## Budget

**Metro Early College High School (012391) - Franklin County - 2016 - Straight A Fund - Rev 0 - Straight A Fund - Application Number (6)**

**U.S.A.S. Fund #: 466**

**Plus/Minus Sheet (opens new window)**

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**Adjusted Allocation** 0.00

**Remaining** -503,164.00
Please respond to the prompts or questions in the areas listed below in a narrative form.

A) APPLICANT INFORMATION - General Information

1. Project Title:
   Hybrid Teaching Pilot

2. Project Summary: Please limit your responses to no more than three sentences.
   Hybrid Teaching blends good practice & technology delivering robust education to students efficiently & effectively regardless of location.
   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.

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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.

Hybrid Teaching has the potential to double, the students directly impacted at Metro Early College Middle and High schools (1440) through the replication of the model by the partner schools, Baldwin Rd Junior High School and Tri-State STEM, once they have experienced the model and are familiar with the process. Thus before the project is completed it is expected that the partnering schools will form their own hybrid teaching teams with similar instructional strategies and delivery providing rigorous and relevant education to other schools who can benefit from a hybrid teaching system. Thus, once the participating schools have experienced the hybrid teaching model being spearheaded by Metro Early College Schools in the implementation year they will receive professional development in order to create their own hybrid teaching teams and deliver hybrid programs to their own students and students from other schools replicating and growing the model throughout Ohio and regional partners.

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

First and last name of contact for lead applicant
Meka Pace

Organizational name of lead applicant
Metro Early College High School

Address of lead applicant
1929 Kenny Rd, Columbus, OH 43210

Phone Number of lead applicant
(614) 259-6639

Email Address of lead applicant
mpace@themetroschool.org

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

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

The predominant US educational system, based on the delivery of content in siloed, segmented units, although well suited to the manufactory needs of the early 20th century, no longer meets the needs of the 21st century workforce nor the efficacy of knowledge delivery (White House Press Release November 10, 2015). Rapid generation of knowledge today far outstrips publication capabilities making textbooks obsolete before they come off the printing press. Moreover, learning delivered in a vacuum of application leaves students and teachers unengaged, disheartened by a lack of success, and disenfranchised from the future. The emerging landscape of STEM learning engages instructional strategies that promote problem-based learning, which in turn promote a holistic approach to delivery and relevance to community, including the needs of local workforce development. Today's schools are searching for cost effective and efficient solutions that fully integrate technology and blend content through hybrid delivery maximizing the use of technology, time, and expertise in order to produce tomorrow's critical thinkers and problem solvers.
b. The proposed innovation and how it relates to solving the problem or improving on the current state.

The Hybrid Teaching Pilot proposes an innovative solution for the delivery of blended content using a transdisciplinary problem-based learning (TPBL) approach with the enhancement of existing, low-cost technology. The Hybrid Teaching Pilot draws upon experienced STEM teachers, facilitators, and service teachers who work together to design, plan, and deliver all four, core content subjects simultaneously to students at different locations utilizing the support of facilitators and interactive, robotic technology. Hybrid teaching teams are made up of Science, Math, and Humanities teachers. Working together they simultaneously deliver all four content concepts appropriate to the grade band level by pivoting learning on a real-world problem that requires the use of integrated content to devise a solution. The solutions to these real-world problems draw upon concepts that form Common Core and Next Generation Science Standards. The Hybrid teachers become guides helping students acquire knowledge and apply it in the quest to create solutions that can be measured against predetermined metrics. Thus, the Hybrid Teaching Pilot better reflects real-life comprehensive content and problem-solving requiring a holistic approach. Hybrid courses are taught in larger blocks of time but continue to afford time for other courses and extracurricular activities. The Hybrid Teaching Pilot will create hybrid teaching teams for the 9/10 grade band (high school), the 7/8 grade band (middle school). Because there are multiple teachers and facilitators in the high school and middle school opportunities, the classes are larger than a single teacher/single subject class. Although, all students are in the same class, they are not in the same location. Thus, it is necessary to have facilitators at satellite locations. The facilitators work with and alongside the hybrid teachers in planning and implementation, which in turn provides an excellent mentoring system for pre-service or new service teachers. Through the supplement of technology, specifically Doublebots and Swivel recording systems, the hybrid teaching team, facilitators, and students have the capability of interacting one-on-one synchronously, regardless of location. Hybrid classes are delivered five days a week, and office hours are also provided. Each class is recorded and immediately posted to a private YouTube account so that students and parents can review material presented and keep abreast of expected deliverables. Well-designed weekly, synchronous, planning meetings, published TPBL modules, and online management platforms are utilized by the hybrid teaching teams, facilitators, parents, and students to provide real-time course correction, model good practice, keep facilitators, administrators, and parents informed, and engender engagement. Students are tested in short cycles aligned to scheduled projects, as well as through standardized summative tests.

