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Adjusted Allocation: 0.00
Remaining: -1,582,333.00
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: Closing Critical Gaps: Improving Student Achievement in Science and Technology

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 TGFS innovative project targets four critical transition hot spots for student achievement in Science and Technology - 3rd to 4th grade, 5th to 6th, 8th to 9th, 11th to post secondary. A collaborative team of teachers, across grade levels and schools, will meet regularly to fashion cross disciplinary learning expeditions (that are aligned to the common core for these Hot Spot grade levels) and assess student performance to aid them in adopting new habits of scholarship and improving achievement levels. In order to improve student achievement in Science and Technology we will furnish four science labs and deploy 1:1 computer: student relationship and appropriate infrastructure support.

4. Lead applicant primary contact: - Provide the following information:
First Name, Last name of contact for lead applicant: Evan Rulon
Organizational name of lead applicant: The Graham School
Unique Identifier (RN/Fed Tax ID): 133421
Address of lead applicant: 3950 Indianapolis Avenue, Columbus, OH 43214
Phone Number of lead applicant: 614-262-1111
Email Address of lead applicant: djwadison@gmail.com

5. Secondary applicant contact: - Provide the following information, if applicable:
First Name, Last name of contact for secondary applicant: Edmund Ingman
Organizational name of secondary applicant: The Charles School at Ohio Dominican University
Unique Identifier (RN/Fed Tax ID): 007999
Address of secondary applicant: 1270 Brennetail Ave.
Phone number of secondary applicant: 614-258-8858
Email address of secondary applicant: ingman.1@thecharlesschool.org

7. Partnership and consortia agreements and letters of support: - (Click on the link below to upload necessary documents).
* Letters of support for districts in academic or fiscal distress only. If school district or 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.

3. Total Students Impacted:

4. 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 (RN/Fed Tax ID), Address, Phone Number, Email Address of Contact for All Secondary Applicants in the box below.

5. List all partners and consortia agreements and letters of support:

6. 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.

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.

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

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

F Student achievement
F Utilization of a greater share of resources in the classroom

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

F New - never before implemented
F Existing and researched-based - never implemented in your district or community school but proven successful in other educational environments
F Mixed Concept - incorporates new and existing elements
F 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.

Project Goals for improving student performance: Create collaborative communication structures for treating student achievement Gaps in Science and Technology at transition hot spots; Employ experiential, hands-on pedagogy; Develop and furnish four science labs; Deploy 1:1 computer: student relationship and appropriate infrastructure support; Integrate multiple resources and perspectives to support student achievement in science and technology. The TGFS innovative project targets four critical transition hot spots for student achievement in Science and Technology - 3rd to 4th grade, 5th to 6th , 8th to 9th, 11th to post secondary. A collaborative team of teachers, across grade levels and schools, will meet regularly to assess student performance in science and technology helping them to adopt

12. Enhancing/Scale Up - elevating or expanding an effective program that is already implemented in your district, school, or consortia partnership

13. Project Goals for improving student performance: Create collaborative communication structures for treating student achievement Gaps in Science and Technology at transition hot spots; Employ experiential, hands-on pedagogy; Develop and furnish four science labs; Deploy 1:1 computer: student relationship and appropriate infrastructure support; Integrate multiple resources and perspectives to support student achievement in science and technology. The TGFS innovative project targets four critical transition hot spots for student achievement in Science and Technology - 3rd to 4th grade, 5th to 6th , 8th to 9th, 11th to post secondary. A collaborative team of teachers, across grade levels and schools, will meet regularly to assess student performance in science and technology helping them to adopt
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.

TGS provides an environment where students are engaged and active in science. Our research shows that students are more likely to develop a passion for science and technology when they are actively involved in hands-on, real-world experiences. TGS offers a unique opportunity for students to apply their knowledge and skills in science and technology settings. The program also fosters a sense of community and collaboration among students and teachers, leading to increased learning outcomes. Furthermore, TGS helps students develop critical thinking and problem-solving skills, which are essential for success in science and technology fields. By providing students with the opportunity to engage in authentic learning experiences, TGS helps to cultivate a lifelong love for science and technology.

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 Brief 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.

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

1,582,333.00  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, RTT money, local funding, foundation support, etc.), and provide details on the costs of items included in the budget (i.e. staff counts and salary/benefits, equipment to be purchased and cost, etc).

TGS enhances students' critical thinking and problem-solving skills by providing them with real-world, hands-on experiences in science and technology. These experiences help students develop a deeper understanding of the concepts and principles of science and technology. In addition, TGS fosters a sense of community and collaboration among students and teachers, leading to increased learning outcomes. Furthermore, TGS helps students develop the communication and collaboration skills that are necessary for success in today's workforce. By providing students with the opportunity to engage in authentic learning experiences, TGS helps to cultivate a lifelong love for science and technology.
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.

