## Budget

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

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

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### Adjusted Allocation

| Remaining | -883,701.82 |

North Royalton City (044545) - Cuyahoga County - 2016 - Straight A Fund - Rev 0 - Straight A Fund - Application Number (110)
Please respond to the prompts or questions in the areas listed below in a narrative form.

A) APPLICANT INFORMATION - General Information

1. Project Title: Engineering Creativity: North Royalton's Passion Playground and Discovery Den

2. Project Summary: Please limit your responses to no more than three sentences. We will redesign middle and high school media space, creating a makerspace for students, staff and parents to create and collaborate.

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.

We expect that up to 600 additional elementary students could be impacted throughout the life of this project. As more teachers become trained in the strategies of Project-Based Learning, the makerspaces at the middle and high school can become field trip opportunities for our teachers at the elementary level to bring their students to to enrich their learning experiences. In addition to allowing students to visit during an in-school field trip, parents would also be encouraged to bring their children after hours to creatively explore the resources available in the makerspace.

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

First and last name of contact for lead applicant
Melissa Vojta

Organizational name of lead applicant
Director of Curriculum and Instruction

Address of lead applicant
6579 ROYALTON RD

Phone Number of lead applicant
4405829038

Email Address of lead applicant
MELISSA.VOJTA@NORTHROYALTONSD.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

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

North Royalton City Schools currently has a problem of not being able to fully support project-based learning opportunities for teachers due to lack of creative work space, innovative technology resources, and individual student devices to enrich lesson development. Additionally, teachers currently have outdated desktop computer stations that hinder the ability to brainstorm collaboratively with colleagues, students, and parents to enhance learning opportunities. Because we do not have a one-to-one computer initiative currently in place, teachers must wait for lab space, or some of the existing chromebook carts to be available for check-out. This holds instruction up from being able to flow naturally from one day to the next if an extended project-based learning opportunity is presented to students. Our schools also currently do not provide student access to technology resources to complete creative assignments during non-school hours. For students who do not have accessibility to the internet at home, or technology in general, this is a problem. Teachers cannot assign homework which requires the use of technology and online collaboration because not all students can use technology outside of school hours. This eliminates any technology-based project work outside of the school day. Furthermore, we have a few teachers who have tried to incorporate PBL into their current instruction, but others who are reluctant to attempt PBL without any type of official professional development. In addition to the lack of PBL, there is also a lack of Computer Science courses available in our curriculum. Our students have little opportunity to engage in any type of
computer science program during the school day. Additionally, we do not offer any clubs that would attract students who would want to do computer programming after school.

b. The proposed innovation and how it relates to solving the problem or improving on the current state.

Recently, a North Royalton High School senior, Ryan Chester, became the first recipient of the international Junior Breakthrough Challenge competition (funded by Mark Zuckerberg and wife Dr. Priscilla Chen) that required applicants to create short videos that creatively communicated big ideas in the life sciences, physics and math. Ryan, a high-achieving student with a personal interest in film-making, chose to engage in this competition on his own with success, earning a $250,000 scholarship. Ryan has access at home to the necessary innovative technology to allow him to be successful with that competition. Most students his age do not. We would like to make opportunities like Ryan's available to all students to support the creative talents we know they have. Our proposed innovation is to redesign existing media center space in both our middle school and high school to create collaborative makerspaces where students and teachers can benefit from access to a variety of new technology tools while having learning take place outside of the traditional classroom setting across all content areas. We would like to foster intellectual curiosity and stimulate life-long learning. Technology such as film-making devices and necessary computer software and a green screen would be available. Furniture to promote collaboration such as whiteboard topped tables, standing desks, couches, and plexiglass boards will be incorporated in place of some existing traditional tables and chairs. Updated computers to support software for a 3D printer (along with a 3D printer) would exist. North Royalton's Passion Playground and Discovery Den will empower our school curriculum. Through the integration of inquiry-based learning and PBL, teachers will be able to fully utilize the space for collaboration and innovation. We envision that teaching and learning will take place outside of the constraints of a traditional classroom. Thus, teachers and students must have the ability to be "mobile" meaning that all would need individual devices. We will select a team of twenty teachers to complete PBL training. Through having teachers trained in PBL, our goal is to have these teachers move their instruction toward student-centered, inquiry-based, active learning. Students will become self-directed learners and develop higher-order thinking skills. Students will begin this type of learning in the Middle School and it will be reinforced at the High School. These media work spaces will also serve as "hubs" for students to access during regular school hours and outside of school hours (at the high school only) to complete projects or simply to have access to the internet to engage in the greater world around them. We believe that, like Ryan Chester, every student has a passion that they could discover by having this additional access to technology after school hours. We want to empower our students to cultivate their passion for learning whatever may interest them. Having accessibility to the facility after hours also meets needs of families and parents who could benefit from these resources. After school hours, we intend to host a Computer Science Club in the Middle School, following Google's CS First platform. Students will use their own devices to learn computer programming through Scratch, following the guidelines set in the CS First curriculum. Through engaging Middle School students in a computer science club, we will generate interest and curiosity while establishing a sense of competency. Thus, generating an increased interest for potential Computer Science courses at the high school level. Opportunities for additional teacher courses for credit through Ashland University can also be developed and carried out in these renovated spaces. Student elective course offerings can also be enhanced with the addition of these resources in the building, either directly or through distance learning opportunities through NOTA.