Hybrid Teaching takes advantage of Flex credit and provides credit for science, math, language arts, and social studies based on passing grades. The cost of instruction is figured on delivered credit per student. Potentially, each student can acquire the same number of credits, as if he or she attended four separate classes. In the implementation year, Metro Early College schools will provide the hybrid teaching teams, the facilitators, and model delivery to the satellite schools, who receive all instruction remotely. At the close of the implementation phase, two more, hybrid, teaching teams will be trained. Going into the sustaining years there will be four trained teams that can deliver hybrid teaching. The Hybrid Teaching model is both efficient and cost-effective generating cost savings by utilizing shared teacher resources and driving greater shared resource toward the classroom building effective learning environments for Ohio students and modeling effective teaching practices for other schools, regardless of location.

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)

a. 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.*

The desired student achievement outcomes from the Hybrid Teaching Pilot are four-fold: 1) Higher student academic achievement reflected by increased percentages of students attaining proficient or advanced score in standardized testing due to three teachers simultaneously presenting information and assisting their colleagues in the presentation of curricula; 2) Higher engagement of students reflected in increased achievement scores due to the fully integrated nature of hybrid content delivery; 3) Higher critical thinking skills among students due to the STEM problem-based learning instructional strategy of Hybrid Teaching; and 4) Increased collaboration and communication skills due to the expanded nature of the blended learning classroom across multiple sites that drive different types of collaboration and communication.

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.*

The assumptions Hybrid Teaching makes to insure student achievement outcomes are; 1) Hybrid Teaching assumes that the presence of three teachers simultaneously in the classroom with students will empower multiple learning modalities and better differentiation of learning for students. Due to the differing nature of the content areas, the teachers will reflect differing strengths in a range of learning modalities and thus help students of differing learning modalities succeed across all the content areas. For example, “logic learner” students often struggle in visualization and writing but with the Math teacher working in conjunction with the Science and Humanities teacher, varying approaches are available to the student to enhance understanding; 2) Hybrid Teaching assumes that problem-based learning that pivots on real-world problems provides students with authentic learning and thus is more engaging. STEM learning is inherently problem-based, which promotes deeper learning and more thorough understanding helping students achieve mastery, as well as provides a systems approach that offsets multiple delivery styles cited as a constraint to integrated delivery; and 3) Hybrid Teaching assumes that students readily interact across multiple platforms of synchronous learning. Digital natives familiar with multiple platforms of interaction, social media, and online gaming respond without hesitation to synchronous interaction with hybrid teachers removing into class via robotics and online formats (Schneider 2015 Armour HS, SD: Town Hall Debate on GMOs).

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

Student achievement is a symbiotic relation between academic demonstration and student engagement. Together they are the barometer used to gauge success in education. Success in one without the other is an indication of a system in stress. However, the landscape of which education exists is highly dynamic reflecting the changes in societal norms. Sometimes these changes are slow and at other times quite swift. We are in a time of swift change and we must adapt our educational strategies instructionally, culturally, and through delivery. To keep our nation competitive and our schools responsive, our students both academically engaged, we must continue to adapt to the needs of our society. The Hybrid Teaching Pilot is one such adaption that addresses a critical need cited by Moursheed and colleagues in the 2010 McKinsey Report that schools need to focus on “process” in order to improve systematic performance. They go on to note it is not a case of
adding but rather changing how resources, structure and process are utilized, especially process that garners the greatest change in student achievement. The Hybrid Teaching Pilot provides a systematic process for effective and efficient delivery that takes advantage of a transdisciplinary approach. The concept of teaching interdisciplinarily is not new, it simply requires planning and a concerted delivery. At the Sorbonne University in Paris the Centre for Transdisciplinarie Studies has been researching the benefits of education mirroring life for years. In his book Transdisciplinarity: Theory and Practice, Nicolescu Basrab (2008) argues that the closer teaching gets to mirroring everyday life the deeper and more enriched the learning becomes. Although hybrid or integrated teaching is most often used in collegiate level courses there is no reason it cannot be used in middle and high schools. The greatest challenge cited by Vanderbilt’s Center for Teaching as a constraint to hybrid implementation is a concerted process. The South Dakota Innovation Lab Hybrid teaching model overcame this constraint by using a standardized process and cohort planning system. SDIL uses the PAST TPBL module building method and schedules regular team planning that has a set agenda with expected deliverables. After three years of piloting their hybrid teaching program, SDIL has recorded a rise in student achievement across participating schools. In the latest Smarter Balanced standardized tests, the one of the hybrid schools scored 93% in critical thinking among the students who participated in hybrid taught classes. By changing the process and way resources are used along with changing the structure of delivery the Hybrid Teaching Pilot models good instructional practices that will promote differentiated learning and celebrate differing modalities of learning in a dynamic environment. A well structured program that delivers engaging content at a dynamic pace address both types of student achievement.

