials built into the General Fund budget in 6 years. The use of grant funds to provide a 1:1 will be sustained over time, as rental monies collected from students (\$50/year) who wish to use machines at home or during the summer will be collected and be used to replace machines at the end of 5 years. Thus the grant money will have seeded a plan that can be sustained into the future. A great deal of the proposed budget is dedicated to the provision of professional development (\$664,315), provided by Project Lead the Way, Case Western Reserve University Gelfand STEM Center, and the Cleveland Clinic Center for Autism (all within Ohio). The training provided by these groups is intended to build our capacity to provide STREAM learning and serve students with ASD. As new teachers join our district in the future, we will use Title IIA funds to provide training to ensure STREAM continues to be systemically implemented. The provision of consultant services via Case Western Reserve's Gelfand STEM Center and Cleveland Clinic Center for Autism to govern and direct the development of our physical environments - STREAM Labs and our center to serve students with ASD - is critical. The grant monies (\$80,000) dedicated to this work by experts in both STEM and serving the needs of students with ASD will ensure our district's success. Renovations to our facilities to support our new STREAM Labs and the new localized center to serve students with ASD will be provided by grant funds (\$2,244,261) that will sustain over time. These renovations will be added to our District Facilities Plan to ensure that upgrades and improvements over time are built into our district budget. The purchase of a used pickup truck to haul our new Mobile Fab Lab (\$25,000) will grow interest and excitement about STREAM learning. While we will enter this need into our district Transportation budget for replacement in 5 years, it is likely that a district Booster organization will raise funds for replacement.

15. What new/recurring costs of your innovative project will continue once the grant has expired? If there are no new/recurring costs, please explain why.

0.00 * Specific amount of new/recurring cost (annual cost after project is implemented)

* Narrative explanation/rationale: Provide details on the cost of items included in the budget (i.e. staff counts and salary/benefits, equipment to be purchased and cost, etc.). If there are no new/recurring costs, please explain why.

The S.T.R.E.A.M. for Progress project is two-fold, with the possibility for recurring costs kept to a minimum amount for both school districts in the Consortium. Implementing a new curriculum (S.T.R.E.A.M.) is virtually self-sustaining once professional training and the creation of the Mobile Fabrication Lab, the development of S.T.R.E.A.M. Labs on the 7-12 Chagrin Falls campus, the renovation of Science labs at the Chagrin Falls Intermediate School campus, and the development of the S.T.R.E.A.M. Lab Junior are completed via project-funding during summer 2014. The equipment purchases will satisfy our technology needs for at least four years with minimal maintenance cost. We anticipate replenishing and updating our technology and equipment on a rotational basis spending approximately \$20,000.00 annually beginning in year four of use, however we will save \$20,000 per year by not replacing desktop computers within existing labs and will save \$42,000 in energy costs through decreasing the use of desktop computers. Furthermore, the project-funded purchase of Chromebooks for all students and teachers within the Chagrin Falls EVSD and within the new localized Chagrin Falls Center for Students with ASD will be virtually self-sustaining, as rental fees collected from students who wish to use machines at home throughout the school year will fund the replacement of machines at the end of a 5-year cycle. There is the possibility of needing to continue training opportunities for the S.T.R.E.A.M.-trained staff, however, we believe we can use the expertise of our own teachers to train new staff members. This can be provided at no cost to the district and/or Title IIA funds which are designed to provide teacher professional development may be used in the future to pay for additional teacher training. The second portion of our project will actually reduce spending as outlined in this application, without the need for new or recurring costs. By partnering with the Cleveland Clinic Center for Autism, the Consortium districts will benefit from approximately a fifty percent rate reduction in tuition, and quite possibly, the lead district (Chagrin Falls) could enjoy generated revenue collected through service to students with ASD from other area school districts. Both Consortium districts will significantly reduce transportation costs, without the possibility of increasing expenditures for this project.

16. Are there **expected savings** that may result from the implementation of the innovative project?

360,604.00 * Specific amount of expected savings (annual)

* Narrative explanation/rationale: Provide details on the anticipated savings (i.e. staff counts and salary/benefits, equipment to be purchased and cost, etc.)