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.

- increase of PBL in high school and middle school - establishment of MS Computer Science Club - increase in standardized test scores (due to the increase in technology and the increase in learning problem solving skills via PBL) Academic achievement: Goals for 21st century learning emphasize mastery of significant academic content, which also is the foundation of any well-designed project. Comparisons of learning outcomes in PBL versus more traditional, textbook-and-lecture driven instruction show that: Students learning through PBL retain content longer and have a deeper understanding of what they are learning (Penuel & Means, 2000; Stepien, Gallagher & Workman, 1993) In specific content areas, PBL has been shown to be more effective than traditional methods or teaching math, economics, language, science, and other disciplines. (Beckett & Miller, 2006; Boaler, 2002; Finkelstein et al., 2010; Greier et al., 2008; Mergendoller, Maxwell, & Bellisimo, 2008) On high-stakes tests, PBL students perform as well or better than traditionally taught students. (Parker et al., 2011) In PBL classrooms, students demonstrate improved attitudes toward learning. They exhibit more engagement, are more self-reliant, and have better attendance than in more traditional settings. PBL shows promise as a strategy for closing the achievement gap by engaging lower-achieving students. (Boaler, 2002; Penuel & Means, 2000)

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.

Project-Based Learning strategies engage students in ownership of their learning at a higher degree. We must assume the following: In a review of the research on project-based learning, Thomas (2000) identified five distinguishing features of project-based learning: -The use of projects that focus on content that is central to the curriculum. These projects become the primary vehicle for content learning, and often, assessment. -Projects are based on questions of importance or driving questions (Blumenfeld et al., 1991). Driving questions must be germane to the content, and crafted both to engender optimal student engagement and foster active intellectual pursuit of solutions. -Projects involve students in ways that require them to identify problems, develop and design solutions, and create an end product such as a presentation, report, invention, or model. -Projects are student-centered to the greatest extent possible. Teachers serve as resources, facilitators and guides, but it is the students who define, choose and carry out their projects. -Projects are developed from reality-based ideas and problems rather than on academic exercises and pursuits. The projects represent authentic efforts in solving or investigating real-world dilemmas.