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).

The metrics used to measure progress of student achievement in the Hybrid Teaching Pilot will be two-fold: 1) Qualitative methods will be used to collect the voice of the stakeholders (students, teachers and administrators) participating in the Hybrid Teaching Pilot both from the delivery and receiving sides of the program, in order to ascertain perceived success strategies in achievement and barriers to success in student achievement. This data will be quantified and used to inform real time course corrections for the hybrid teaching teams, facilitators and administration in order to amplify success and address or ameliorate barriers to success in student achievement; and 2) Quantitative data in the form of pre/post assessment that short cycle with projects and standardized assessments will collected to measure student achievement growth across all four content areas as aligned with Common Core and Next Generation Science Standards. The quantitative data will also be used to insure the coverage of standards and direct instruction with regard to concepts or standards that need redressing in order for students to attain mastery (92%). Together the qualitative and quantitative data sets will be used to drive student learning and inform instructional strategies.

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

The metrics used by both the qualitative and quantitative data collection will provide the Hybrid Teaching Pilot with a set of points on which to base measurement in students achievement. First, the qualitative data sets, which include observations, interviews, surveys, and directed focus groups will inform the hybrid teachers on a regular basis through interaction at planning meetings and monthly update meeting what prevailing themes are either accelerating the program or setting barriers to success. With this type of real time feedback the teaching teams can course correct and/or address perceptions that are hindering student achievement in the implementation year of the project. The importance of the qualitative data checks during the implementation year cannot be over stated. The regular sampling of stakeholder perceptions will help the hybrid teams understand and detect benchmarks of change in the process, which in turn have the potential to accelerate student achievement and implementation. Similarly, quantitative pre/post assessments associated with individual projects that run in two week cycles will provide regular formative feedback to the the teaching teams as well as students and be able to drive student learning as well as instruction. The pre/post assessment provides longline formative data throughout the year for aggregated class growth as well as individual student growth. In a given year the teaching teams will collect pre/post data on up to sixteen projects. The pre/post assessments are complemented by the more general standardized tests, which form a check on the program mastery by the students. Finally, Hybrid Teaching will be benchmarked for fidelity to the budget in order to determine that the proposed activities for training the teachers, preparing them to consistently track achievement along the development of modules.

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

Hybrid Teaching Pilot will collect multiple metrics that inform real time course correction in planning and implementation, as well as sustaining years to insure student achievement. Modification will be informed by qualitative/quantitative data used to establish benchmarks of change from stakeholder voices alongside graphed quantitative growth. Information from 2 data sets will be regularly reported at: 1) weekly held Hybrid Teaching team planning meetings; 2) monthly update meeting for the entire team; and 3) quarterly reports will cover activities, budget fidelity, outcomes and recommended real time changes to be implemented in upcoming quarter; so that agile response can be enacted in the effort to enhance student achievement. Both data sets enable project teams to recognize barriers to success and provide an opportunity to brainstorm solutions. Qualitative data captures perceptions and quantities themes that either can be used to help promote or pose a barrier but can be ameliorated by improved messaging. In quantitative data sets pre/post assessment provide teachers and student with a starting point in learning (pre assessment) for each project & provide a metric for growth (post assessment). The pre assessment informs teachers on a number of levels: readiness level of individual students as well as where and how to tailor and/or modify planned activities to respond to student needs. By including the pre assessment questions in the post assessment the teacher and students can also chart growth across content and specific concepts or standards and be prepared to revisit concepts or standards again through other problems addressed by other projects. By creating a overarching design that provides clear communication pathways for all stakeholders The Hybrid Teaching Pilot is well situated to respond to necessary changes throughout the implementation phase and create a model for continued communication and modification in sustaining years.

