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<th>Supplies 500</th>
<th>Capital Outlay 600</th>
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Adjusted Allocation 0.00

Remaining -669,175.99
Please respond to the prompts or questions in the areas listed below in a narrative form.

**A) APPLICANT INFORMATION - General Information**

1. Project Title:
   SCOPES School of Innovation-Bringing STEM to Appalachia

2. Project Summary: Please limit your responses to no more than three sentences.
The Unioto Elementary seeks to expand its SCOPES program that provides STEM opportunities for its top students.

   *This is an ultra-concise description of the overall project. It should only include a brief description of the project and the goals it hopes to achieve.*

3. Estimate of total students at each grade level to be directly impacted each year.

   *This is the number of students that will receive services or other benefits as a direct result of implementing this project. This does not include students that may be impacted if the project is replicated or scaled up in the future. It excludes students who have merely a tangential or indirect benefit (such as students having use of improved facilities, equipment etc. for other uses than those intended as a part of the project). The Grant Year is the year in which funds are received from the Ohio Department of Education. Years 1 through 5 are the sustainability years during which the project must be fiscally and programmatically sustained.*

<table>
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<tr>
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<th>Year 3</th>
<th>Year 4</th>
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<td>208 K</td>
<td>190 1</td>
<td>185 2</td>
<td>180 3</td>
<td>177 8</td>
</tr>
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</table>
4. Explanation of any additional students to be impacted throughout the life of the project. This includes any students impacted or estimates of students who might be impacted through future scale-ups or replications that go beyond the scope of this project.

As Unioto students are promoted to middle school, the instructional delivery at grades 6-8 will reflect STEM concepts in their instructional delivery. Following that transition, the high school will address needed changes based on the higher achievement level of students. Another significant impact will be academic improvement of high school graduates attending college. The number of students not needing developmental courses will decrease. Students will have the college readiness skills to be successful. The workforce after high school will have a set of problem solving skills and a greater understanding of science and mathematics. Thus, the workforce in the area will have higher performing employees at the entry level and through their careers. Other districts in Ross County may use the Unioto model in their annual adjustments to curricular delivery.

Ohio University-Chillicothe's education degree program will study the impact on their preservice teachers and make a

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

First and last name of contact for lead applicant
Jennifer Domo

Organizational name of lead applicant
Union Scioto Local School District

Address of lead applicant
1565 Egypt Pike, Chillicothe, Ohio

Phone Number of lead applicant
740-773-4103 Ext. 2501

Email Address of lead applicant
jdomo@unioto.net

Community School Applicants: After your application has been submitted and is in Authorized Representative Approved status an email will be sent to your sponsoring entity automatically informing the sponsor of your application.

6. Are you submitting your application as a consortium? - Select one checkbox below

Yes

No

If you are applying as consortium, please list all consortium members by name on the "Consortium Member" page by clicking on the link below. If an educational service center is applying as the lead applicant for a consortium, the first consortium member entered must be a client district of the educational service center.

Add Consortium Members

7. Are you partnering with anyone to plan, implement, or evaluate your project? - Select one checkbox below

Yes

No

If you are partnering with anyone, please list all partners (vendors, service providers, sponsors, management companies, schools, districts, ESCs, IHEs) by name on the "Partnering Member" page by clicking on the link below.

Add Partnering Members

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

8. Describe the innovative project: - Provide the following information

The response should provide a clear and concise description of the project and its major components. The following questions will address specific outcomes and measures of success.

a. The current state or problem to be solved; and

In this Appalachian area, there are limited opportunities for in-depth exposure to science and mathematics available to students, pre-service and existing teachers. The local workforce requires employees to have a solid understanding of the science, technology, engineering and math fields. Research shows schools need to provide rigorous activities in these disciplines at an early age. Our challenge is that we currently have no access to regional comprehensive STEM programs for grades k-5. Unioto's elementary students are achieving below the desired level of attainment on state tests. Students are not meeting their annual measurable objectives. This analysis revealed this was true even with gifted students. In exploring effective programs to increase student understanding and applications of science, technology, engineering and mathematics, STEM programs appeared best to meet the demographics of Unioto's students. However, when studying the STEM Program, another issue surfaced. There needed to be a greater share of resources in the classroom for students to gain a deeper understanding of the concepts. Hands-on activities to solve proposed problems to students required additional individuals who had a
b. The proposed innovation and how it relates to solving the problem or improving on the current state.

