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Adjusted Allocation | 0.00

Remaining | -957,250.00
Please respond to the prompts or questions in the areas listed below in a narrative form.

A) APPLICANT INFORMATION - General Information

1. Project Title:
Design & Innovation for the Future

2. Project Tweet: Please limit your responses to 140 characters.
This program will help develop and retain engineering students in Ohio.

This is an ultra-concise introduction to the project.

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

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

<table>
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<tr>
<th>Grant Year</th>
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<td>35 10</td>
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</table>
4. Explanation of any additional students to be impacted throughout the life of the project. This includes any students impacted indirectly and estimates of students who might be impacted through replication or an increase in the scope of the original project.

The total number of students impacted in the 2016-17 school year will be 94. Each year it is anticipated to grow by approximately 25-30 students with after 4 years having approximately 140 students in the program at one time. This represents approximately 25% of Beachwood High School students. This number is expected to grow as the program is further promoted.

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

First and last name of contact for lead applicant
Ken Veon
Organizational name of lead applicant
Beachwood City Schools
Address of lead applicant
24601 Fairmount Blvd. Beachwood, OH 44122
Phone Number of lead applicant
216-464-2600
Email Address of lead applicant
kev@beachwoodschools.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

The overarching problem, as Norman Augustine, Lockheed Martin chairman pointed out, is that there has been an 18 percent decline in the U.S. in engineering, math, and physical and geoscience bachelor's degrees during the previous two decades. He also noted a 40 percent decline in the proportion of students studying these subjects. By 2006, the United States ranked 17th in the percentage of university science and engineering graduates, down from third 30 years before (Brown, 2009). More specifically, the problem the Beachwood City Schools face with the implementation of the Engineering/Design curriculum, to help address this global competition problem, is that there is a lack of institutional knowledge when it comes to engineering/design/architecture. Because engineering/design components take a specialized set of skills and knowledge, a typical (core subjects) teacher or administrator does not have the expert knowledge needed to implement the program to the fullest extent.

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

This project takes a team of people and experts to implement it with integrity and rigor. The reliance on one teacher for the entire project is a daunting task. The idea is for students to focus on project based learning in architecture, industrial design and various engineering fields. By partnering with Cleveland State University's Washkewicz College of Engineering, students in Beachwood will not only be provided with the
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 process.

- (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.*

By providing students with a sequencing/progression with regard to engineering/design, the district will be affording students the opportunity to learn material that is not typical of a K-12 public education. Students will leave high school prepared for college engineering and design work, as well as have a better grasp on career opportunities. Students will use this blended approach with the guidance of Cleveland State University Professors, Graduate Assistants and students to help with college and career readiness in engineering.

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.*

Research suggests that 40% of engineering students switch to other majors or drop out, especially in the first two years. If Beachwood, and if replicated other districts, can provide students with some of the background information (design process, information about the careers/fields, the rigor), students will achieve success and possibly stay with the major in college and beyond. According to the Bureau of Labor Statistics, the engineering fields that the Beachwood City Schools are focusing upon have a range of job outlooks over the next ten years to be +6% for chemical engineering all the way to a +62% increase in need for biomedical engineers. The purpose for this program/initiative is to promote the idea of every student being college and career ready. With an attrition rate of about 40% (according to a UCLA study cited in the NY Times), students are not prepared for what they are going to encounter in the college course work and corresponding career.