Across the school in FY 15 $83,968 in new costs will occur. These include an IT staff member’s salary and benefits, a janitor’s increased salary and benefits, and funds available for maintenance of new systems. In FY 16 and beyond the new costs increase to $157,593 including the FY 15 costs plus additional funds to replace equipment on a rotating schedule allowing us to reasonably afford to maintain the technology tools without needing a large influx of funding. Because of the influx of new technology, supplies and equipment, these will not need to be purchased on the previously budgeted schedule. In addition, consultants budgeted over the last five years will no longer be contracted (both are retiring) with staff members implementing their projects. Cost reductions to pay for the above ongoing costs are primarily taken from meager budget lines that were available for small amounts of the same items. TGS IT Specialist $26,000 + $4,000 salary and benefits for 6 months in 2010. Ongoing annual salary and benefits will be $52,000 + $8000 - position will be ongoing allowing one technology expert to be stationed in each of the three school buildings. (we currently have 2 IT professionals across the four schools in three buildings. This individual will support all technology from an IT perspective as well as work with teachers on integrating technology into curriculum, provide training, and lead student tech teams in each school. Two $8000 new/recurring cost items are retiring ($80,000 in annual contracts) and will not be replaced, freeing funds for this position. Janitorial 20% increase $9922 + $1066 starting in FY 15 for maintenance of larger footprint of buildings in use as classrooms. Funds from reduction in consultant fees referenced above. $8000 from consultant non renewed will be budgeted for maintenance of building infrastructure such as electric or HVAC $2,000 from the non-renewed consultants will fund maintenance of the technology infrastructure. $2,000 from the non-renewed consultants will fund space reconfiguration if necessary. One fourth of technology items ($22,244) will be replaced annually starting in FY 16 from budgeted supplies and materials, an area of reduced need once the science/tech center is operational. Increases in building utilities because of the new building will be covered by Erate. $15,000 in annual contingency funds are available in case of an emergency. TCS Replacing new technology tools at rate of one fourth annually beginning 2016 ($28,850) from the capital outlay budget that will not be needed. Infrastructure improvements will support the new technology with maintenance budget ($200 annually from capital outlay to PS) infuse of equipment will provide a solid foundation that with a systematic replacement pattern will provide plenty of technology tools to support the initiative of integrated classroom technology. GEMS technology is replaced to be budgeted in 2016 at one fourth annually from current supplies and materials budget - items being removed are marketing materials and science class supplies. $2000 maintenance budget for network upgrades in necessary from supplies and materials. GPS Will be replaced at one fourth ($3681) annually beginning in FY16 taken from capital outlay line. Infrastructure improvements will support the new technology with maintenance budget ($2,000 annually) coming from capital outlay into purchased services.

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 how you 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.

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.)

The proposal process included a planning team that includes the Deans of each consortium school; and individuals who work for all four consortium schools: Executive Dean of Academics and Administration; Supreme Dean, Executive Director of each school; Techno Manager; Educational Data Analyst; Director of Advancement; Director of Operations, Business Administrator. The team identified the needs, the plan, and potential team members and met with service providers, including: Theresa A. Holleman, Ph.D., Vice President for Academic Affairs, Ohio Dominican University; T. D’Arcy Oaks, Ph.D., Executive Director of Student Life, The Ohio State University; Keely J. Pratt, Ph.D. Director, Office of Students: Education & Human Ecology, The Ohio State University; Connie Boehm, Director, Student Wellness, Office of Student Life, The Ohio State University; Robert L. Caldwell Jr., Executive Director, AnswerPoventry; et al. The project tasks are broken out into planning committees and work groups. To achieve the goals outlined in the proposal, the planning committees and work groups will meet bi-weekly or more often to discuss project development and planning, budgeting, with meeting minutes shared with all stakeholders.

Implement (MM/DD/YYYY) 1/31/2014-6/30/2018

Narrative explanation

Assessment data is submitted twice per year: MAP testing in reading, math and science; Student Engagement Survey; Teacher Climate Survey; Student Evaluation of Teaching Survey; Community Engagement/Participation Survey; and the Wellness Pre-test. All classes use interim assessments and state tests (OGT and OAA) will be administered. Action method participation will be used to adjust objectives based on data collected and analyzed. Ten days of professional Development for all teachers with representatives from ODU will be scheduled 6/2014. This extensive training will include science teaching practices and expectations; technology integration into the classroom, data analysis and an essential focus on the transition years. Teachers will meet bi-weekly to discuss the strategy, implementation and outcomes, and fine tune new tools for the following year. At the end of the year, a year end meeting will be held with all stakeholders to reflect on the project and to fine tune for the next year.