In 2014-15, Unioto Elementary School developed the SCOPES (Science Co-Operative Of Physicians and Elementary Students) Academy for the top-performing students after receiving a “D” rating for these gifted students on the 2014-15 state report card. This academy was created for these students to achieve their maximum level of achievement. We have used technologies and materials in the SCOPES lab with great success. The 122 students enrolled in the past 1-1/2 years have shown greater interest in the academics of STEM, careers, and problem-based inquiry learning. The SCOPES Academy encourages life-long learners in the STEM field, thus preparing our learners for college and careers in the STEM field. Although we have made several adjustments in curriculum to achieve maximum growth in our students, and our school district has allocated many resources to improve our current state, we still need more support in order to carry out our master plan. Our plan is to include our entire school (PreK-5) in 2016-17, then all the district for the following year. We want to improve our standardized test scores at all levels. Reducing our retention rate at all grade levels is one objective. We wish to improve our rate of passage on the 3rd grade guarantee and reach Annual Measurable Objectives on the state report card. With the elevated level of student performance, our school will accomplish these objectives. There is a need for a common focus for students and staff. To accomplish this, professional development is essential. The grant will provide the professional development and resources needed to create this learner-centered, self-monitoring, STEM-centered, rich in content, type of learning environment for all students. We will base our professional development implementation on the nine required essentials from The National Association for Professional Schools. Our main sources for research evidence are: Models and Approaches to STEM-A Professional Development adopted by the National Science Teachers Association by Brenda S. Wojnowski, and ASCD Professional Development Solution in the Content of STEM. Partnership with Ohio University-Chillicothe will create STEM teaching experiences for education majors. This relationship would enable both educational entities to provide local candidates experience with the most technologically-advanced equipment and materials. One-way glass will be used for teacher observations of best practices used by Master Teachers, National Board Certified teachers, and OU-C faculty members as these experts work with a group of students. If funded, the capital funds will be used to design and equip three research classrooms used by all grades to allow student, faculty, pre-service and graduate level staff members access to advanced equipment and materials. Ninety percent of teachers have indicated they will use the classrooms for demonstrations with input from observers on the instructional-led discussion on the other side of the one-way glass. We plan to use students, teachers, and administrators to problem solve issues for our community. Our professional learning communities will involve student leaders to solve real-life, contextualized issues within our own community. Issues range from solving physical fitness concerns to employment needs. This will create an increased number of homegrown individuals working locally in STEM-related fields. With our OU-C partnership and this proposal, we will create a local pool of educators that are strong instructors in the STEM fields to fill positions throughout the area. Our proposal would allow rural students equal access to technologies and materials. Technology and materials to incorporate into our SCOPES School of Innovation are 3D printing technology and digitizing, robotics, coding, exercise physiology case studies, and life and physical science labs for hands-on learning.

9. Select which (up to four) of the goals your project will address. For each of the selected goals, please provide the requested information to demonstrate your innovative project. - (Check all that apply)

- Student achievement

   i. List the desired outcomes.

   Examples: fewer students retained at 3rd grade, increase in graduation rate, increased proficiency rate in a content area, etc.

   Our desired outcomes are to create excitement for Science, Technology, Engineering, Mathematics, (and Medicine) STEMM at an early age. Research from the Discover Channel indicates that our youth are formulating their life-long attitudes and abilities about STEM by the sixth grade. Therefore, it is critical that we reach these learners and give them a rich STEM learning environment prior to leaving our elementary building. Our school will implement a STEM program for 2016-17. A desired outcome is to improve our achievement level of all students as measured on standardized test assessments at all levels throughout the elementary building. Another outcome of the project would be to reduce retention rate as students would be actively engaged in the learning process. The English Language Assessment will show an improved rate of passage. A higher rate of students meeting the 3rd grade guarantee would be noted and an increase in the number of students meeting their AYP (Adequate Yearly Progress) would be evident. As the project evolves at all grade levels Prek-5, other assessments will be designed to indicate student progress in all subject levels and show increased problem solving. We believe that with the elevated level of student engagement that occurs as a result of these curricular changes and technological opportunities, our school will realize these goals.

   ii. What assumptions must be true for this outcome to be realized?

   Examples: early diagnosis and intervention are needed to support all children learning to read on grade level; project-based learning results in higher levels of student engagement and learning, etc.

   A significant assumption is that the students and staff members will want to participate in this STEM initiative. The SCOPES Academy was created to test the STEM theory and implement the methods of inquiry-based instruction prior to a full-scale, building-wide SCOPES Innovative School proposal was even thought of being created. Our research on entrance and exit exams on critical thinking screeners indicate a year's worth of growth as defined by the OTES evaluation model was realized by in pilot and will be realized at all grade levels due to student engagement. Teacher and parent surveys about expanding the SCOPES program indicate a need to expand this successful program. The survey results at the end of the pilot year indicated a feeling of success by teachers and parents. Ninety percent of the teachers indicated they will participate in the professional development program and will participate in teaching behind the glass each semester. Feedback will be provided by observers. Instructional strategies will be the focus of discussion. Because of the success of SCOPES for the gifted, Unioto wants to bring similar learning opportunities to our whole student body that embraces these core values of the instructional framework-4 C’s of STEM, which are collaboration, creativity, communication, and critical thinking. These values are centered in the subjects of Science, Technology, Engineering and Mathematics. Ultimately, we would like to become a STEM school and one of the first serving the Appalachian area.

   iii. Describe any early efforts you have made to test these assumptions (pilot implementation, etc), or how these are well-supported by the literature.