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

One of our middle school science teachers, Sarah Franko, was invited to partake in a prestigious fellowship through the Lowell Milken Center for Unsung Heroes. In 2013, Sarah won the Milken Educator award for the state of Ohio which made her a candidate for the Milken Fellowship program. The Lowell Milken Center for Unsung Heroes works with students and educators across diverse academic
disciplines to develop history projects that highlight role models who demonstrate courage, compassion and respect. Students use a unique project-based learning approach, where they discover, develop and communicate the stories of Unsung Heroes who have made a profound and positive impact on the course of history. By championing these Unsung Heroes, students, educators and communities discover their own power and responsibility to effect positive change in the world. Students conduct primary research and interviews to discover and develop an Unsung Hero’s story through an interactive learning process that cultivates critical-thinking, problem-solving and leadership skills. They then create ways to share the story, including student-driven plays, documentary films, websites, museum exhibits and more. Ultimately, Unsung Heroes projects help create lasting change in attitudes and behaviors within classrooms, schools and communities across the U.S. and throughout the world. Now in its eighth year, the Lowell Milken Center has reached over 1,103,332 students in 8,667 schools in all 50 states, with growing global reach. All 100 of Franko’s fifth grade students are immersed in project based learning through the Unsung Hero project during allocated social studies/science class times. However, the lack of individual student devices make it difficult to implement flexible scheduling among her team of teachers. Currently, they hold “Genius Hour” once per month, which is time dedicated to project based learning through the Unsung Hero project. Genius hour stems from the Google Corporation’s 20% time, where employees are encouraged to explore what they think will most benefit the company. Many schools across America are implementing their own versions of the Google 20% time and have coined the term Genius Hour. Research has proven that such inquiry-based teaching and learning is not so much about seeking the right answer but about developing inquiring minds, and it can yield significant benefits. Franko is piloting Genius Hour for the middle school, and has come to an early conclusion the lack of technology makes it increasingly more difficult to schedule, implement, and assess. In 2014, two middle school teachers, Jessica Connelly and Sarah Franko were invited to be a part of the “The Teacher Showcase Project”, a collaboration between ODE and ITIP Ohio, highlighting teams of educators integrating technology into their classroom as they implement Ohio’s New Learning Standards delivered through project-based learning activities. Franko redesigned her owl pellet unit to showcase the use of technology and project based learning. Connelly’s students researched cars and their production, allowing them to design their own “moosetrap car”. Both teachers the SAMR (Substitution, Augmentation, Modification, and Redefinition) model as a guide to assist in using technology and project based learning to elevate student achievement and create a student-centered learning environment. Franko brought in an expert from the field, a scientist from Arizona, and allowed students to communicate with him via Google Hangouts. Franko and Connelly were astounded with the high achievement and engagement, and believe this is a direct reflection of student immersion through project based learning. Despite the success of the end product of each project, both teachers experienced much frustration with the lack of available technology. The projects were required to be completed during PARCC testing and neither teacher had constant access to technology in their classrooms.

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).

- Teachers trained in PBL strategies will be required to implement at least one project utilizing the newly designed maker space in their respective building.
- Trainers will train at least one additional group of teachers from their respective building.
- Logs of individuals or groups utilizing the new maker spaces will be reviewed quarterly to measure rate of use.
- Log of completion of the Google CS First programs.
- Attendance records for classes using PBL instruction.

v. List and describe pertinent data points that you will use to measure student achievement, providing baseline data to be used for future comparison.
We will be examining our student achievement data annually from the Ohio Department of Education based on research that supports implementing PBL strategies in the classroom results in an increase of student achievement. Current data is as follows (numbers indicate percent of students proficient or higher): ELA: grade 4 - 89 grade 5 - 85.6 grade 6 - 88 grade 7 - 85.5 grade 8 - 83.1 grade 9 - 90.7 Math: grade 3 - 88.7 grade 4 - 89.7 grade 5 - 86.4 grade 6 - 89.4 grade 7 - 82.9 grade 8 - 87.9 Algebra I - 85.2 Geometry - 98.6 Science: grade 5 - 83.5 grade 8 - 83.3 Social Studies: grade 4 - 91.7 grade 6 - 85.4 American Government - 51.3 American History - 76.7

vi. How are you prepared to alter the course of your project if assumptions prove false or outcomes are not realized?
If outcomes are not realized as expected, our team will reconvene to identify where plans fell short to intervene appropriately. If necessary, additional professional development will be provided to teachers on how to utilize the technology tools, how to implement Project-Based Learning strategies, or even how implement the individual devices in the classroom setting.

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.

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.

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. 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).

v. List and describe pertinent data points that you will use to measure spending reductions, providing baseline data to be used for future
vi. How are you prepared to alter the course of your project if assumptions prove false or outcomes are not realized?