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

By providing students with the opportunity to "tinker" with the different careers, projects involved, developing critical thinking skills as well as collaboration skills, they will be prepared to be a force in college and in their engineering/design field. According to the Partnership for 21st Century Learning, students, in addition to the 3 R's, are supposed to develop "Learning and Innovation Skills - 4C's" (which are critical thinking, communication, collaboration, and creativity). This program stresses all of these components. In addition, students are to learn life and career skills, which are comprised of flexibility, initiative, cross-cultural skills, productivitv and leadership. This program is the living embodiment of those skills. In addition to this program helping students in the area of engineering/design, the Beachwood City School District has a history of academic success, ranked #3 in the state according to performance index and #1 in gifted performance index. The rich education, coupled with this program for students, will produce a high level of college student that will be accepted into the college of engineering at any university. According to Steel (2014), collaboration between businesses and colleges help engage students to enter and persevere in the engineering field. By partnering with Cleveland State University, the Beachwood Schools and students would benefit from the collaboration and helping students participate in the program through engaging activities and lessons. However, pre-college engineering is especially problematic in public education since there is no well-established curriculum or standards for engineering in the K-12 public schools or as part of teacher preparation and certification programs. Most K-12 teachers and administrators are ill-prepared to advise students about engineering careers, much less to introduce engineering knowledge and skills into the classroom. While there is a growing appreciation that engineering may be a positive vehicle to motivate K-12 students. This program, in 3 years of implementation and consistent adjustments with advice from engineers and professors from CSU, has morphed into a program that has prepared students for college. Through a blended learning approach, students are able to easily navigate careers in the engineering field with logical, abstract, concrete and theoretical thinking. The attrition rates will be highly documented from one year to the next within the high school program, but also after students start and finish college and in addition if they go into the field of interest for a career. It is important because for example,
according to the Institute of Electrical and Electronics Engineers, almost 20% of all males, and 34% of all females in electrical engineering leave the occupation within five years. This is coupled with the fact that only 23% of both men and women in electrical engineering are very satisfied with their occupational choice. The goal for the Beachwood City Schools is to produce students that stay in the field of their choice, engineering/design/architecture, and stick with it after college with a high level of satisfaction. This can be accomplished through support and guidance at an early stage of high school. This initial information has begun to be gathered, but because we have not had the program for 4 years, the information is still in an infant stage.

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).*

Not only will attrition rates be low for students entering this program because of the support, encouragement and communication with parents, but students entering the field will be a well-rounded representation of the student body. We will increase the number of female students and African American students. This will be done through seminars, programs directed toward minority students, support during the course work and parent engagement. Increase in enrollment, which includes more African-Americans and females in the courses and beyond high school. This information will be compared to local, state and national schools that have an engineering program AND track the information we are seeking. Beachwood Schools will begin to make the connections with these schools in the very near future to be able to gauge the success of the program by dropout rates.

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 data collection employed to evaluate the impact of the program will include satisfaction surveys with students, parents, teachers and administrators. This information will be used to determine what areas are areas of strength and which areas are areas for improvement. This will be done twice a year and changes, consistent with formative assessment, will be made to improve the program. Students will be expected to participate in surveys even after high school. A website/database will be developed and periodic check-ins will be made with students to gather data to determine the worthiness of the program and again, make changes if necessary. This information, including opinions of the students, along with charting their progress in the fields of engineering/design/architecture will help the district make a determination about what changes need to be made to improve rigor, raise expectations or improve on the publicizing of the program to enlist more students and expand it.

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

Because of the vast offerings of programs at Beachwood High School, if students determine that engineering is not their field of interest, they have many options. However, if the data does not prove to be as assumed, whether it is from lack of enrollment to the attrition rate during college, we will certainly revise our system to ensure all students succeed. It is difficult to be specific about this because the program has not failed yet. Enrollment has increased in each of the three years it has been offered, with the numbers tripling this past year from 15 to 45 students in the first year course. If needed, the experts in curriculum and the professors from Cleveland State University will analyze the information and make adjustments as necessary. Each of the 3 years have seen changes, some more drastic than others, to make sure the program is successful. For instance, the data was analyzed and it was determined the teacher for the program wasn’t the right fit, so adjustments were made and immediately more students enrolled in the course. These types of adjustments are mandatory for the program to be viewed in a positive light as well as provide students with the skill sets required to be successful.

**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. Please enter the Net Cost Savings from your FIT.

v. List and describe the budget line items where spending reductions will occur.

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 measurable changes, not the accomplishment of tasks.
   Example: consolidation of transportation services between two districts.

v. List and describe pertinent data points that you will use to evaluate the success of your efforts, providing baseline data to be used for future comparison.
   Example: change in the number of school buses or miles travelled.

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

10. Which of the following best describes the proposed project? - (Select one)
   a. New - Never before implemented
   b. Existing - Never implemented in your community school or school district but proven successful in other educational environments
   c. Replication - Expansion or new implementation of a previous Straight A Project
   d. Mixed Concept - Incorporates new and existing elements
   e. Established - Elevating or expanding an effective program that is already implemented in your district, school or consortia partnership

C) BUDGET AND SUSTAINABILITY

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

957,250.00 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.

The total amount requested in the grant will be $957,250. This does not include the cost for the teacher or professor costs from Beachwood Schools or Cleveland State University. The costs include: Cleveland State University Coordinator/Graduate Assistant(s) - $37,000 Facilities/Equipment - (includes building, plumbing, electricity, networking, HVAC, equipment, etc.) - $920,250 Computer Lab Diagnostic materials (instant temp., speed, sound, moisture, etc.) Delta V Fluid Systems 3-D Scanners Full Size PRSalpha CNC HP DesignJet T2300 eMFP (large format printer) HP DesignJet 3D MultiColor Printer Misc. Items (ebooks, consumables, entrance fees for competitions, etc.)