   We have piloted a prototype of the SCOPES Innovative School since the 2014-2015 school year with the SCOPES Academy. Our Facebook
page at Union Scioto Scopes demonstrates many of our successful lessons, programs, technology usages, community leaders in STEM, and partnerships with community partners. We were asked to present at the ITSCO (Technology) Conference. We have submitted a video of our program for a model for the Ohio Association of School Boards to demonstrate best practices in Technological Innovations. Our principal and founder, Mrs. Dana Letts, received a Technology Innovation Award from Outstanding Use of Technology in the classroom. Other school districts such as Paint Valley Local School District, Huntington Local School District, and Westfall School Local School District have come to observe and plan to attempt to implement a similar program in their school district. Dayton STEM School also sent representatives to collaborate with our staff and partners for a week of highly reflective professional conversations and collaboration. We have several additional school district requests for visitations and are in the process of scheduling them at this point. Thus the pilot indicated students engaged in problem solving by connecting concepts from various disciplines. Their level of performance was at a higher level on teacher based assessments. The equipment given to Unioto and guest instructors from local businesses provided the foundation for inquiry and problem solving instruction.

iv. List the specific indicators that you will use to measure progress toward your desired outcome. *These should be measurable changes, not merely the accomplishment of tasks. Example: Teachers will each implement one new project using new collaborative instructional skills, (indicates a change in the classroom) NOT; teachers will be trained in collaborative instruction (which may or may not result in change).*

We wish to create collaborative action research teams to emphasis a STEM practice as selected by the staff and university participants. Book study groups would learn more about these problems of practice and implement research-based strategies in lesson design. We have established a partnership advisory council that can identify educational community STEM-related needs as well. Community liaisons will advise us of the areas where regional employers are seeing deficiencies and plan collaboratively to improve these deficiencies in our Appalachian community. We plan to use standardized test scores to measure success in this program. At the end of each assessment, we will measure the student growth with the object being at least one year growth. We also plan to use a critical scoring measure before and after instruction to determine student growth and achievement. This critical thinking measure will be developed by our Curriculum Specialist at the Ross County Educational Service Center. The screening measure will indicate that students will use appropriate problem solving techniques in arriving at a solution to a given issue. We also plan to use surveys (pre and post surveys) with our students, parents, community members, community partners, administrators, and teachers/staff regarding their attitudes about and abilities in STEM at the beginning and the end of the grant period each school year. The results will indicate students, parents, community members and partners have been engaged and feel that the curriculum is being implemented through strong STEM principles. We plan to measure the growth in our undergraduate teacher candidates by the use of their summative assessment in pedagogy and content knowledge through the university’s accreditation system, NCATE. NCATE is used by the Ohio Board of Regents to evaluate university’s effectiveness and needs.

v. List and describe pertinent data points that you will use to measure student achievement, providing baseline data to be used for future comparison.

Standardized test scores are one indicator utilized to measure success in this program. Each grade level also plans to use a critical screening measure before and after instruction to determine student growth and achievement. This critical thinking measure will be developed by our Curriculum Specialist at the Ross County Educational Service Center. We also plan to use surveys (pre and post surveys) with our students, parents, community members, community partners, administrators, and teachers/staff regarding their attitudes about and abilities in STEM at the beginning and the end of the grant period each school year. We plan to measure the growth in our undergraduate teacher candidates by the use of their summative assessment in pedagogy and the survey results as surveyed through the university’s accreditation system, NCATE. The Advisory Council composed of administrators, OU-C faculty, business leaders, and teacher representative will create benchmarks on a quarterly basis to determine the journey implementing the comprehensive plan.

vi. How are you prepared to alter the course of your project if assumptions prove false or outcomes are not realized?

We are prepared to alter the course of the SCOPES Innovation School project if these assumptions prove false or outcomes are not realized by going back to our SCOPES Advisory Committee and collaborating to create a win-win learning opportunity for the students of Unioto Elementary that is STEM related and student achievement based. Our partnerships expert, Marcie Keffer Kennedy from Ohio University-Athens, has volunteered to assist us in this matter. She created a similar partnership with Athens County Schools and Ohio University-Athens. Her program has proven very effective and she is extremely anxious to see this type of program begun near a regional campus of Ohio University. The evaluation team will meet quarterly to look at progress of student learning, staff involved in professional development and adding resources outlined in the Straight A proposal.

b. Spending reductions in the 5 year forecast

i. List the desired outcomes. *Examples: lowered facility cost as a result of transition to more efficient systems of heating and lighting, etc.; or cost savings due to transition from textbook to digital resources for teaching."

Textbook expenditures will be reduced by approximately $2,500 every five years due to the elimination of elementary science textbooks. Professional development expenditures are projected to decrease by approximately $1,100 per year. This will be accomplished through university credits earned through the STEM SCOPES center at a reduced tuition rate from $512 per hour to $150 per hour. We project that an average of 8 credit hours will be reimbursed under this plan which would result in savings of approximately $2,800 per year in tuition reimbursement costs. The expanded opportunities presented by the expansion of the SCOPES Academy will attract and retain our residential students. As a result, the number of residential students leaving the district will decrease which will result in a decrease of purchased services of $53,100.

ii. What assumptions must be true for this outcome to be realized? *Example: transition to "green energy" solutions produce financial efficiencies, etc.; or available digital resources are equivalent to or better than previously purchased textbooks."

The state-of-the art labs created through the project will provide multi-media content and resources that are far superior to textbooks. We assume that teachers who work in the district will take advantage of the convenience and cost savings provided from taking the continuing education through the SCOPES Lab. While the district does provide tuition reimbursement for 80% of the cost, the 20% cost of the reduced tuition is much less expensive for employees. We are assuming at least 4 teachers taking 2 credit hours each will pursue this alternative to the traditional route of traveling off sight or taking on-line courses. Residential students leaving the district in grades 1-5 decreased by 9 students last year. We believe this is a direct relationship to the engaging, innovative SCOPES Academy. We receive many calls and
visitors who express interest in the program. The program entices many of our residential students to come back to the district due to the increased opportunity.

iii. Describe any early efforts you have made to test these assumptions (pilot implementation, etc), or how these are well-supported by the literature.