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?
   *Examples: 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.*

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 measureable 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
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)

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.

883,701.82 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.

Teacher Laptops: Toshiba Tecra, 4GB, Windows 7 Pro $699.99/each quantity for MS and HS teachers - 200 $139,998.00 Much like the students, a true PBL environment requires teachers to be mobile and flexible. Teachers currently have PC classroom computers that are significantly outdated. In order for the teachers to support the student's creative and collaborative learning they need to be able to take advantage of the flexible spaces available to them. This requires the mobility of a laptop while having robust memory for installation of software such as SMART, and processor speed to cloud compute using web based tools like Google Apps for Education. The laptops should also provide communication tools such as webcams, connectivity to projectors, and internet access. Student Chromebooks: Lenovo N21, 4GB, 16G + console management $169.00 + 24.50 = $193.50 Quantity needed for middle school - 1425 $275,737.50 quantity needed for high school - 1560 $301,860.00 Total $577,597.50 The internet can be an inexhaustible resource for students in information, creation, and collaboration. To take advantage of these tools, student must have access. The recent adoption of chromebooks into schools has allowed a fiscally sound choice for student to access, collaborate, participate and create in their learning in a number of environments outside of the traditional school setting and computer lab confines. Professional Development for Teachers: Project-Based Learning training for 20 teachers $350/each Stipend for training ($450 per teacher) $9,000.00 Total $16,000.00 Just providing the students and teachers the tools for Project Based Learning is not enough. PBL is a change in established teacher practice. Such a change is difficult to realize without any formal professional development. The professional development will provide teachers with the skills and knowledge needed to design, assess, and manage a rigorous, relevant, and standards-based project. The professional development session will model the project process. Cost of Aide for HS Makerspace: 7 hours/day - salary $22,800 benefits $15,500 Total $38,300 Staff will be a critical resource in our makerspace. The high school's Discovery Den will be open after hours and we will hire an aide to oversee the space after school hours. Film Equipment/Green Screens/Other Technology: iMac computers (2) $4,000 Camera (2) $3,000 Green Screen (2) $120 Frame (2) $300 Lighting kits (2) $1,000 Tricaster (2) $16,000 3D Printer (2) $4998 Total $29,418.00 The goal of any makerspace is to have students create. Our Passion Playground and Discovery Den will be no different. Film equipment, high powered computers, green screens and 3D printers will allow our students to create, rather than consume. Furniture: regard double-side collaborative workstation (4 at $17,054.00 each) $68,216.00 Lounge bench seating (12 at $859 each) $10,308.00 Pentagon bench with power unit (4 at $789) $3,156.00 Clover shaped Markerboard tables (4 at $177.08) $708.32 Total $82,388.32 The idea of a 21st century learning space must begin with the look and feel of the space. We want to have a modern and inviting space that promotes collaborative learning. Furniture must support this collaboration. Our goal will be to create fluidity, mobility and accessibility in the media center, allowing for change and flexibility of learning spaces in order to fit the needs of each visitor. Total Grant Request $883,701.82

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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</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 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.

To sustain the project, the cost of the personnel to oversee the after-hours in the High School makerspace will be necessary. This is a cost of...
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 Range February 2016 - May 2016

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

February 2016 - Establish an implementation team with key stakeholders, including administrators, teachers, media center specialist, students and parent representatives. Members will be selected based on the following: -knowledge of implementation (or willingness to learn) -time to devote to implementation -commitment to implementation -willingness to promote implementation throughout district - Meet with implementation team to finalize purchases to be made. The implementation team will visit local schools to gain ideas on how to recreate the media center space, examining layout of furniture and technology. - Select 20 teachers who will attend the summer PBL training, based on the following: -previous PBL experience -expressed interest in PBL -desire to implement PBL within their instruction - Willingness to promote implementation within their school - Willingness to continue to implement within the district - Willingness to communicate with administration, teachers, media center specialist, and students.

Prepare for the implementation of personnel in the high school makerspace (roles, responsibilities, hours of employment). - Work with Personnel Director to get the position posted, interviewed for, and filled - Create blueprints for placement of furniture and technology within the

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.