The anticipated savings that the Straight A Fund project would have on our general fund spending covers many aspects of providing special education services to the students in our district attending the Cleveland Clinic Center for Autism (CCCA). The largest anticipated savings would come from reduced tuition payments saved via the creation of a localized Autism unit on the Chagrin Falls 7-12 campus. We currently pay upwards of \$420,000 per year in tuition costs associated with providing special education services to seven students. The instructional and therapeutic services include specialty areas such as speech and language, occupational, physical, and music therapy to address communication, social, functional, and real-world challenges compounded by Autism. At up to a fifty percent tuition rate reduction, the Chagrin Falls EVSD would save approximately a total of \$210,000 / year in tuition and the West Geauga Local Schools would save approximately \$35,000/year in tuition. Additionally, the cost to transport our students to and from the CCCA daily throughout the entire calendar year dips greatly into our General Fund. At a cost of approximately four dollars per mile to transport our students thirty miles per day, our cost savings would incur at a saved distance rate of twenty-six miles per day for services provided during the school year and the summer months. This savings includes a reduction of \$21,600 (in reduced salary for bus drivers), a reduction of \$3348 in reduced bus driver benefits), a reduction of \$19,656 (in reduced fuel/mileage) annually for Chagrin Falls EVSD and a reduction of \$8500 for payment of West Geauga Local Schools to Chagrin Falls EVSD for the provision of transportation to and from the CCCA Shaker Heights campus. In total, if awarded this grant, the Chagrin Falls EVSD would show a total yearly cost savings of \$254,604 to our General Fund resulting directly from the creation of a localized service option for students with ASD; the West Geauga Local Schools would show a total yearly cost savings of \$44,000 to their General Fund resulting directly from the creation of a localized service option for students with ASD. Consortium member, West Geauga Local School District, expressed interest in joining with our district in this project, as they anticipate their number of students who will need services that will be provided via the Cleveland Clinic Center for Autism will increase over the next few years. Through joining in this project, they will ensure access to the localized services for students with Autism Spectrum Disorder at a reduced rate and at a reduced amount for transportation (West Geauga Local School District borders Chagrin Falls Exempted Village School District). Additionally, the systemic S.T.R.E.A.M. training for all K-12 Chagrin Falls EVSD teachers, the creation of STREAM learning environments within all schools, and the provision of systemic technology (and infrastructure) for all K-12 Chagrin Falls EVSD students and teachers will promote the more efficient and effective use of shared resources. The provision of project-funded Chromebooks for all Chagrin Falls EVSD K-12 students and staff and all students and staff served within the created Chagrin Falls campus of a localized provider of service for students with ASD will allow the Chagrin Falls EVSD to decrease the number of computer labs needed, reducing the \$20,000 cost per year in replacing desktop computers within these labs and reducing the energy costs to support these labs by \$42,000 per year. Because a rental option will be provided to students to allow home use of Chromebooks of \$50 per year (and our past experience with this model implemented at one grade level has shown that 100% of students take advantage of this option), replacement of these machines on a 5-year cycle will be virtually self-sustaining (\$50 x 5 years of collected rental fees = \$250, the anticipated approximate replacement cost of each machine.)

17. Provide a brief explanation of how the project is self-sustaining. If there are ongoing costs associated with the project after the term of the grant, this explanation should provide details on the cost reductions that will be made that are at least equal to the amount of new/recurring costs detailed above. If there are no new/recurring costs, explain in detail how this project will sustain itself beyond the life of the grant.

The Straight A Fund project provides great cost-savings that will continue over time (service to students with ASD) and/or sustain over time (STREAM and 1:1 environment). The largest anticipated savings would come from reduced tuition payments saved via the creation of a localized Autism unit on the Chagrin Falls 7-12 campus. We currently pay upwards of \$420,000 per year in tuition costs associated with providing special education services to seven students. The instructional and therapeutic services include specialty areas such as speech and language, occupational, physical, and music therapy to address communication, social, functional, and real-world challenges compounded by Autism. At up to a fifty percent tuition rate reduction, the Chagrin Falls EVSD would save approximately a total of \$210,000 / year in tuition and the West Geauga Local Schools would save approximately \$35,000/year in tuition. Additionally, the cost to transport our students to and from the CCCA daily throughout the entire calendar year dips greatly into our General Fund. At a cost of approximately four dollars per mile to transport our students thirty miles per day, our cost savings would incur at a saved distance rate of twenty-six miles per day for services provided during the school year and the summer months. This savings includes a reduction of \$21,600 (in reduced salary for bus drivers), a reduction of \$3348 in reduced bus driver benefits), a reduction of \$19,656 (in reduced fuel/mileage) annually for Chagrin Falls EVSD and a reduction of \$8500 for payment of West Geauga Local Schools to Chagrin Falls EVSD for the provision of transportation to and from the CCCA Shaker Heights campus. In total, if awarded this grant, the Chagrin Falls EVSD would show a total yearly cost savings of \$254,604 to our General Fund resulting directly from the creation of a localized service option for students with ASD; the West Geauga Local Schools would show a total yearly cost savings of \$44,000 to their General Fund resulting directly from the creation of a localized service option for students with ASD. Consortium member, West Geauga Local School District, expressed interest in joining with our district in this project, as they anticipate their number of students who will need services that will be provided via the Cleveland Clinic Center for Autism will increase over the next few years. Through joining in this project, they will ensure access to the localized services for students with Autism Spectrum Disorder at a reduced rate and at a reduced amount for transportation (West Geauga Local School District borders Chagrin Falls Exempted Village School District). Additionally, the systemic S.T.R.E.A.M. training for all K-12 Chagrin Falls EVSD teachers, the creation of STREAM learning environments within all schools, and the provision of systemic technology (and infrastructure) for all K-12 Chagrin Falls EVSD students and teachers will promote the more efficient and effective use of shared resources. The provision of project-funded Chromebooks for all Chagrin Falls EVSD K-12 students and staff and all students and staff served within the created Chagrin Falls campus of a localized provider of service for students with ASD will allow the Chagrin Falls EVSD to decrease the number of computer labs needed, reducing the \$20,000 cost per year in replacing desktop computers within these labs and reducing the energy costs to support these labs by \$42,000 per year. Because a rental option will be provided to students to allow home use of Chromebooks of \$50 per year (and our past experience with this model implemented at one grade level has shown that 100% of students take advantage of this option), replacement of these machines on a 5-year cycle will be virtually self-sustaining (\$50 x 5 years of collected rental fees = \$250, the anticipated approximate replacement cost of each machine.)