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.
### 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. |
| ii. What assumptions must be true for this outcome to be realized? | Example: improvements to school and classroom climate will result in fewer disciplinary instances allowing leadership to devote more time to curricular oversight. |
| iii. Describe any early efforts you have made to test these assumptions (pilot implementation, etc), or how these are well-supported by the literature. | |
| 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. | Note: this is the preferred indicator for this goal. |
| 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? | |

#### 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. |
| The desired greater shared services outcomes from implementation of the Hybrid Teaching Pilot are three-fold: 1) The Hybrid Teaching Pilot empowers schools with teacher deficits and/or limited resources to provide rigorous education for students, regardless of location; 2) The Hybrid Teaching Pilot provides schools a synchronous option to asynchronous learning that leverages technology creating an interactive classroom; and 3) The Hybrid Teaching Pilot capitalizes on experienced teachers and problem-based learning instructional strategy to leverage shared delivery of content simultaneously. These three desired outcomes will significantly change the look and feel of a classroom expanding shared services of teachers, shared mentoring of facilitators, and shared learning experiences of students. |
| 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. |
| The three assumptions that the Hybrid Teaching Pilot makes to insure the success of greater shared services are: 1) The Hybrid Teaching Pilot assumes the pilot model is well designed and well structured to provide satellite schools with well-articulated strategies in order to participate fully in the pilot and take advantage of the shared services. The qualitative and quantitative data collection alongside the open and regular communication design are intended to help benchmark change and provide a platform from which to brainstorm solutions and make real time modifications; 2) The Hybrid Teaching Pilot assumes the onus of technology design for delivery should be carried by the lead Hybrid teaching team school. Metro Early College Middle and High Schools will draw from their pool of experience STEM and hybrid teachers to form the initial teaching teams, train and place facilitators, and provide the technology for delivery; and 3) The Hybrid Teaching Pilot assumes that the shared services of the hybrid teachers will change the look and feel of the classroom. Experience with the South |
Hybrid teaching is not a new approach to content delivery and shared services. The traditionally cited benefits include freeing of classroom space, but more recently researchers are noting the increase in student skills related to problem solving, self-directed learning and time management (Fanter 2010 The Future of Instructional Models). Some hybrid programs refer more to the use of technology in the classroom, such as one-to-one computing like the Pennsylvania Hybrid Learning Institute designed and launched in 2012. Although this hybrid teaching proposal employs today’s technology for delivery, it is more focused on the integration of content and the ability of multiple teachers to be more inclusive across modalities of learning. The Vanderbilt University Center for Teaching notes that collaborative teaching “introduces the strengths of multiple viewpoints in a synthetic endeavor… and connects with more student learning preferences.” (Team/Collaborative Teaching 2015 https://cft.vanderbilt.edu/guides-sub-pages/teamcollaborative-teaching/). In the Tilburg University’s Three Models for Collaborative Teaching, they stress the importance of having good instructional strategy design and articulated delivery systems when constructing integrated, team taught courses. The critical factors of well defined strategies and delivery is why this proposal stresses the use of problem-based or TPBL as a process for designing replicable modules so that they constantly relate to a real world problem and demand a solution that draws on multiple content area concepts or standards to form a solution. The Center for Transdisciplinary at the Sorbonne University is now joined by numerous centers around the world that study and propose pedagogy for integrated and interdisciplinary delivery of content. There is even an Association for Interdisciplinary Studies (http://www.oakland.edu/ais), however the majority of the research focuses on post secondary use of the process and approach. Thus, the concepts behind the process and structure of the Hybrid Teaching Pilot as a means of providing shared resources is not new to education, but it is not widely used in middle and high schools. It is time that the model shift down into middle and high school to achieve better shared services, drive more resources to the classroom, and amplify student achievement.