Once the implementation of the project takes place with the distribution of individual devices to students, two existing computer labs at the middle school that are staffed full time will no longer be needed. One of the employees will be reassigned to staff the newly created high school makerspace so that the after school hours can be established. Additionally, 10 existing chromebook carts complete with 30 chromebooks each will be reallocated to our elementary school buildings to replace existing, outdated computer labs and outdated desktop computers in our elementary media centers.

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.
newly designed makerspaces. - Work with the ESC to arrange for summer PBL training for 20 teachers. - Develop an in-district Professional Development Plan for teachers with regards to integrating the use of Chromebooks into their instruction. - Develop an in-district Professional Development Plan for middle school and high school paraprofessionals with regards to Chromebook support. April 2016 - Establish a plan for distribution of laptops to teachers and chromebooks to students including communication with all stakeholders involved. - Evaluate the technology infrastructure in the high school and middle school to ensure that the increase in devices will be supported. - Familiarize high school makerspace personnel with the technology that will be used in high school makerspace. May 2016 - Prepare and process all necessary purchase orders to fund elements of the grant.

22. Implementation (grant funded start-up activities)

  a. Date Range: June 2016 - June 2017

  b. Scope of activities - include all specific completion benchmarks

    - June 2016 - Conduct PBL training for 20 teachers. - Receive and inventory all new grant-funded items - Provide technology training to any personnel who will be staffed in the Passion Playground and Discovery Den July 2016 - maintenance department reworks existing space to pull out outdated computers and some furniture - maintenance department will move in newly purchased items in the media centers of both the middle and high school, according to the blueprint designs. August 2017 - Distribute computer devices to staff and students - Reallocation of redundant equipment

    - existing Chromebook carts to our elementary schools - Invite district staff to attend an Open House at the Passion Playground and Discovery Den prior to beginning the school year. - Invite parents and students to attend an Open House at the Passion Playground and Discovery Den prior to beginning the school year. September 2016 - Promote communication about the after-school hours to families. - Organize the meeting structure of the Computer Science Club, following the model stated by Google's CS First. - Promote the Computer Science Club to the Middle School students. - Collect baseline data with regards to teachers and students using the renovated spaces. October-June 2017 - members of the implementation team and trained PBL teachers will visit staff meetings and TBT meetings to showcase ways to utilize the makerspace. - Elementary teachers with a desire to implement PBL will be permitted to bring their class to the Passion Playground or Discovery Den as an in-district field trip. - Organize the meeting structure of the Computer Science Club, following the model stated by Google's CS First. - Promote the Computer Science Club to the Middle School students. - Offer staff professional development monthly per building to continue supporting teachers as they integrate Chromebooks into their instruction.

23. Programmatic Sustainability (years following implementation, including institutionalization of program, evaluation and communication of program outcomes)

  a. Date Range: July 2017 - May 2022

  b. Scope of activities - include all specific completion benchmarks

    - 2017-18 - 20 PBL trained teachers train additional teachers on PBL strategies. - Purchase Chromebooks for Grade 5 students. - Continue staff professional development monthly per building to continue supporting teachers as they integrate Chromebooks into their instruction. - Collect data usage logs for the renovated spaces. - Collect and analyze middle school and high school teacher, student and parent feedback surveys with regards to the renovated space. - Analyse state testing data. 2018-19 - Train additional teachers on PBL. - Purchase Chromebooks for Grade 5 students. - Continue staff professional development monthly per building for continued teacher support. - Collect data usage logs for the renovated spaces. - Based on feedback surveys from the 17-18 school year, make additional purchases or changes to continue providing an optimal creative and collaborative learning space. - Analyse state testing data 2019-2020 - Train additional teachers on PBL. - Purchase Chromebooks for Grade 5 students. - Continue staff professional development monthly per building for continued teacher support. - Collect data usage logs for the renovated spaces. - Analyse state testing data. 2020-21 - Receive and inventory all new grant-funded items - Provide technology training to any personnel who will be staffed in the Passion Playground and Discovery Den. - Evaluate the technology infrastructure in the high school and middle school to ensure that the increase in devices will be supported. - Familiarize high school makerspace personnel with the technology that will be used in high school makerspace. May 2016 - Prepare and process all necessary purchase orders to fund elements of the grant.