The SCOPES Academy classes and lessons have been developed by using a variety of technology and lab equipment that has resulted in engaging productive lessons without the use of textbooks. The Academy included a robotics lab, frequent outside guest lecturers such as physicians and a veterinarian who provided expertise and interactive projects. The expansion of this approach to delivering our science curriculum will continue to reduce our reliance on textbooks. Based on our relationship with Ohio University Chillicothe we have been able to offer some professional development to our teachers at a reduced rate. By expanding the lab to include more areas to obtain credit, the savings for tuition reimbursement will increase. In 2015, the residential enrollment students leaving the district in grades 1-5 decreased by 9 students. There is a high level of interest and inquiries in our SCOPES program. The pilot program proved that the program will help retain our residential students.

iv. List the specific indicators that you will use to monitor progress toward your desired outcome.

_These should be specific dollar savings amounts. THESE MUST MATCH THE COST SAVINGS AS PROJECTED IN THE FINANCIAL IMPACT TABLE (FIT)._

The district uses a five-year replacement cycle for textbooks. The district last purchased elementary science textbooks in fiscal year 2011. Therefore textbook purchases will decrease by $2,000 every five years due to the elimination of elementary science textbooks. Financial Detail and Budget Detail reports will be monitored for any textbook expenditures. No budget line item for elementary science textbooks or purchase orders will be approved by the treasurer that results in any elementary science textbook purchases. Professional development expenditures are projected to decrease by approximately $1,100 per year. This will be accomplished through university credits earned through the STEM SCOPES center at a reduced tuition rate from $512 per hour to $150 per hour. We project that an average of 8 credit hours will be reimbursed under this plan which would result in savings of approximately $2,800 per year in tuition reimbursement costs. Tuition reimbursements will be reviewed through financial detail reports and specific voucher review to see if teachers are taking advantage of this savings Total students leaving the district is projected to decrease by 9 students. This is a savings of $5,900 per student or a total of $53,100 per year. Residential students enrollment will be reviewed in DASL and through the State Foundation Payment system. We will review open enrollment deductions on foundation reports and the five year forecast to see the decrease is reflected in Purchased Services.

v. List and describe pertinent data points that you will use to measure spending reductions, providing baseline data to be used for future comparison.

The district uses a five year replacement cycle for textbooks. In review of our financial detail reports, the district last purchased elementary science textbooks in fiscal year 2011 for $2,500. No purchase order will be approved by the treasurer that results in any elementary science textbook purchases. In addition, financial detail and budget detail reports will be monitored by reviewing in particular object code 521 for textbook expenditures. Professional development expenditures are projected to decrease by approximately $1,100 per year. This will be accomplished through university credits earned through the STEM SCOPES center at a reduced tuition rate from $512 per hour to $150 per hour. We project that an average of 8 credit hours will be reimbursed under this plan which would result in savings of approximately $2,800 per year in tuition reimbursement costs. Tuition reimbursements will be reviewed through financial detail reports and specific voucher review to see if teachers are taking advantage of this savings Total students leaving the district is projected to decrease by 9 students. This is a savings of $5,900 per student or a total of $53,100 per year. Residential Student enrollment will be benchmarked in 2015 by grade level. Residential students enrollment will be reviewed in DASL and through the State Foundation Payment system throughout the sustainability period. We will also review open enrollment deductions on foundation reports and the five year forecast to see the decrease is reflected in Purchased Services.

vi. How are you prepared to alter the course of your project if assumptions prove false or outcomes are not realized?

Textbook purchases will have to go through approval by the treasurer who has been involved in the project and knows that textbooks for elementary science will not be approved. These purchases will not be approved in the budget nor will specific purchase orders be approved. In the event that an elementary science textbook purchase did take place, the budget for purchasing other textbooks would be reduced by the corresponding amount. If the professional development opportunities are not taken by the professional staff, we will contact union representatives and building principals to inform teachers about the opportunity for convenience and cost savings to obtain needed credit for recertification and degree advancement. In the event the number of students leaving the district does not decrease, we will review our marketing to make sure our younger families are aware of the STEM opportunities at an early age. Even 1 or 2 students choosing not to leave the district as a result of the SCOPES expansion will generate net cost savings on the project.

c. Utilization of a greater share of resources in the classroom

i. List the desired outcomes.

_Example: change the ratio of leadership time spent in response to discipline issues to the time available for curricular leadership._

Through the creation of centralized lab classrooms, we could provide access to hands-on technology and science equipment to be utilized by all general education classrooms. This would provide tools for students to work collaboratively to solve real-world problems across grade levels and disciplines. This would also increase the instructional skills of current and future teachers by providing real-time authentic observation opportunities of best practices using state-of-the-art equipment.

ii. What assumptions must be true for this outcome to be realized?

_Examples: improvements to school and classroom climate will result in fewer disciplinary instances allowing leadership to devote more time to curricular oversight._

We are assuming that a higher-level of student engagement will result in an increase in student achievement. We must assume that all teachers will gain the knowledge needed to utilize these lab resources effectively.

iii. Describe any early efforts you have made to test these assumptions (pilot implementation, etc), or how these are well-supported by the literature.