The indicators that will be used to monitor the success of shared services through the Hybrid Teaching Pilot are both qualitative and quantitative, they include; 1) The Hybrid Teaching teams will regularly review quantitative pre/post assessments for coverage of concepts or standards within each problem-based project for coverage across all four core content areas. Through professional development and planning each TPBL module used by the teaching teams will have pre/post assessments that are aligned to selected standards. Analysis of the pre/post data will provide concept coverage as well as growth of students helping the teachers decide which concepts need to be revisited and how often. Benchmarking achievement through the short cycling assessments provides excellent feedback on how well the shared delivery is covering the necessary content; 2) The outside evaluation for the Hybrid Teaching Pilot will employ the mixed methods to collect the qualitative data that identifies barriers to success not captured in quantitative metrics. By monitoring this data at regular intervals during the implementation phase the entire project team can help brainstorm solutions around barriers. The nature of the qualitative data often illuminates factors that stakeholders may not have recognized, ignored, or mistakenly dismissed. The qualitative data brings voice to the project and helps create a holistic set of benchmarks that the teams can employ to monitor progress and inform real time course correction.

The Hybrid Teaching Pilot will use four data points to evaluate the success of the shared resources during the implementation year and to establish Benchmarks for comparison in succeeding year with regard to shared services delivery. These data points include; 1) The quantitative metrics of charted growth of students will be collected and evaluated from pre/post assessments, which will be associated with each problem-based project; 2) The quantitative metrics that benchmark the success of the participating students against students statewide and nationally. Students participating in the Hybrid Teaching Pilot will continue to take standardized tests as prescribed by the districts and state; 3) The qualitative coverage of concepts and standards through the problem-based projects as benchmarked by mastery of the concepts indicated in both the pre/post assessment and standardized testing; and 4) The qualitatively defined benchmarks of change gathered from the voices of the stakeholders, students, teachers, and administrators. Together these four data points of evaluation will form the foundation for comparison in the sustaining years and for replication of the Hybrid Teaching model.

The Hybrid Teaching Pilot is prepared to agilely modify instructional modules, and delivery as well as project relevance to achieve success with regard to shared services delivery through thee mechanisms. 1) The Hybrid Teaching teams will schedule weekly planning meetings that go up upcoming activities, expected outcomes, and re-visit modifications needed to address the differentiated needs of the students; 2) The Hybrid Teaching teams will hold regular office hours for students and post a recording of each class on a private YouTube, so that students have more opportunities to review and seek one-on-one mentoring from the teachers to enhance delivery, hone modality of learning perspectives, and better drive their learning; and 3) The entire project team with members from the participating schools will have the opportunity to meet monthly to get updates, go over qualitative and quantitative data sets and their implications, address barriers to success, and brainstorm solutions. By creating a overarching design that provides clear communication pathways for all stakeholders The Hybrid Teaching Pilot is well situated to respond to necessary changes throughout the implementation phase and create a model for continued communication and modification in the sustaining years.

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

a. New - Never before implemented
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)

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.

503,164.00 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.

In order to operationalize the Hybrid Teaching Pilot the following budget details are submitted for your consideration. The following details are represented within two categories: Purchased Services 85% and Capital Outlay 15%. One hundred percent of the total budget goes directly to support the Hybrid Teaching Pilot’s implementation and replication. Metro Early College Schools will rely on their partner the PAST Foundation to manage the program and evaluate it, but will utilize the existing faculty talent within the school programs to design and implement the curricula.

Purchased Services: At total of $427,164 is for grant purchased services and is broken down as follows: Program Management and Oversight to insure fidelity to the proposed program and timely submission of deliverables $76,416; Program Design $58,656; Professional Development Facilitation to insure continuity and depth of workshops and ongoing professional development $28,000; Quarterly Planning Professional Development in 2016 and 2017 to insure real time course correction of planned modules and data analysis $9,600; Hybrid Teaching Teams Stipends for 2 teams of 3 teachers in 2016 and 2 teams of 3 teachers each in 2017 to offset the additional planning and implementation the holistic problem-based delivery $24,000; Satellite facilitators for 3 facilitators to optimize the hybrid teaching model in satellite schools $96,000; Online P3 to provide consistent professional development for hybrid teachers, facilitators and participating satellite school administrators $18,796; Outside external Evaluation of the program $59,522; and Administration of the grant and facilities $56,174 Capital Outlay: A total of $76,000 is for Capital Outlay and is broken down as follows: DoubleBots? to provide interactive mobility for the hybrid teachers remotely $63,000; Swivls? to provide tracking recording capabilities for the hybrid teachers in order to provide the highest quality of class recordings $4,900; iPads? to go with the Double Bots? to enhance the interactive mobility of the hybrid teachers $8,100.

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.

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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 outlined. 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.

There will not be any sustaining costs for the program. All of the costs within the implementation year will cover any items that Metro will need to use the program from FY18 through FY22.