D) IMPLEMENTATION - Timeline, communication and contingency planning

18. Fill in the appropriate dates and an explanation of the timeline for the successful implementation of this project. In each explanation, be sure to briefly describe the largest barriers that could derail your concept or timeline for implementation and your plan to proactively mitigate such barriers. In addition, the narrative should list the stakeholders that will be engaged during that stage of the project and describe the communication that occurred as the application was developed.

Describe the ongoing communication plan with the stakeholders as the project is implemented. (Stakeholders can include parents, community leaders, foundation support and businesses, as well as educational personnel in the affected entities.)

* Proposal Timeline Dates

Plan (MM/DD/YYYY): 01/01/2014 - 03/31/2014

* Narrative explanation

In partnership with consultants from the Leonard Gelfand STEM Center at Case Western Reserve University (CWRU), we will conduct a needs assessment of existing district science programming using a standards-based protocol. Consultants from the STEM Center will provide a comprehensive report to Chagrin Falls EVSD administrators by 03/31/2014. These consultants will also work with the Chagrin Falls Director of Strategic Initiatives to plan renovations to the existing 7-12 Chagrin Falls campus to accommodate the creation of a S.T.R.E.A.M. Lab through re-purposing of 2 existing classrooms and will identify and engage appropriate resources to provide guidance on design and outfitting of fabrication space. Similarly, through our partnership with the Cleveland Clinic Center for Autism (CCCA), we will create plans for renovation of the 7-12 Chagrin Falls campus to accommodate a localized program for students with Autism Spectrum Disorder. All needed capital outlay, instructional equipment and supplies, and building supplies needed to fulfill renovations of existing Intermediate School Science Labs to support S.T.R.E.A.M. learning, the creation of new a S.T.R.E.A.M. Junior lab within the K-3 Gurney Elementary campus, the development of a Mobile Fab Lab and purchase of a used pick-up truck to transport the Mobile Fab Lab, and the purchase and outfitting of the modular unit will occur with direction of the Director of Strategic Initiatives. The hired consultants will convene teams of Chagrin Falls teachers and CWRU faculty to map out professional development programming for summer 2014. Consultants from the Leonard Gelfand STEM Center at CWRU (will plan grade level summer 2014 4-day training sessions for all K-6 teachers using the "Engineering is Elementary" program. The Director of Curriculum will order all instructional resources to support this training. These consultants will also plan a 5-day summer 2014 training for all K-12 staff on S.T.R.E.A.M. approaches to instruction and systemic integration of the "Great Lakes in My World" curriculum to provide Real-world applications of learning. The Director of Curriculum will order all instructional resources needed to support this training for all K-12 Science teachers. Two secondary teachers will be identified to attend the 2-week Project Lead the Way (PLTW) Summer 2014 Training to be held at Sinclair Community College and registration will occur. The Director of Curriculum will work with PLTW consultants to schedule training for 7-12 Science teachers at Sinclair Community College (summer 2014) and order all instructional resources and kit materials needed to support the new PLTW courses to be offered via grant funds. The Director of Technology will schedule infrastructure work needed to support 1:1 learning environments and order Chromebooks. The Director of Technology will assist the Director of Curriculum in identifying and ordering the technology needed to support the K-3 S.T.R.E.A.M. Lab modular unit, the renovated S.T.R.E.A.M. Labs on the 7-12 campus, and the Mobile Fab Lab. Similarly, consultants from the Leonard Gelfand STEM Center at Case Western Reserve University will assist in ordering of non-technological equipment needed to support the S.T.R.E.A.M. programming. A location to be leased via project funds that will serve as the temporary Chagrin Falls EVSD Central Office will be identified that will accommodate our need for 5000 sq. ft. of space and within our allocated budget. A timeline and process for this move during June 2014 will be established via the Cabinet. The CCCA and the Directors of Special Education/Pupil Services from both the Chagrin Falls EVSD and the West Geauga LSD will contact families of students with ASD who are currently served via the Shaker campus CCCA program to discuss placement options and the new localized service provider.