During the 2014-2015 school year, we established a single SCOPES Academy classroom which serviced only our high-achieving
students. We saw an increase in student engagement and student achievement. Survey results showed an increased staff desire to learn how to implement similar practices into general education classrooms. Invitations extended to pre-service teachers have resulted in over 20 voluntary classrooms observations since the Academy's inception. Our single iPad lab and SMARTtable are shared daily throughout the building. Therefore, our staff is familiar with sharing of common resources.

iv. Please provide the most recent instructional spending percentage (from the annual Ohio School Report Card) and discuss any impact you anticipate as a result of this project.

v. List any additional indicators that you will use to monitor progress toward your desired outcome. Provide baseline data if available. These should be specific outcomes, not just the accomplishment of tasks. Example: fewer instances of playground fighting.

vi. How are you prepared to alter the course of your project if assumptions prove false or outcomes are not realized?

We are prepared to alter the course of the SCOPES Innovation School project if these assumptions prove false or outcomes are not realized by going back to our SCOPES Advisory Committee and collaborating to create a win-win learning opportunity for the students of Unioto Elementary that is STEM related and student achievement based. Our partnerships expert, Marcie Keffer Kennedy from Ohio University-Athens, has volunteered to assist us in this matter. She created a similar partnership with Athens County Schools and Ohio University-Athens. Her program has proven very effective and she is extremely anxious to see this type of program begun near a regional campus of Ohio University. The evaluation team will meet quarterly to look at progress of student learning, staff involved in professional development and adding resources outlined in the Straight A proposal.

d. Implementing a shared services delivery model

i. List the desired outcomes.

Examples: increase in quality and quantity of employment applications to districts; greater efficiency in delivery of transportation services, etc.

ii. What assumptions must be true for this outcome to be realized?

Example: neighboring districts have overlapping needs in administrative areas that can be combined to create efficiencies.

iii. Describe any early efforts you have made to test these assumptions (pilot implementation, data analysis etc), or how these are well-supported by the literature.

iv. List the specific indicators that you will use to monitor progress toward your desired outcomes.

These should be measurable changes, not the accomplishment of tasks.

Example: consolidation of transportation services between two districts.

v. List and describe pertinent data points that you will use to evaluate the success of your efforts, providing baseline data to be used for future comparison.

Example: change in the number of school buses or miles travelled.

vi. How are you prepared to alter the course of your project if assumptions prove false or outcomes are not realized?

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

a. New - Never before implemented

b. Existing - Never implemented in your community school or school district but proven successful in other educational environments

c. Replication - Expansion or new implementation of a previous Straight A Project

d. Mixed Concept - Incorporates new and existing elements

e. Established - Elevating or expanding an effective program that is already implemented in your district, school or consortia partnership

C) BUDGET AND SUSTAINABILITY

11. Financial Information: - All applicants must enter or upload the following supporting information. The information in these documents must correspond to your responses in questions 12-19.
a. Enter a project budget in CCIP (by clicking the link below)

Enter Budget

b. If applicable, upload the Consortium Budget Worksheet (by clicking the Upload Documents link below)

c. Upload the Financial Impact Table (by clicking the Upload Documents link below)

Upload Documents

The project budget is entered directly in CCIP. For consortia, this project budget must reflect the information provided by the applicant in the Consortium Budget Worksheet. Directions for the Financial Impact Table are located on the first tab of the workbook. Applicants must submit one Financial Impact Table with each application. For consortium applications, please add additional sheets instead of submitting separate Financial Impact Tables.

666,175.99 12. What is the amount of this grant request?

13. Provide a brief narrative explanation of the overall budget.
Responses should provide a rationale and evidence for each of the budget items and associated costs outlined in the project budget. In no case should the total projected expenses in the budget narrative exceed the total project costs in the budget grid.

14. Please provide an estimate of the total costs associated with maintaining this program through each of the five years following the initial grant implementation year (sustainability costs). This is the sum of expenditures from Section A of the Financial Impact Table.

<table>
<thead>
<tr>
<th>Year</th>
<th>Sustainability</th>
<th>Cost</th>
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</thead>
<tbody>
<tr>
<td>Year 1</td>
<td></td>
<td>1,000.00</td>
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<td>Year 2</td>
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<td>Year 3</td>
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<td>Year 4</td>
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<tr>
<td>Year 5</td>
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<td>1,000.00</td>
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</table>

15. Please provide a narrative explanation of sustainability costs.
Sustainability costs include any ongoing spending related to the grant project after June 30, 2017. Examples of sustainability costs include annual professional development, staffing costs, equipment maintenance, and software license agreements. To every extent possible, rationale for the specific amounts given should be detailed. The costs outlined in this narrative section should be consistent and verified by the financial documentation submitted and explained in the Financial Impact Table. If the project does not have sustainability costs, applicants should explain why.