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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<td>b. Sustainability Year 2</td>
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<td>c. Sustainability Year 3</td>
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<td>d. Sustainability Year 4</td>
<td>0.00</td>
</tr>
<tr>
<td>e. Sustainability Year 5</td>
<td>32,500.00</td>
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</tbody>
</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.

The costs associated with year one are software costs, maintenance on equipment and some staffing expenses for professional development. These costs, estimated at $106,483, are one year only and will be incurred by the school district. Years 2, 3, and 4 have no additional expenses for the school district because the professional development will be maintained by Cleveland State University Professors and software will be purchased outright instead of on a cycle. Year 5 will see a refresh on the computer lab necessary to run the software applications for the program. The district will incur these costs too.

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.

The budget savings are indirectly a result of the program. Because of the growth of this program, other programs are being down sized and therefore there will be a cost savings through personnel.

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.

One of the glaring savings by growing this program is to the detriment of other programming. We have a finite number of students and periods in a day, so students can only take so many classes. As they enroll in the Design & Engineering program, it pulls from other programs. With that, the Beachwood City Schools will reduce a teacher next year based upon the enrollment of the D&I program. This cost will not be reinstated without a reduction of other programming. The costs that will be saved over the short-term are the hiring of the coordinator and graduate assistants will be approximately $37,000. However, the expertise obtained by working with Cleveland State University is hard to put a calculation to for the purpose of developing curriculum, offering institutional knowledge, and helping develop business relationships that will provide students with opportunities that may not have been realized without this grant/partnership. In addition, this grant funding will allow CSU and Beachwood to seek additional grant opportunities to support/expand this initiative within the district and CSU will be able to replicate with other
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 Team Key Personnel information by clicking the link below:

Add Implementation Team

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 June 20, 2016 - June 30, 2017
   b. Scope of activities - include all specific completion benchmarks.
   June 2016 - When awarded the grant the curriculum side of the planning has already started and has been implemented over the last 3 years and will be expected to be completed, in the entire scope and sequence, by the end of June 2016 (4th year course). This will include assessing and realigning the curriculum, both vertically within the program, and horizontally, with classes students need (or are encouraged to participate in during the sequencing) being addressed during the planning stages (for example chemistry no later than sophomore year for students taking chemical engineering). This is where CSU professors, the Beachwood teachers/administrators, and students will work in unison to develop a rigorous and worthwhile curriculum revision. If we are awarded the grant on June 20th, we will spend the next week with architectural firms to develop drawings based on our (administration, professors and teachers) expectations for the space provided to the students for their "Engineering Lab". Engineers from Cleveland State and local businesses will have their input solicited too within that time frame. Finally, most inspiring, students, especially the ones focusing on architecture, will be provided the opportunity to work with the architectural firm to develop a space that is aesthetically pleasing, but more importantly, provides students with a state of the art engineering/design facility. Think about the opportunity. Students from a high school helping to develop, draw, and critically analyze a space that they are in turn going to learn more about the process and create for future engineering/design students. This is a real world application that cannot be provided too often. With this grant, students will be afforded the opportunity and will create a world-class learning environment.

22. Implementation(grant funded start-up activities)
   a. Date Range August 2016-June 2017
   b. Scope of activities - include all specific completion benchmarks
   The partnership between Beachwood City Schools and Cleveland State University has already started and will be strengthened by the Straight A Fund grant. The number of students wanting to participate in this program has been phenomenal. We increased from 28 students in 2013-2014 to 84 students 2015-16. This will provide the financial assistance needed to provide resources to Cleveland State University and Beachwood City Schools to hire a coordinator for this project as well as graduate assistants as needed to help develop the curriculum, become resources to the students and teachers in Beachwood, and very importantly, develop relationships with businesses and professors to assist in the project based learning process. This will begin right after the start of the new year (with the grant being awarded on June 20th). Work with professors and coordinators was started last year, but this will provide the time needed to focus attention to the curriculum and mapping out the course of action. Because this facility will be an addition to the high school, students and staff will not be interrupted for the construction aspect of the facility and building can start immediately. This gives the builders 14 months to implement the building process and have it ready by the end of June 2017 for the start of school in August. The jointly created curriculum (BCS and CSU) will be implemented in the world-class facility on the first day of school using the highly focused technology tools to enhance student achievement.