Other area districts will also be invited to send their students to the Chagrin Falls localized provider.

Implement (MM/DD/YYYY): 04/01/2014-9/29/2014

* Narrative explanation

An overview of the S.T.R.E.A.M. for Progress project will be provided via a May 2014 Board of Ed. meeting. All K-12 Chagrin Falls EVSD teachers and Principals and all teachers within the localized center for students with ASD will receive 5 days of training during summer 2014 on S.T.R.E.A.M. learning, instructional approaches to inclusion of S.T.R.E.A.M. within their content/grade level/discipline, and professional development on the use of the "Great Lakes in My World" K-12 interdisciplinary curriculum to provide the "R"= Real-world applications within our S.T.R.E.A.M. programming. The Curriculum Director, the Director of Pupil Services, and identified special education staff from West Geauga Local Schools will also be invited to participate in these sessions. Grade level teams of Chagrin Falls Exempted Village teachers (in grades K-6) will receive 4 days of training during summer 2014 from consultants with the Leonard Gelfand STEM Center at Case Western Reserve University on use and implementation of the "Engineering is Elementary" program. Identified teachers from the 7-12 Chagrin Falls campus will attend a total of 4 Project Lead the Way (PLTW) Summer Training Institutes at Sinclair Community College, as scheduled by PLTW (06/01/2014 - 08/15/2014). The Mobile Fabrication Lab will be created and a used pick-up truck will be purchased during summer 2014. Consultants from the Leonard Gelfand STEM Center at Case Western Reserve University will train the PLTW-trained teachers on use of the Fab Lab with various levels of students. The S.T.R.E.A.M. Lab Junior will be created within the grant-purchased modular unit on the K-3 Gurney Campus during summer 2014. Plumbing and wireless access points will be created and shelving to house the "Engineering is Elementary" kits will be built. All ordered Capital Outlay and Instructional Supplies defined in the scope of the project will be delivered to their respective buildings during summer 2014. Under a Consultation Agreement with CCCA, we will begin work which maintains confidentiality. Renovations to the 7-12 campus to create the localized program for students with Autism Spectrum Disorder and to create 2 S.T.R.E.A.M. labs will occur 06/09/2014 - 08/01/14. The delivery of the new modular unit to the K-3 campus and the renovation of this unit to accommodate the S.T.R.E.A.M. programming will occur 06/09/2014-08/29/2014, with delivery of furniture, equipment, technology, and storage bins and shelving to occur 07/21/2014-08/08/2014. The creation of the Mobile Fab Lab (under the direction of Consultants from the Leonard Gelfand STEM Center at Case Western Reserve University) will occur 06/09/2014-07/11/2014. In the beginning of June 2014, the Chagrin Falls Exempted Village Central Office staff will move to the grant-funded temporary location to allow renovations of this area to occur to prepare it for use as the new localized service provider for students with ASD. The campus, which will be fully operational no later than August 23, 2014. As of the beginning of the 2013-14 school year, the following will be fully implemented: all K-12 Chagrin Falls Exempted Village School District students and students within the localized provider of service to students with ASD will be able to access S.T.R.E.A.M. programming, the Mobile Fabrication Lab will be operational on the K-3 campus, the S.T.R.E.A.M. labs on the 7-12 Campus will be operational, the enhanced Science labs to support S.T.R.E.A.M. programming at the Intermediate School will be operational, the S.T.R.E.A.M. Lab Junior will be fully functional, the "Great Lakes in My World" program will be implemented in grades K-12, the "Engineering is Elementary" program will be implemented in grades K-6, and 4 new Project Lead the Way S.T.R.E.A.M. courses will be offered on the 7-12 campus. All K-12 students and staff within the Chagrin Falls EVSD and the localized ASD program will receive their Chromebooks in August 2014.