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.

Hybrid Teaching provides $66,629 per year of cost and time savings that will be used by Metro Early College Middle and High Schools. The ability of the Hybrid Teaching Pilot to share experienced teachers and integrate content delivery with the enhancement of technology enables Metro and participating satellite schools to block time efficiently and effectively allowing for the reallocation of time for the enhancement opportunities. These may include classes in mechatronics, digital data mining, or coding, all of which can further enrich student experiences without being tacked-on. The ability of the Hybrid Teaching Pilot to save the cost of a fourth core content teacher by amalgamating language arts and social studies under the purview of a Humanities teacher allows Metro and other replicated programs to reallocate the labor and benefits costs associated with the extra position and use the funds for other opportunities that drive resources to the classroom, facilitate share services and ultimately directly impact student achievement. Hybrid teaching models are not new, but the use of robotics to amplify shared services and create interactive connections with students regardless of location creates a dynamic learning environment where students are engaged, and the classroom is transformed.

0 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.

There are not any reallocation of cost saving that will be used for this program.

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 RangeMarch 2016 through July 2016

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

Activity: March Planning Meeting with Administrators

Benchmark: Establish communication platforms, deliverables, responsibilities, and schedules

Activity: 3 Day Planning Workshop

Benchmark: Administrators: Synthesize the goals of the grant & how each team can develop a shared program and resources. Begin architectural structure for full year of Hybrid teaching and learning model. Lead Teachers and facilitators: Session 2 - Developing the appropriate Hybrid Model for each respective level. Develop the plan to create schedule structure, roles and responsibilities of Hybrid staff and support team, identify the possible partners, etc. Lead Teachers and facilitators: Session 3 - Upload quarter 1 & 2 plans in complete format and then upload 3 remaining quarter plans in rough format. Provide feedback and also ask partners to support instruction and begin shifting the hybrid process to encourage community partnership.

22. Implementation(grant funded start-up activities)

a. Date RangeApril 2016 through June 2017

b. Scope of activities - include all specific completion benchmarks

Activity: PD Online for Lead Teachers and Facilitators

Benchmark: Participant teachers take online course and begin planning modules for the 2016/2017 academic year Activity: 1 Day Workshop Benchmark: Lead teachers and facilitators: Beginning of the year check in as well as an opportunity to modify, plan materials, and order supplies needed for 1st quarter implementation Activity: Launch implementation of High School, Middle School programs Benchmark: Lead Teachers and facilitators: Team begin implementation, and posting monthly progress and status updates with regard to student achievement, shared resources and shared services. Activity: Weekly Planning meetings Benchmark: Lead teachers and facilitators: Team discusses and modifies delivery and content as a team Activity: Monthly Updates Virtual Benchmark: Lead teachers, facilitators, project team and administrators: Review progress and constraints, brainstorm solutions Activity:
23. Programmatic Sustainability (years following implementation, including institutionalization of program, evaluation and communication of program outcomes)

a. Date Range: July 2017 through June 2022

b. Scope of activities - include all specific completion benchmarks
Activity: Bi-Annual report of metrics Benchmark: Quantitative data that tracks changing academic achievement

E) SUBSTANTIAL IMPACT AND LASTING VALUE

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 expected changes in instructional and organization practices due to the Hybrid Teaching Pilot fall within the parameters of school redesign and represent significant changes both instructional at all levels - elementary, middle, and high school, as well as organizational practices in terms of delivery, content, class timeframes, programmatic structure, and allocation of labor. The instructional changes are four-fold. 1) By utilizing a hybrid delivery system it is expected that the overall instructional strategies and delivery will be more integrated and enhance STEM education overall. By creating an environment where three teachers train and plan to deliver content simultaneously Hybrid Teaching accelerates the movement away from siloed content delivery toward an integrated delivery that is immersed in problem-based learning. 2) By employing three teachers to deliver content simultaneously, Hybrid Teaching better integrates literacies in all content areas in keeping with the intent of Common Core literacies. Integrating language arts into all aspects of learning promotes increased basic vocabularies, increased comprehension and writing skills across the content areas. 3) By changing the look of instructional delivery Hybrid Teaching changes how students think about learning. Blurring the lines between content and changing how teachers work together alters the educational landscape profoundly changing how teachers interact, teach to their strengths, learn to work and model collaboration, communicate both among the teaching team and to students. 4) By using Hybrid Teaching to deliver content, the teaching team is better able to differentiate learning and reach a greater number of learning modalities creating an educational environment that empowers students to drive their own learning and outcomes. Thus, the Hybrid Teaching Pilot will significantly change the look of the classroom, the look of delivery, the approach to learning, and organizational practices in facilitating rigorous and relevant STEM education. The organizational changes due to employing Hybrid Teaching is significant reaching three important facets of school organization. 1) Hybrid Teaching moves the school day away from the traditional bell system and Carnegie Unit through integrated delivery that draws on the use of Flex Credit. When all four, core content curricula is delivered simultaneously, the emphasis shifts from time in the seat to competency and mastery. 2) Hybrid Teaching shifts program emphasis responding the vertical rise of STEM school projections. By delivering all content simultaneously students can tackle relevant, real world problems that better prepare them for upper level course work that employs workforce development needs to align coursework, internships and post secondary offerings. 3) Hybrid Teaching enables schools without ready access to experienced teachers and/or schools experiencing financial pressure to deliver rigorous and relevant education to students through the blended learning, technological tools associated with Hybrid Teaching at the middle and high school levels.