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:

We have great confidence that the awarding of this grant will ensure sustainable, organizational change in our daily instructional practices at North Royalton City Schools. The availability of the devices in the teachers' and students' hands on a regular basis will change expectations in the classrooms and open the doors for expanding learning opportunities. Currently, our media centers function as traditional "libraries" with little classroom use because of the physical layout and lack of updated technology. There are desktop computer labs within both the middle school and high school media centers that are used regularly by classes, but because they are not mobile, the availability to all is greatly limited. Students must work individually at stations and collaboration is not able to be encouraged or supported in the existing setup. Straight-A Grant dollars can fund the opportunity for mobile collaboration, where lessons can begin in a teacher's classroom and continue in the makerspace where students can work together on projects and have access to more resources to enhance their research, or presentation of a final project. Modifying the layout of the high school media center to create a makerspace, and providing individual student devices, will completely change the current processes and procedures in place. One example of this is with our staff hall structure where students are...
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:

**Melissa Vojta, Director of Curriculum and Instruction melissa.vojta@northroyaltonsd.org 440.582.9038**

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.*

Throughout the implementation of the project, the following data will be collected and analyzed by the District Leadership Team led by the Director of Curriculum and Instruction: - documented use of the makerspace areas by individual students, classrooms, community at-large - professional development opportunities that have taken place in the makerspaces - student achievement data from state assessments - number of courses able to be provided in the makerspace via distance learning for for college credit

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 successful, this project could be replicated at the elementary level. Research states that from PK-12, project-based learning was perceived positively by participants, and described as fostering greater engagement with the subject matter. Students reported enjoying the active, hands-on approach to content, as well as improved perceptions of the subject matter. (Barron, et al., 1998; Baumgartner & Zabin, 2008; Benneke & Ostrosky, 2008; Blumenfeld, et al., 1991; Chu, Tse, & Chow, 2011; Faris, 2008; Hertzog, 2007; Hmelo-Silver, Duncan, & Chinn, 2007) If this concept were to be introduced at the elementary level, studies show that PBL appeals to diverse learners. According to research, inquiry-based, student-centered learning connects middle and low achieving students to the subject matter through real world focus and driving questions. Additionally, because we will be able to reallocate existing chromebooks to the elementary buildings to replace outdated desktop computer labs, two additional classrooms at each building will become available. This is also the case at the middle school. This allows for a number of wonderful possibilities that can benefit students - creative, collaborative makerspaces or additional staff to lower student-teacher ratios, for example. If introduced at the elementary level, our students could begin learning critical 21st century skills at the onset of their school career. Critical thinking, communication, collaboration and creativity will be embedded into our youngest students' curriculum. As they progress into Middle School and High School, PBL will be the most natural way for them to learn. Potentially, students' creativity may lead to improvements in our community. And, our graduates will be better prepared for college, careers and citizenship.