Summative evaluation (MM/DD/YYYY): 09/30/2014

* Narrative explanation

An overview of the new localized service option for students with Autism Spectrum Disorder (ASD) will be available via the Chagrin Falls Exempted Village School District (EVSD) website and the West Geauga Local Schools website. A summary of the intensive summer S.T.R.E.A.M. training of K-12 teachers and an overview of the new S.T.R.E.A.M. labs and programming will be shared via the Chagrin Falls Exempted Village Schools Annual Report 2014. A media release will be prepared by the Chagrin Falls EVSD to showcase the progress made via the S.T.R.E.A.M. for Progress project. Evaluations will be completed by all K-12 teachers and administrators who participated in the project-provided S.T.R.E.A.M.-related training professional development sessions during summer 2014 and data will be compiled and shared with the Chagrin Falls EVSD Board of Education. Parent/guardian surveys and student surveys will be created and administered to all Chagrin Falls EVSD students and their families and to all students served via the new localized service provider for students with ASD. These surveys will collect feedback regarding improvement in the greater access to newly acquired shared resources and learning as it relates to S.T.R.E.A.M., the increased access to technology which promotes collaboration in real-world problem-solving, and the increased opportunity for students to achieve. At the end of the 2013-14 school year, the Chagrin Falls EVSD Treasurer and the West Geauga Local School District Treasurer will provide each Board of Education with a summative evaluation reflecting the actual cost savings to each district via the S.T.R.E.A.M. for Progress project in Year 1. The Director of Curriculum within the Chagrin Falls EVSD will monitor and document increased achievement of students in grades K-12 over the next 5 years as it relates to state testing in Math and Science and in the number of graduates over time who seek S.T.R.E.A.M.-related post-secondary options/careers resulting from the implementation of the S.T.R.E.A.M. for Progress project. The Assistant Superintendent within the Chagrin Falls EVSD will monitor and document increased achievement of students with ASD served via the new localized program over the next 5 years as it relates to performance on state testing and/or vendor assessments in Math and/or Science and in the number of graduates over time who seek STREAM-related post-secondary options/careers resulting from the implementation of the S.T.R.E.A.M. for Progress project.

19. Describe the expected changes to the instructional and/or organizational practices in your institution.

Internal systemic changes to our approach to serving students with ASD are expected as a result of this project. We currently serve six students with Autism Spectrum Disorders (ASD) at varying ages within an alternate environment (they attend the Cleveland Clinic Center for Autism). The Cleveland Clinic Center for Autism (CCCCA) is well-respected and world-renown for their approach to serving their client's needs. One critically important component missing to their service plan, is the ability to serve students in an educationally-based setting with access to typical peers. Currently, we can describe the setting at the CCCCA as clinical and therapeutic. In our consultation with the CCCCA, we had a rich discussion regarding the relevance of serving students in a real-world setting, such as a school. The CCCCA recognizes the strength in our proposed project and its ability to meet the educational, academic, social, functional, and emotional needs of students. With the implementation of our proposed project, we expect philosophical changes among our staff. We have not benefited from fully including this population of student in our classrooms and schools, so with their addition, we anticipate and hope for our instructional and organizational practices to adjust to the changing student body. We hope to build the capacity of our staff to differentiate their instructional practices to meet the needs of the students with ASD, very similarly as we do for our general education population of students. Building an awareness and tolerance for those with disabilities will also increase as a result of implementing our project. Opting for models of inclusion and reverse inclusion, when appropriate, will provide students of all abilities the opportunity to interact and learn from each other demonstrating that all students have unique skills and talents.

E) SUBSTANTIAL IMPACT AND LASTING VALUE - Impact, evaluation and replication

20. Describe the rationale, research or past success that supports the innovative project and its impact on student achievement, spending reduction in the five-year fiscal forecast or utilization of a greater share of resources in the classroom.