The project is self-sustaining due to the low operational costs. No additional staff will be needed to implement the program. Expansion of the project will be in the start-up costs. Operational costs will be minimal as existing teachers will receive professional development as part of the implementation. Ongoing costs will include a slight increase in utilities and maintenance of the new classrooms. However, elementary science textbook purchases will be eliminated with the new labs. This amounts to a $2,000 savings over the five year period. Professional development costs through tuition reimbursement will also be reduced as the lab will allow our teachers to earn credit hours through our instructional lab with our partner, Ohio University Chillicothe. Tuition per hour will decrease from $512 per credit hour to $75. Since the district reimburses 80% of tuition toward graduate courses, we estimate the savings of $350 per credit hour. We are projecting a total of 4 teachers.
The project will reduce costs by eliminating elementary science textbook purchases, reducing teacher graduate course reimbursement and a reduction in elementary students leaving the district. Textbook purchases will be reduced by $2,000 over the sustainability period due to the elimination of elementary science textbook purchases which are on a five year replacement cycle. Further savings will be achieved through reductions in professional development costs. The new labs will allow for district teachers to earn tuition credit through our partnership with Ohio University Chillicothe (OU-C) at a reduced rate. OU-C's tuition of $512 per credit hour will be reduced to $75. Since, the district reimburses tuition at a rate of 80%, the district will see savings from this service. We project that 4 teachers will take advantage of this at 2 credit hours apiece. This will amount to an annual savings of $2,800. In the 2014-2015 year, open enrollment students leaving the district in grades 1-5 decreased by 9 students. By expanding the program, we project the same growth will take place in each year of the sustainability period. This will generate savings of $53,100 per year. The savings will be offset partially by annual recurring maintenance and utility costs for the additional learning space of $1,000 per year. This includes the small increase in utilities for the higher utilization in the space that was not utilized for instruction. Maintenance costs will cover the upkeep of the new classroom space as well as any equipment maintenance not covered by warranty. However, equipment maintenance should be minimal based on the upfront purchase of extended warranties and licenses.

100. 16. What percentage of these costs will be met through cost savings achieved through implementation of the program?

Total cost savings from section B of the Financial Impact Table divided by total sustainability cost from section A of the Financial Impact Table. If the calculated amount is greater than 100, enter 100 here.

17. Please explain how these cost savings will be derived from the program.

Applicants who selected spending reductions in the five-year forecast as a goal must identify those expected savings in questions 16 and 17. All spending reductions must be verifiable, permanent, and credible. Explanation of savings must be specific as to staff counts; salary/benefits; equipment costs, etc.

18. What percentage of sustainability costs will be met through reallocation of savings from elsewhere in the general budget?

Total reallocation from section C of the Financial Impact Table divided by total sustainability cost from section A of the Financial Impact Table

Note: the responses to questions 16 and 18 must total 100%

19. Please explain the source of these reallocated funds.

Reallocation of funds implies that a reduction has been made elsewhere in the budget. Straight A encourages projects to determine up front what can be replaced in order to ensure the life of the innovative project.

D) IMPLEMENTATION

20. Please provide a brief description of the team or individuals responsible for the implementation of this project, including other consortium members or partners.

This response should include a list of qualifications for the applicant and others associated with the grant. Please list key personnel only. If the application is for a consortium or a partnership, the lead should provide information on its ability to manage the grant in an effective and efficient manner. Include the partner/consortium members' qualifications, skills and experience with innovative project implementation and projects of similar scope.

Enter Implementation Key Personnel information by clicking the link below:

Add Implementation - Key Personnel

For Questions 21-23 please describe each phase of your project including its timeline, and scope of work.

A complete response to these questions will demonstrate awareness of the context in which the project will be implemented and the time it will take to implement the project with fidelity. A strong plan for implementing, communicating and coordinating the project should be apparent, including coordination and communication in and amongst members of the consortium or partnership (if applicable). Not every specific action step need be included, but the outline of the major steps should demonstrate a thoughtful plan for achieving the goals of the project. The timeline should reflect significant and important milestones in an appropriate time frame.

21. Planning

a. Date RangeFebruary 2016-August 15, 2016

b. Scope of activities - include all specific completion benchmarks.

During this phase, we will concentrate on building renovations, lab design and preparation, and planning of staff professional development. Building renovations completed by June 15, 2016; purchase of lab equipment and furnishings completed by June 15, 2016; lab setup completed by August 1, 2016; professional development calendar created by August 15, 2016; schedule of Ohio University coursework to be held onsite

22. Implementation (grant funded start-up activities)
24. Describe the expected changes to the instructional and/or organizational practices in your institution.

The response should illustrate the critical instructional and/or organizational changes that will result from implementation of the grant and the impact of these changes. These changes can include permanent changes to current district processes, new processes that will be incorporated or the removal of redundant processes. The response may also outline the expected change in behaviors of individuals (changes to classroom practice, collaboration across district boundaries, changes to a typical work day for specific staff members, etc.). The expected changes should be realistic and significant in moving the institution forward.

Please enter your response below:
The expansion of the SCOPES Academy will accomplish several long-lasting goals. Test scores will improve at all levels. With the elevated level of student performance, our school will accomplish these objectives. The program will provide a common focus for students and staff. The program will provide the professional development and resources needed to create this learner-centered, self-monitoring, STEM-centered, rich in content, type of learning environment for all students. Partnership with Ohio University-Chillicothe will create STEM teaching experiences for education majors. This relationship would enable both educational entities to provide local candidates experience with the most technologically-advanced equipment and materials. We plan to use students, teachers, and administrators to problem solve issues for our community. Our professional learning communities will involve student leaders to solve real-life, contextualized issues within our own community. Issues range from solving physical fitness concerns to employment needs. This will create an increased number of homegrown individuals working locally in STEM-related fields. With our OU-C partnership and this proposal, we will create a local pool of educators that are strong instructors in the STEM fields to fill positions throughout the area. Our proposal would allow rural students equal access to technologies and materials. Technology and materials to incorporate into our SCOPES School of Innovation are 3D printing technology and digitizing, robotics, coding, exercise physiology case studies, and life and physical science labs for hands-on learning.