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 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.
## 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>Paula</td>
<td>Kucinic</td>
<td>216.901.4244</td>
<td><a href="mailto:paula.kucinic@esc-cc.org">paula.kucinic@esc-cc.org</a></td>
<td>Educational Service Center of Cuyahoga County</td>
<td>6393 Oak Tree Boulevard, Independence, Ohio, 44131</td>
<td></td>
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<tr>
<td>Eugene</td>
<td>Linton</td>
<td>419.289.5921</td>
<td><a href="mailto:elinton@ashland.edu">elinton@ashland.edu</a></td>
<td>Ashland University</td>
<td>121 W. Main Street, Ashland, Ohio, 44805</td>
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<tr>
<td>John</td>
<td>Ramicone</td>
<td>216.916.6360</td>
<td><a href="mailto:John.Ramicone@ideastream.org">John.Ramicone@ideastream.org</a></td>
<td>Idea Center of WVIZ</td>
<td>1375 Euclid, Cleveland, OH, 44115</td>
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<tr>
<td>First Name</td>
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<td>Title</td>
<td>Responsibilities</td>
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<tr>
<td>Melissa</td>
<td>Vojta</td>
<td>Director of Curriculum and Instruction</td>
<td>- Oversee planning of grant projects - Coordinate the purchasing of items related to the grant - Coordinate professional development of Project-Based Learning training for the teachers - Monitor the evaluation of the implementation - Collect and analyze the data of effectiveness</td>
<td>As the Director of Curriculum and Instruction for the district, Melissa is currently responsible for analyzing district data to determine where professional development needs are. Melissa oversees the District Leadership Team to facilitate this process. Melissa also an adjunct professor at Ashland University and can underwrite and teach courses for credit for staff members.</td>
<td>Elementary and Middle School principal for 12 years; Taught Language Arts and Math at the seventh and eighth grade levels.</td>
<td>Bachelor of Education-U of Toledo; Masters Degree - Educational Administration, Cleveland State University; Valid Superintendent's License</td>
<td>100</td>
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<tr>
<td>Mike</td>
<td>McGinnis</td>
<td>Director of Instructional Technology</td>
<td>Mike will oversee the entire technology operation of the implementation of this project. This will include planning, developing, and executing processes for the purchase and distribution of devices to staff and students; coordinating the removal of existing equipment no longer needed; training for the media center staff members at both the middle and high school; and ensuring the the technology department is up to date with all necessary technology needs including that of the infrastructure of the buildings. Mike will also assist the Director of Curriculum and Instruction with delivering professional development related to the project and work with the Curriculum Facilitator to engage our building technology committees in the project implementation.</td>
<td>As the district Director of Instructional Technology, Mike currently supervises the technology department and handles the decisions related to purchasing for this area. His prior experience as a high school administrator gives him a very solid working knowledge of the staff members there, the culture of the building, and the facility layout and procedures in place that will need to be adjusted to implement the project with success.</td>
<td>High School Assistant Principal-6 years; Early Childhood Principal-3 years; Physical Education Teacher-15 years; Various Coaching positions</td>
<td>Bachelor of Education-Muskingum University; Master of Instructional Leadership - Ashland University; Valid Superintendent License</td>
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<tr>
<td>Jeffrey</td>
<td>Cicerchi</td>
<td>North Royalton Middle School Principal</td>
<td>As the middle school principal, Jeff will oversee the implementation of the makerspace in the media center and ensure that processes and procedures are in place for its success. He will work with his staff</td>
<td>Jeff's leadership as principal, a former assistant principal, and service on the District Leadership Team qualify him to carry out the responsibilities</td>
<td>North Royalton City Schools Administrator, 7 years; ELA and Social Studies Teacher, 4 years; Various Coaching</td>
<td>Bachelor of Education-Baldwin Wallace University; Master of Educational Administration-Ursuline College</td>
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<td>Ann Marie</td>
<td>Curriculum Facilitator</td>
<td>Ann will assist the Director of Curriculum of Instruction with all essential implementation elements of the project. Additionally, she is the liaison to the teaching staff and the main source of support with district-wide initiatives. Ann will provide input to the design and set-up of the makerspaces and assist with training building technology teams, media center personnel, and administrators with all elements involved in the project. Ann will provide presentations on the progress of the project (with the Director of Curriculum and Instruction) to parent groups, at staff meetings, and to the North Royalton Board of Education.</td>
<td>Bachelor of Art - Allegheny College; Master of Education - John Carroll University; College studies in Paris, France</td>
<td>Teacher of French and German for 9 years; District Curriculum Facilitator for 3 years</td>
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<tr>
<td>Sean Osborne</td>
<td>North Royalton High School Principal</td>
<td>As the high school principal, Sean will oversee the implementation of the makerspace in the media center and ensure that processes and procedures are in place for its success. He will work with his staff through professional development, the Building Leadership Team, and staff meetings to change some current expectations that are in place for the use of individual student devices.</td>
<td>Bachelor of Education - The Ohio State University; Master of Educational Administration - Cleveland State University</td>
<td>Cloverleaf Schools Administrator, 12 years; North Royalton Administrator, 4 years; Science Teacher, 5 years</td>
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