Research speaks directly to the prevalence rates of Autism Spectrum Disorders (ASD) among all children to be one in every eighty to ninety children and one in every fifty-four males. These rates have exponentially increased over the last decade, leaving school districts with challenges that were never before tackled. In addition to the challenge of educating such individualized students, comes great rewards and opportunity. Research, as previously stated in this application, reveals to us that when students with ASD attend post-secondary education options, they more likely than not to enter into STEM (Science, Technology, Engineering, and Math) related majors of study. Our innovative project will include an aspect of Art and Real-world application making the curriculum more comprehensive than the traditional STEM. Unfortunately, research also shows us that students with ASD enter into post-secondary schooling less often than students with other disability types. We hypothesize the reason for this fact is that students with ASD do not experience the "in-school" support they need leading up to graduation. In our case, being such a small district, it is not cost effective for us to provide the level of staffing needed to support such a small population of students. Therefore, we do not ignore their needs, but contract with an outside provider that has the staffing and expertise to reach our students. The only variable missing in this equation is that the setting is clinical and therapeutic in nature, not school-based. As referenced by the administration of the Ohio Department of Education, educating students as close to the regular school environment as possible is ideal. Research shows us that inclusionary methods have the highest rates of success in preparing students for Twenty-first Century Skills. Our district, like many others across the state are pushing more and more students to stay in the general education setting, albeit difficult. Students are not only learning lessons in math and reading, but perseverance, which may assist them in navigating real-world situations. If given the opportunity to enact our project, we would be partnering with and sharing our resources with one of Ohio's greatest resources in Case Western Reserve University (CWRU). We would rely on CWRU to consult with our staff on the preparation of implementing the STEAM curriculum, as well as the two fabrication labs. They have created successful partnerships like this previously with other public school districts. CWRU has helped to set up fabrication labs in nearby public school districts and have consulted and provided professional development for teachers across the state. They have expressed an interest and desire in working with our district and find interesting the tie to special education. The Cleveland Clinic Center for Autism (CCCCA) has also expressed an interest with working with our team. They can commit to consulting and training our staff, which is a great start. We are hopeful that the CCCCA or that another existing center for Autism will open a satellite site in our district or that our district can create a core of expertly trained staff in order to maximize services for students with ASD. We believe our resident students could return from the CCCCA for a more localized education, reducing their travel time per day, acquainting them with peers who live in the community, and building relationships with their families and making a connection with our district.

21. Is this project able to be replicated in other districts in Ohio?

Yes

No

22. If so, how?

Adding the components of Art and Real-world application to existing STEM curriculum in schools across Ohio would easily be established. In schools where STEM is already embedded as staple coursework for the district, it would mean including the teachers of the Arts (Language Arts, World Languages, Visual and Performing Arts) into the planning and inter-disciplinary implementation process of S.T.R.E.A.M. Additionally, the district would need to adopt a philosophy of inclusion into the regular education setting for students identified with Autism Spectrum Disorders. A district's mindset, as a whole, is integral to the success of an inclusionary model. Thankfully, inclusionary practices are not new to Ohio schools and the expectation for learning to occur in the Least Restrictive Environment is well understood, accepted, and prevalent. Any district wanting to replicate the S.T.R.E.A.M. for Progress project would need to make several decisions in order to initiate this program. With regards to the learning content for students, districts would need to determine if using an already established curriculum, like Project Lead the Way, or infusing S.T.R.E.A.M.-like content into existing coursework is preferred. Although we are choosing to hire a consultant from Case Western Reserve University for this project, districts could reduce spending by asking their own staff to oversee the implementation of S.T.R.E.A.M. Districts would need to weigh the benefits of both models and determine which better suits their needs and spending capability. Depending on the level of time, finances, and commitment to the project, districts would determine the number of staff required for training and allowing for multiple opportunities to plan. Additionally, staff training on the inclusion of students with ASD into the general education classroom will be required. There are many strategies districts can use to successfully include these disabled students. The Cleveland Clinic Center for Autism uses Applied Behavior Analysis (ABA) as their research-based methodology, but districts could decide for themselves if they prefer a different approach. Regardless, training on an approach is necessary for student achievement in this program. As stated, we are asking the Cleveland Clinic Center for Autism to assist us in creating a localized service provider on the Chagrin Falls 7-12 campus. This model could be replicated in other districts by virtue of the number of chartered schools that focus on ASD. Districts could establish such a partnership or move to create their own district's center. Beyond training, the largest expense to a district for replicating the project would be the cost of the equipment for the fabrication labs, as well as the Center for Autism. Technology is required to support the curriculum and provide the real-world application we desire.

Without laptops, 3-D printers, accessibility, etc. the project would not be as impactful as it is with these capabilities. Technology to support students with ASD is also extremely important. Many students use text to speech devices to communicate with their teachers and peers. Using this inter-disciplinary curriculum (S.T.R.E.A.M.), students would not have the success we are attempting to reach without the ability to collaborate.