25. Please provide the name and contact information for the person and/or organization who will oversee the evaluation of this project.

Projects may be evaluated either internally or externally. However, evaluation must be ongoing throughout the entire period of sustainability and have the capacity to provide the Ohio Department of Education with clear metrics related to each selected goal.

Please enter your response below:
Martin Tuck, Dean Lead Evaluator Ohio University-Chillicothe 101 University Drive Chillicothe, Ohio 45601 740-772-7222 tuck@ohio.edu

26. Describe the overall plan for evaluation, including plans for data collection, underlying research rationale, measurement timelines and methods of analysis.

This plan should include the methodology for measuring all of the project outcomes. Applicants should make sure to outline quantitative approaches to assess progress and measure the overall impact of the project proposal. The response should provide a clear outline of the methods, process, timelines and data requirements for the final analysis of the project’s progress, success or shortfall. The applicant should provide information on how the lessons learned from the project can and will be shared with other education providers in Ohio. Note: A complete and comprehensive version of the evaluation plan must be submitted to ODE by all selected projects.

For the evaluation of the project, we will be utilizing a variety of data, both formative and summative, to help us to determine the effectiveness of our approach as well as plan for continuous improvement. We will use pre and post survey results from staff, district students and university students, NCATE survey results from the university, parent and partnership surveys, and educator instructional confidence surveys. For our achievement data, we will use a combination of our district’s common quarterly assessment data, district-approved pre and post test data, and formative data analyzed by our teacher-based teams. A process evaluation will be performed by Joyce Atwood and Marcie Keefer Kennedy employed by Ohio University. An independent financial audit will be performed by Caldwell and Company. In addition, we will be using data collected from facility usages logs, lesson plan reviews and analysis, technology performance checklists, and student rubrics for technology and project performance. By using a variety of data to analyze the implementation and effectiveness of this project, we will be able to make quick adjustments when needed, and bring challenges and or identified areas for improvement to our committee. This would maximize effectiveness of this investment.

27. Please describe the likelihood that this project, if successful, can be scaled-up, expanded and/or replicated. Include a description of potential replications both within the district or collaborative group, as well as an estimation of the probability that this solution will prove useful to others.
Discuss the possibility of publications, etc., to make others aware of what has been learned in this project.

The response should provide an explanation of the time and effort it would take to implement the project in another district, as well as any plans to share lessons learned with other districts. To every extent possible, applicants should outline how this project can become part of a model so that other districts across the state can take advantage of the learnings from this proposed innovative project. If there is a plan to increase the scale and scope of the project within the district or consortium, it should be noted here.

If the SCOPES Innovation Center realizes our goals, we would like to expand to include students in grades 6 - 12. Ultimately, we would like to create a complete wing designated as the SCOPES Southern Ohio Innovation Center housed on the Unioto Schools campus that can be used by the students, universities and community businesses to be the preschool through career hub for science, technology and engineering learning in Southern Ohio. All classrooms would be lab style and equipped to explore a specific area of the STEM curriculum. Some possible examples that have already been discussed with current and prospective partners include The Childhood Obesity Prevention Lab (working with Adena Regional Medical Center), The STEM gym (also with Adena, researching health, wellness and exercise), The Mechanical Engineering, Fabrication and Robotics Lab (in partnership with Kenworth Trucking), Life Sciences Lab (in partnership with local veterinarian and farmers), The Technology - Programming and Creation Lab (in partnership with Horizon), The Community-Based Problem Solving Lab (in partnership with the county commissioners) and hopefully The Science of Art Lab (in partnership with our local arts community). The SCOPES Southern Ohio Innovation Center could be used as a centralized location for STEM learning in the southern Appalachia area of Ohio. We could hold multi-district professional development opportunities for educators. In the evenings, we could host job fairs, training sessions and networking opportunities for area students as well as community members. Students would have the opportunity to be trained as student ambassadors and lead informational sessions for the community on health and wellness for families. If such expansion is realized, we would be able to provide a center that would increase the skills of our local workforce and encourage students of all ages to explore the opportunities that are available in future careers in this region. The Innovation Center would serve as a model of community partnership and improvement that could be replicated in other struggling communities throughout Ohio.

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 time frame. The Governing Board of the Straight A Fund reserves the right to conduct an evaluation of the project and request additional information in the form of data, surveys, interviews, focus groups and other related data on behalf of the General Assembly, Governor and other interested parties for an overall evaluation of the Straight A Fund.

PROGRAM ASSURANCES: I agree, on behalf of this applicant, and any or all identified consortium members or partners, that all supporting documents contain information approved by a relevant executive board or its equivalent and to abide by all assurances outlined in the Straight A Assurances (available in the document library section of the CCIP).