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:

The Hybrid Teaching Pilot will use an outside research team to do external evaluation Dr. Monica Hunter PAST Foundation 1003 Kinnear Rd Columbus, OH 43212 614.340.1208 mhunter@pastfoundation.org

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.

The Hybrid Teaching Pilot will engage an outside evaluation group to externally evaluate the entire project from planning through the sustaining years. The outside evaluation group will be responsible for acquiring an expedited IRB for the tenure of the study to protect the rights of all stakeholders. The evaluation team will also be responsible for acquiring informed consents from all participants prior to any
evaluation research. The initial planning and implementation of the project will employ both qualitative and quantitative methods to collect data. The evaluation team will use a mixed methods approach to collect qualitative data including observations, key informant interviews, online surveys, and focus groups. The stakeholders of the Hybrid Teaching Pilot include, teachers, facilitators, administrators, identified partners, and students. However, for the purposes of this study only high school and middle school students will be offered the opportunity to participate in the study due to age and understanding of the research and data collected. The rationale behind use of these methods is to ensure that the project team has actionable information so that they can quickly and agilely respond to constraints during planning and implementation of the project. These real time course corrections are intended to be responsive to the varying needs of the student populations served by the hybrid teaching teams, as well as the partners of the elementary hybrid program. Concurrent with the collection of qualitative data, the hybrid teaching teams will collect and graph quantitative metrics associated with the curriculum being delivered through pre/post assessments. The rationale behind this metric collection is to benchmark academic growth within and among of the participating students. Research findings of both the qualitative and quantitative data collection will be reported quarterly to the funder during the planning and implementation phases of the project (March 2016-June 2017). Collection of qualitative data will end at the close of the implementation period, and a full report on the findings and responses will be submitted in August 2017. In the sustaining years of the project (July 2018-June 2022) only quantitative data from both short cycle assessments and any standardized testing will be collected and reported upon in the bi-annual reports along with the FIT reports. The continuation of quantitative data collection will allow for the consideration of longline academic achievement within and among multiple student populations and the use of blended delivery.

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 Hybrid Teaching Pilot is designed to be both replicated and scaled up across the partnering districts and future partnering districts. As a STEM demonstration school that works in partnership with the PAST Innovation Lab, Metro Early College Middle and High Schools are in an excellent position to pilot the Hybrid Teaching program. Already familiar with STEM delivery strategies and problem-based learning, Metro teachers are poised to explore new ways to design and deliver innovative education that elevates student achievement and drives self directed learning. Through Metro’s Learning Labs the faculty are also familiar with teaching multiple student cohorts simultaneously. PAST Foundation with its experience in professional development and hybrid teaching for rural education models using problem-based learning and interactive technology brings brings an understanding of how to reach across distances without loss of student engagement and how to successfully plan and implement STEM problem-based learning modules. Together, through this partnership there is high potential for the replicability of this project. The statistics on teacher retention in rural and high urban areas make this pilot extremely useful for schools and districts that due to limited resources struggle to provide local students with rigorous and relevant STEM education. With improving technologies, a well defined structure and process for delivery of integrated content, and real world problems to tackle, the Hybrid Teaching Pilot has a high potential of transforming the classroom saving time and costs that can be reallocated to drive even more resources to the students and better prepare them for career and college readiness. As a demonstration school, Metro Early College facilities have become a destination for educators seeking new and innovative systems to replicate. The regular visitation of the the school and Learning Labs insures that the awareness of the Hybrid Teaching Pilot will spread. Furthermore, the expectation by both Metro and PAST that all innovative projects, methodologies, research, and new systems are shared through peer presentations and published in ongoing blogs, white papers, and peer reviewed publications insures the dissemination of the Hybrid Teaching Pilot.