23. Describe the substantial value and lasting impact that the project hopes to achieve.

Although there will be a substantial monetary value to the amount of savings the district will incur with the implementation of this project, our primary focus and hope is that students with Autism Spectrum Disorders (ASD) benefit significantly from the S.T.R.E.A.M. curriculum and format as evidenced by higher rates of achievement and improved social interaction skills. To measure the impact of the curriculum, we believe that higher rates of students with ASD will not only enroll in post-secondary options (Universities, Community Colleges, Trade Schools) but the coursework they choose to pursue will reflect the high-interest areas of Science, Technology, Engineering, and Mathematics. Attending post-high school options increases the likelihood that students will become productive, engaged citizens that contribute to our country's overall economy. Moreover, and possibly just as impactful as the STEM curriculum, is the social interaction and inclusion of students with ASD that the project anticipates. People in the workforce are more successful when they have honed their "people skills," and this has been proven to be a difficult skill for many of those with ASD. Many people born with ASD often struggle with instances of inference, reading body language, abstract concepts, eye contact, and subtleties. By providing students with ASD access to an educationally-based learning environment populated by typical peers without disabilities, students with ASD will gain opportunity to practice lifelong social skills. Pairing this learning option with direct instruction with a social curriculum will assist students to gain the skills required to be successful adults. The substantial value and lasting impact of this project includes a monetary savings, as well. A majority of our overall savings will come from a cut in tuition for our students with ASD that attend school outside the district. Tuition costs equals approximately \$420,000 per year, and we are hoping to reduce tuition spending by up to fifty percent over the course of the next five years. Transportation costs also need to be included in the overall cost savings sum. Transporting students to an outside facility adds twenty-six miles, round trip, to each child's day of travel over driving directly to our school buildings. Our district calculated fuel and maintenance cost association with these trips plus the savings incurred with staffing will result in reductions of approximately \$41,256 per year, over the next five years.

24. What are the specific benchmarks related to the fund goals identified in question 9 that the project aims to achieve in five years? Include any other anticipated outcomes of the project that you hope to achieve that may not be easily benchmarked.

The "S.T.R.E.A.M. of Progress" project will be evaluated relative to progress toward each of the Straight A Fund identified goals. The completion of training for all K-12 teachers on S.T.R.E.A.M. strategies and their use as applied to the "Great Lakes in My World" program will ensure that understanding and use of these strategies is systemic. At the end of summer 2014 grant-funded S.T.R.E.A.M.-related trainings, teachers will participate in a survey to capture data which reflects the degree to which they have increased understanding of S.T.R.E.A.M. strategies, the degree to which they have an increased content understanding/knowledge through the provided training, and the degree to which they can derive meaning and applications of S.T.R.E.A.M. to their content area/courses. Student surveys will be administered to K-12 students at the end of the 2013-14 school year to collect feedback relative to increased learning in Science and Mathematics through the integration of Technology, the Arts, and application to Real-world experiences. The long-term goal of improving student achievement will be reflected via improved achievement of students in Science and Mathematics as evidenced on state assessments and increases in the number of students scoring a 3 or higher on AP science course exams within the next 5 years. Spending reductions evidenced in the 5-year fiscal forecast identify concrete savings that the S.T.R.E.A.M. for Progress project will provide. The project-funded creation of a localized service for students with ASD will provide total yearly cost savings of \$254,604 to the Chagrin Falls EVSD General Fund; the West Geauga Local Schools will show a total yearly cost savings of \$44,000 to their General Fund. A yearly cost savings for the Chagrin Falls EVSD of \$62,000 is also within the 5-year fiscal forecast - through the provision of the S.T.R.E.A.M.-related training, systemic technology/resources, and creation of supportive infrastructure. Our creation of a Mobile Fabrication Laboratory, a S.T.R.E.A.M. Lab Junior on our K-3 campus, a S.T.R.E.A.M. Lab on the 7-12 campus, and enhancements to our Intermediate School Science labs to support S.T.R.E.A.M. learning will ensure access for all K-12 students enrolled within the Chagrin Falls EVSD and to students with Autism Spectrum Disorder (ASD) who will now receive localized service via the localized service provider. Through the provision of these dedicated areas and the project-provided Chromebooks, S.T.R.E.A.M. resources will be shared and accessible to all students and teachers. Similarly, students with (ASD) from both Consortium districts (Chagrin Falls EVSD and West Geauga Local Schools) and other area district will have new access to S.T.R.E.A.M. programming. These students will also have regular and ongoing access to typical regular education peers and to all music, art, and other courses available on the 7-12 campus. This access to existing resources and new grant-funded shared resources will increase student achievement. Over time, the students with ASD will show an increase in achievement in Math and Science as evidenced by state and local test scores and will show an increase in the number of students with ASD who pursue S.T.R.E.A.M.-related post-secondary study and/or career options. This project will also provide immediate evidence at the end of the 2014-15 school year to reflect progress in decreasing spending previously used to provide service to students with ASD via the Cleveland Clinic Center for Autism (CCCA). Savings in monies paid to the CCCA and in transporting students with ASD to and from the Shaker Heights CCCA campus will be documented. Surveys will be administered to all families of students served via the localized service to students with ASD at the end of the 2014-15 school year to gather data to reflect increased student achievement and greater access to learning opportunities.