23. Programmatic Sustainability (years following implementation, including institutionalization of program, evaluation and communication of program outcomes)
   a. Date Range June 2016 - June 2024
   b. Scope of activities - include all specific completion benchmarks
   Because it is not created as "one-year" project, it is difficult to say how sustainable it is. Beachwood is fortunate to have a supportive community and if the program thrives, as expected, the resources will be allocated to maintain and expand the program. However, for a more concrete answer, the program will be reevaluated after 8 years. 8 years was chosen because students will be able to have gone through the complete 4 year cycle in HS and then follow a traditional four years in college. After that time, the district feels it will have enough information to make informed choices about student attrition rates, satisfaction and changes to the program. In addition, demographic information will be collected each year and will be a focus each of the years the program is in place.
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:

Through this grant, the instructor, as well as the students, will have access to more advanced technology and resources to hone their thinking skills and abilities. As stated above, the grant will help, but yearly analysis of the program will result in changes to help progress the program. The by-product that may result is an increase in STEM programs at the elementary and middle schools. To help advance minorities as well as the program, starting at an earlier age may be prudent to implement. This would take collaboration among each of the buildings and a vertical articulation.

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:

Ken Veon Director of Operations & Technology 216-464-2600 kev@beachwoodschools.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.

Although there will be an ongoing evaluation of the program, formal evaluations of the program will be completed each June through 2024. This will be reported to the State Board of Education, the Beachwood Board of Education, administration, Cleveland State University's Waskewicz College of Engineering and all stakeholders in the Beachwood City Community. It will be based upon the number of enrollees in the program, the quality of work and projects, and how many students participate in all 4 years of the program as well as 4 years in college engineering programs. Long term, alumni interviews will be conducted to learn the effects of the Design & Innovation program's learning experiences on students' eventual success in their engineering colleges' programs of study. In the short-term, a report will be provided about the facilities and equipment provided, the amount of time students worked with graduate assistants after school and the quality of collaboration between the Beachwood Schools and the professors from Cleveland State University. This will be done using quantitative and qualitative measures.

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 the 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.

Many districts are able to replicate this program. The key to the implementation/replication is to form partnerships with institutions of higher learning, in this case Cleveland State University, and local businesses in the field. Most K-12 institutions do not have the expert knowledge to know where to start with a program such as this. Through the last few years, several surveys, face to face interactions and meetings were held to gather more information about what the goal of the program was and how a partnership would be mutually beneficial. Making sure students were provided with the baseline knowledge without moving too quickly seemed to be a key. By making this program last over four years (and actually building some of the scientific methods base at the elementary and middle school levels), students will be provided with a thorough understanding of what it will take to be a successful engineer, industrial designer or architect. Schools could replicate this by developing a strong elementary science program, with a focus on the design/scientific method process. Because we have a freshmen level course, students are introduced to the various components of the program, given an overview, and slowly developed into the high level of students we expect. By the time they are seniors, students will be working on an independent project (not necessarily solo, but a project that takes planning, consideration of variables, constraints, revision and presentation). The teacher, along with the collaboration from Cleveland State University, will help students in their project, but will not have as much of a hand in the process as students will have in sophomore and junior year projects. This unique partnership with CSU could and will be shared at local, state and national conferences.

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. Ken Veon Beachwood City Schools
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>
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<tbody>
<tr>
<td>Majid</td>
<td>Rashidi</td>
<td>(216) 687-2575</td>
<td><a href="mailto:m.rashidi@csuohio.edu">m.rashidi@csuohio.edu</a></td>
<td>Cleveland State University</td>
<td></td>
<td>2121 Euclid Avenue, FH 333, Cleveland, OH, 44115-2214</td>
</tr>
<tr>
<td>First Name</td>
<td>Last Name</td>
<td>Title</td>
<td>Responsibilities</td>
<td>Qualifications</td>
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<tr>
<td>Ken</td>
<td>Veon</td>
<td>Director of Operations &amp; Technology</td>
<td>Architect of the program. Oversees all aspects of this grant, from budget, personnel, to coordination with Cleveland State University.</td>
<td>PhD in Instructional Leadership Masters in Educational Administration</td>
<td>Director of Operations &amp; Technology Director of Curriculum &amp; Technology Principal Teacher</td>
<td>PhD in Instructional Leadership Masters in Educational Administration Bachelors in Education</td>
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