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).

Meka Pace Chief Academic Officer Metro Early College High School 11/21/2015
**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>
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</thead>
<tbody>
<tr>
<td>Sheli</td>
<td>Smith</td>
<td>614.340.1204</td>
<td><a href="mailto:sheli@pastfoundation.org">sheli@pastfoundation.org</a></td>
<td>PAST Foundation</td>
<td></td>
<td>1003 Kinnear,, Columbus,, OH,, 43212</td>
<td></td>
</tr>
<tr>
<td>Scott</td>
<td>Howard</td>
<td>614.323.8588</td>
<td><a href="mailto:scott@ohiotraining.net">scott@ohiotraining.net</a></td>
<td>Tri-State STEM</td>
<td></td>
<td>216 Collins Ave,, , South Point,, OH,, 45680</td>
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</tr>
<tr>
<td>Courtney</td>
<td>Heppner</td>
<td>614.367.1600</td>
<td><a href="mailto:courtney.heppner@reyn.org">courtney.heppner@reyn.org</a></td>
<td>Baldwin Rd. Junior High School</td>
<td></td>
<td>2300 Baldwin Place,, , Reynoldsburg,, OH,, 43068</td>
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<tr>
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</tr>
<tr>
<td>Sheli</td>
<td>Smith, PhD</td>
<td>Principal Investigator</td>
<td>project oversight</td>
<td>Dr. Smith is the Chief Academic Officer of the PAST Innovation Lab and oversees all programs</td>
<td>Dr. Smith has been planning, building and implementing bridge programs for 30 years</td>
<td>PhD (1986) U. of Penn; MS (1979) Texas A&amp;M Univ; BA (1976) Univ of Arizona</td>
<td>20</td>
</tr>
<tr>
<td>Ketal</td>
<td>Patel</td>
<td>Field Director, Prof. Development Design</td>
<td>will lead program design including workshops and professional development</td>
<td>Ms Patel is the Director of School Redesign and Strategy for the PAST Innovation Lab. She oversees the team of STEM Coordinators who facilitate professional development</td>
<td>Ms. Patel oversaw the design and implementation of the hybrid bridge professional development program that will be employed to help train and prepare the participating facilitators to run programs in the future</td>
<td>MA (2011) OSU; BA (2006) OSU</td>
<td>40</td>
</tr>
<tr>
<td>Monica</td>
<td>Hunter, PhD</td>
<td>Outside Evaluator</td>
<td>manage all evaluation activities</td>
<td>Dr. Hunter is the Director of Research for PAST Foundation. She oversees all evaluation; internal and external</td>
<td>Dr. Hunter is a leader in the field of STEM research on the emergent educational landscape. She has pioneered a distinctive mixed methods approach to provide real time feedback</td>
<td>PhD (2003) University of California, Los Angeles; BA (1991) California State University, Long Beach</td>
<td>5</td>
</tr>
<tr>
<td>Kat</td>
<td>Deaner</td>
<td>Online PD</td>
<td>will deliver online professional development course for administrators teachers partners and facilitators</td>
<td>Ms. Deaner is the Director of Online Learning for the PAST Innovation Lab. She has led the team designing and developing online learning that support TPBL and its delivery.</td>
<td>Ms. Deaner held the Battelle Fellow for STEM education when she directed the Chalk program Growing America before becoming a STEM Coordinator now program director.</td>
<td>MS (2011) OSU; MEd (2011) OSU; BA University of California, Santa Cruz</td>
<td>16</td>
</tr>
<tr>
<td>Meka</td>
<td>Pace</td>
<td>Chief Academic Officer</td>
<td>project oversight and partner coordination; supervise Metro staff</td>
<td>Ms Pace is the Chief Academic Officer for the Metro Early College schools overseeing all curriculum development and delivery</td>
<td>Ms Pace has been instrumental in the design and development of one of Ohio’s premier STEM school systems.</td>
<td>BGSU - BS Education Handicapped K12; Capella University - MA Ed Admin</td>
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