25. Describe the plan to evaluate the impact of the concept, strategy or approaches used.

* Include the method by which progress toward short- and long-term objectives will be measured. (This section should include the types of data to be collected, the formative outputs and outcomes and the systems in place to track the program's progress).

* Include the method, process and/or procedure by which the program will modify or change the program plan if measured progress is insufficient to meet program objectives.

The "S.T.R.E.A.M. of Progress" project will be evaluated relative to progress toward each of the Straight A Fund identified goals. The systemic training for all K-12 teachers on S.T.R.E.A.M. strategies and their use as applied to the "Great Lakes in My World" program will ensure that understanding and use of these strategies is systemic. At the end of summer 2014 grant-funded S.T.R.E.A.M.-related trainings, teachers will participate in a survey to capture data which reflects the degree to which they have increased understanding of S.T.R.E.A.M. strategies, the degree to which they have an increased content understanding/knowledge through the provided training, and the degree to which they can derive meaning and applications of S.T.R.E.A.M. to their content area/courses. Student surveys will be administered to K-12 students at the end of the 2013-14 school year to collect feedback relative to increased understanding in Science and Mathematics through the integration of Technology, the Arts, and application to Real-world experiences. The long-term goal of improving student achievement will be reflected via increases in achievement of students as evidenced on the ODE Math and Science assessments and increases in the number of students scoring a 3 or higher on AP math and science course exams within the next 5 years. Spending reductions evidenced in the 5-year fiscal forecast identify concrete savings that the S.T.R.E.A.M. for Progress project will provide. The project-funded creation of a localized service for students with ASD will provide total yearly cost savings of \$254,604 to the Chagrin Falls EVSD General Fund; the West Geauga Local Schools will show a total yearly cost savings of \$44,000 to their General Fund. A yearly cost savings for the Chagrin Falls EVSD of \$62,000 is also within the 5-year fiscal forecast - through the provision of the S.T.R.E.A.M.-related training, systemic technology/resources, and creation of supportive infrastructure. Our creation of a Mobile Fabrication Laboratory, a S.T.R.E.A.M. Lab Junior on our K-3 campus, a S.T.R.E.A.M. Lab on the 7-12 campus, and enhancements to our Intermediate School Science labs to support S.T.R.E.A.M. learning will ensure access for all K-12 students enrolled within the Chagrin Falls Exempted Village School District and to students with Autism Spectrum Disorder who will now receive localized service via the localized service provider. Through the provision of these dedicated areas and the provision of Chromebooks, S.T.R.E.A.M. resources will be shared and accessible to all students and teachers. Similarly, students with Autism Spectrum Disorder (ASD) from both Consortium districts (Chagrin Falls EVSD and West Geauga Local Schools) and other area district will have new access to S.T.R.E.A.M. programming. These students will also have regular and ongoing access to typical regular education peers and to all music, art, and other courses available on the 7-12 campus. This access to existing resources and new grant-funded shared resources will increase student achievement. Over time, the students with ASD will show an increase in achievement in Math and Science as evidenced by state and local test scores and will show an increase in the number of students with ASD who pursue S.T.R.E.A.M.-related post-secondary study and/or career options. This project will also provide immediate evidence at the end of the 2014-15 school year to reflect progress in decreasing spending previously used to provide service to students with ASD via the Cleveland Clinic Center for Autism (CCCA). Savings in monies paid to the CCCA and in transporting students with ASD to and from the Shaker Heights CCCA campus will be documented. Surveys will be administered to all families of students served via the localized service to students with ASD at the end of the 2014-15 school year to gather data to reflect increased achievement and access to learning opportunities.

By virtue of applying for the Straight A Fund, all applicants agree to participate in the overall evaluation of the Straight A Fund for the duration of the evaluation timeframe. The Governing Board of the Straight A Fund reserves the right to conduct evaluation of the plan and request additional information in the form of data, surveys, interviews, focus groups, and any other related data to the legislature, governor, and other interested parties for an overall evaluation of the Straight A Fund.

PROGRAM ASSURANCES: I agree, on behalf of this applicant agency and/or all identified partners to abide by all assurances outlined in the Assurance section of the CCIP. In the box below, enter "I Accept" and indicate your name, title, agency/organization and today's date.

I Accept Robert Hunt Superintendent, Chagrin Falls Exempted Village School District October 25, 2013