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Summative evaluation (MM/DD/YYYY): 6/30/2015-6/30/2018

Narrative explanation

All committees will continue to meet regularly through FY 18. Biannual assessment of progress will occur through evaluation of all assessments and distribution of results to all stakeholders. Tracking of progress will be regularly evaluated, plans reevaluated and adjusted according to results. Benchmarks will be established in each grade in each school to allow for systematic evaluation by stakeholders, and to encourage students to take further responsibility for their learning and achievement. These will be clearly outlined at the beginning of each year, and evaluated at the mid and end of each year. At the end of each year a report and a final report on the success of the project over the five year term will be produced. Measures will include attendance, engagement using twice per year survey, behavior, achievement using state and school based assessments, technology usage by students and teachers using equipment and network usage methods, climate using twice per year survey, PD effectiveness using surveys after each session, effectiveness and achievements of benchmarks analyzing the speed and thoroughness with which these are met, wellness knowledge and achievement, achievement and engagement of African American males, community engagement in multiple aspects of school life, expedition effectiveness for teaching and learning, effectiveness of science teaching and learning at each transitional level, student preparation for each next educational transition, improvement in student success in transition years, college preparation.

DSU research/evaluation $7,500, and mentoring $2,500, Tech security plan $5,000 Supplies for science lab, Expedition books $3000 Trays, weights, measures, probe-ware, specimens, glassware, books, etc. $11,000, Cameras 29 $2670, Projectors *2 $4,000, software $10,000, Tablet cases $375, manipulatives $1000, accelerometers $2500 Tablets, desktops, laptops $14,725. Wireless controller unit $850. High grade network switches $1,850, DNS caching servers $700, DNS filtering software $2,000 server $4,060.
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.

Below are the anticipated outcomes in student achievement in Science and Technology at four transition hot spots. We will assess student progress through benchmark assessments to determine if students have met the academic standards set in the State Science and Technology curriculum. Assessment data will be collected at Kentucky, Ohio, Massachusetts, and New York. The results will be used to refine instruction and improve student performance in Science and Technology.

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 in a format that is useful and will have a powerful impact on student continuous improvements.)
Our assessment and evaluation approach requires data and analysis for evaluation and assessment. The Center for the Study of Student Life at The Ohio State University will coordinate the design, administration, and analysis of data in order to validate our instruments, we will use reliability checks. For example, we will measure reliability by calculating Chronbach's alpha. We will also plan to use factor analysis in order to evaluate the validity of any newly created measures. Data will also be analyzed using regression techniques in order to determine the effect of multiple predictors on outcome variables. We will also examine interaction effects in order to determine if the impact of a specific variable depends on the level of another variable. Additionally, we will plan to use hierarchical linear modeling in order to examine possible classroom level effects on outcomes. By determining which factors are most important in predicting outcomes, these analyses will help us make predictive recommendations for effective and timely interventions. The Center for the Study of Student Life in the Office of Student Life at The Ohio State University has expertise in both curricular and co-curricular measurement, instrument development, analysis, and training. The Center employs four Ph.D.-level and three M.A.-level researchers. The Center uses Qualtrics survey software to administer confidential or anonymous surveys usually via email to participants and has much experience with educational research, including using inferential statistical analyses to inform policy, planning, and programming decisions. Additionally, the Center will train three data leaders to monitor and interpret data collected in their schools. The Center will also train the Data Coordinator. This will be done through meetings with staff from the Center and the data leaders and data coordinator, where staff from the Center will demonstrate and explain how to use Qualtrics survey software, and demonstrate statistical techniques using SPSS and HLM7. Measures will include: - Student Formative Assessments o Measures of Academic Progress in Science (aligned to Common Core State Standards) o Student wellness and mindfulness o Technology knowledge, Technology engagement/efficacy and Technology performance o Teacher interim assessments o Measures of Student engagement o Motivation to participate in science o Perceptions on the value of science o School climate o Community participation - Teacher and Community Formative Assessments o Engagement o Technology knowledge, Tech engagement/efficacy and tech performance o Communication processes - Student Summative Assessment o Ohio graduation and achievement tests in science o Technology knowledge, Tech engagement/efficacy and tech performance o Course Grades o Electronic Portfolio evaluation - Teacher and Community Summative Assessments o Engagement o Technology knowledge, Tech engagement/efficacy and tech performance o Communication processes - Student Behavior and other Key Performance Indicators o Attendance o Tardiness o Dropout rates o Time spent with technology o Technology grade level gateways o Demographic information such as ethnicity, sex, nationality, and socio-economic status Time-line: January 2014-March 2014: Instrument development, Curricular development, Baseline measurements March 2014-May 2014: Pilot data gathered June 2014-July 2014: Pilot data analyzed, recommendations given to planning team August 2014: Instrument redesign, Training of data leaders and data coordinator September 2014: Instrumentation, administration, Initial analysis.