I agree on behalf of the Union-Scioto Local District that all supporting documents contain information approved by relevant executive board or its equivalent and to abide by all the assurances outlined in the Straight A Assurances document. Matt Thornsberry, Superintendent Union-Scioto Local School District, 1565 Egypt Pike, Chillicothe, 45601
### Consortium Contacts

No consortium contacts added yet. Please add a new consortium contact using the form below.
<table>
<thead>
<tr>
<th>First Name</th>
<th>Last Name</th>
<th>Telephone Number</th>
<th>Email Address</th>
<th>Organization Name</th>
<th>IRN</th>
<th>Address</th>
<th>Delete Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catherine</td>
<td>Whalen</td>
<td>7407733280</td>
<td><a href="mailto:Catherine.whalen@unitedwyaross.org">Catherine.whalen@unitedwyaross.org</a></td>
<td>United Way</td>
<td></td>
<td>53 East Second Street, Chillicothe, Ohio, 45601</td>
<td></td>
</tr>
<tr>
<td>Bill</td>
<td>McKell</td>
<td>7407038289</td>
<td><a href="mailto:bill.mckell@horizontel.com">bill.mckell@horizontel.com</a></td>
<td>Horizon Telcom</td>
<td></td>
<td>68 East Main St., Chillicothe, Ohio, 45601</td>
<td></td>
</tr>
<tr>
<td>Steve</td>
<td>Clever</td>
<td>7407741732</td>
<td><a href="mailto:sclever@rosscountymca.org">sclever@rosscountymca.org</a></td>
<td>Ross County YMCA</td>
<td></td>
<td>100 Mill Street, Chillicothe, Ohio, 45601</td>
<td></td>
</tr>
<tr>
<td>Martin</td>
<td>Tuck</td>
<td>7407747222</td>
<td><a href="mailto:tuck@ohio.edu">tuck@ohio.edu</a></td>
<td>Ohio University-Chillicothe</td>
<td></td>
<td>101 University Drive, Chillicothe, Ohio, 45601</td>
<td></td>
</tr>
<tr>
<td>S. Kimberly</td>
<td>Jones</td>
<td>740-779-8757</td>
<td><a href="http://www.adena.org">www.adena.org</a></td>
<td>Adena Health System</td>
<td></td>
<td>272 Hospital Road, Chillicothe, Ohio, 45601</td>
<td></td>
</tr>
<tr>
<td>First Name</td>
<td>Last Name</td>
<td>Title</td>
<td>Responsibilities</td>
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<td>Prior Relevant Experience</td>
<td>Education</td>
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<tr>
<td>Jenni</td>
<td>Domo</td>
<td>SCOPES Academy Director</td>
<td>Jenni will oversee all aspects of the program. She will coordinate the design and preparation of the classroom labs. She will work with our partners to develop the STEM curriculum and programs for the new labs to not only improve the students' performance on the standardized tests but will also work with partners to design the curriculum to help better meet the workforce and talent pool demands of our community. Jenni will also coordinate onsite training and observation opportunities for Ohio University-Chillicothe STEM student teachers.</td>
<td>Master teacher, Ohio University undergraduate/graduate instructor, Miami University facilitator of STEM instruction for iDiscovery grant Manager of previous grants, university teaching experience, 6 years; elementary teaching experience, 24 years</td>
<td>Master teacher, Ohio University undergraduate/graduate instructor, Miami University facilitator of STEM instruction for iDiscovery grant. Manager of previous grants, university teaching experience, 6 years; elementary teaching experience, 24 years.</td>
<td>Ohio University, Bachelors in Elementary Education Rio Grande University - Masters in the Art of Teaching</td>
<td>100</td>
</tr>
<tr>
<td>Dana</td>
<td>Letts</td>
<td>Elementary Principal</td>
<td>Dana will serve as an advisory board member and advisor to the SCOPES Academy director. She will work with the director and the (3-5) Principal to ensure the continuity of the program in relation to the overall curriculum in the elementary.</td>
<td>Elementary Principal of Grades PK-2 at Unioto Elementary School, Elementary Principal Kindergarten at Southwest Licking, Union-Scioto Local School District Leadership Team member; Unioto Elementary School Building Leadership Team member</td>
<td>Advisory Board Member and Scopes Academy Founder and Curriculum Consultant, Scopes Innovative Advisory Board Member Elementary principal, 7 years; elementary teacher, 10 years; participant in the Early Primary Math and Science Academy</td>
<td>Masters in Edu. Adm.-University of Dayton; Masters in Sci. of Classroom Inst.-Rio Grande University; Bachelors of Science-Ohio University</td>
<td>10</td>
</tr>
<tr>
<td>Karen</td>
<td>Mercer</td>
<td>Elementary Principal</td>
<td>Karen will serve as an advisory board member and advisor to Advisory Board Member and Scopes Academy Board of Directors President, Scopes</td>
<td>Elementary Principal of Grades 3-5; Union-Scioto Local School District LPDC</td>
<td>Superintendent license-Wright State; Educational</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Name</td>
<td>Role</td>
<td>Background</td>
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</tr>
<tr>
<td>John Rose</td>
<td>Treasurer</td>
<td>C.P.A. - State of Ohio, 1998 10 years as School Treasurer at Union-Scioto Local, Chillicothe City, and Southeastern Local School districts. 8 years as an auditor with the Auditor of State.</td>
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</tr>
<tr>
<td>Matt Thornsberry</td>
<td>Superintendent</td>
<td>Superintendent Union-Scioto Local School District since July 2014 Elementary Principal at Chillicothe City Schools for 6 years Director of Curriculum and Instruction at Wellston City Schools for 2 years.</td>
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