

Budget

New Albany-Plain Local (046995) - Franklin County - 2017 - Straight A Fund - Rev 0 - Straight A Fund - Application Number (143)

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

Plus/Minus Sheet (opens new window)

Purpose Code	Object Code	Salaries 100	Retirement Fringe Benefits 200	Purchased Services 400	Supplies 500	Capital Outlay 600	Other 800	Total
Instruction		0.00	0.00	0.00	18,818.00	40,250.00	0.00	59,068.00
Support Services		23,520.00	3,763.00	23,800.00	0.00	0.00	0.00	51,083.00
Governance/Admin		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Prof Development		0.00	0.00	16,000.00	0.00	0.00	0.00	16,000.00
Family/Community		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Safety		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Facilities		0.00	0.00	0.00	135,657.00	0.00	0.00	135,657.00
Transportation		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Indirect Cost							0.00	0.00
Total		23,520.00	3,763.00	39,800.00	154,475.00	40,250.00	0.00	261,808.00
							Adjusted Allocation	0.00
							Remaining	-261,808.00

Application

New Albany-Plain Local (046995) - Franklin County - 2017 - Straight A Fund - Rev 0 - Straight A Fund - Application Number (143)

Please respond to the prompts or questions in the areas listed below in a narrative form.

A) APPLICANT INFORMATION - General Information

1. Project Title:
Empowering a generation for E3 careers in our region

2. Project Tweet: Please limit your responses to 140 characters.
NAPLS & regional partners will prepare & inspire youth to solve problems & pursue careers in environmental science, energy & engineering.
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.*

Grant Year					
Education	Pre-K Special	K	1	360 2	400 3
367 4	430 5	412 6	380 7	388 8	
397 9	383 10	383 11	319 12		

Year 1					
Education	Pre-K Special	K	1	415 2	399 3
407 4	429 5	379 6	440 7	441 8	
425 9	398 10	450 11	406 12		

Year 2					
Education	Pre-K Special	K	1	403 2	422 3
402 4	420 5	438 6	385 7	449 8	
450 9	425 10	411 11	451 12		

Year 3					
Education	Pre-K Special	K	1	403 2	410 3
427 4	416 5	429 6	446 7	393 8	
458 9	450 10	439 11	412 12		

Year 4					
Education	Pre-K Special	K	1	403 2	410 3
415 4	441 5	425 6	437 7	456 8	
402 9	459 10	464 11	440 12		

Year 5					
Education	Pre-K Special	K	1	403 2	410 3
414 4	428 5	451 6	433 7	446 8	

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.

By nature of the work, students in grades 2-12 in New Albany will be served each year. On average, 4,615 children will be served each year through this project. 4,219 student enrolled in grades 2-12. Additional students to be served in the New Albany community include our 675 preschool - 1st grade students. Our partner, Eastland Fairfield will work with us and together we will grow the program and thereby engage additional students. Approximately 680 students will make yearly visits to the Solar house. Approximately 200 students enrolled in New Albany summer clubs, camps sponsored by Healthy New Albany, Girl Scouts, & Y camp students will use the Solar house. Approximately 500 9- 12 grade students in roughly 13 districts and Ohio State students across central Ohio will be invited to participate in studies at the Solar House studying energy, engineering, & environmental sciences will be invited to access the Solar House across central Ohio.

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

First and last name of contact for lead applicant
Dr. Marilyn Troyer

Organizational name of lead applicant
New Albany-Plain Local Schools

Address of lead applicant
55 North High Street, New Albany, OH 43054

Phone Number of lead applicant
614-855-2040

Email Address of lead applicant
troyer.1@napls.us

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 problem is the low number of students pursuing study and careers in STEM fields. This project addresses that problem with a focus on engaging students from early in their education in hands on, real world problem solving in E3 - energy, engineering and the environment. The Ohio State University Solar building is available for installation so that students from New Albany, Eastland Fairfield and across central Ohio can work with university students, business and community members to explore and solve real world problems in alternative energy, engineering, green architecture, and environmental impact. Beyond installing the house and facilitating collaborative research projects, this project will build problem-based lessons that will be shared with all those who come to use the facility and beyond. The project also enhances the regional engagement regarding STEM research and careers through hosting Energy Summits to bring the central Ohio area together to inspire this generation.

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

The E3 Innovation designs & scales real world problem solving experiences, exposing all NAPLS (gr 2-12) with knowledge, skills, & work habits essential for success in 3 OH highly in-demand STEM career fields (energy, engineering, environmental science). With industry & higher ed partners, NAPLS will establish a world-class living-learning outdoor laboratory & design/scale Problem- Based Learning (PBL) units/lessons that integrate OH Learning Standards with critical STEM college/career ready competencies. Easton-OSU STEM and Nature Center (a.k.a.Solar House) was built by an engineering team at OSU in 2009 & donated to NAPLS. NAHS will collaborate with OSU College of Engineering and College of Architecture to design, prototype, test & transform the structure into a fully operational, energy neutral community learning lab. Lab will be used for gr 2-12 in NAPLS & available for use by OSU students and other OH schools. The development & expansion of courses in engineering & energy in partnership with OSU will focus on high school students working directly with OSU faculty & students to redesign & continual update the Solar House & solve real world problems in energy, engineering & the environment. Early Exposure and exploration: Deepen gr 2-8 student exposure to engineering pathways using numerous lab based modules & resources using PBL instructional design. Curriculum, supplies & equipment will be purchased & professional development (PD) offered to 75 staff benefiting 4,250 students. PBL Unit Design: Teacher leaders & partners will facilitate the design of PBL lessons/units deepening student learning in energy, engineering & environmental science. Lesson/units (grades 2--12) will be designed, tested (for use in the Solar House, wetlands, classroom). Partners include: Eastland Fairfield Career and Technical center who currently partners with the district to offer courses in Environmental Science which utilize the 85 acre wetlands and environmentally protected outdoor learning area. The OSU schools of Engineering & Architecture is a key partner and will send OSU students to work with K-12 students on projects. Until students are engaged, interested and empowered to see themselves as E3 capable learners they will not persevere in the study. This project will be grounded in Inquiry learning (PBL) which is a student centered approach. Students control their process of knowledge getting. It arouses students' curiosities & motivates students to continue to seek until they find answers (Slavin 2006). Learning has more meaning for students as it becomes a more relevant part of their lives & they begin to better understand the world around them. The E3 Innovation takes PBL deeper by engaging industry & higher ed partners, resulting in significant opportunities for increase rigor, real world context and instructional shifts. Teachers & partners will co-design authentic learning experiences to solve real-world problems beyond school walls, bringing learning into the community. Students collaborate with partners to design, prototype & improve solutions. This increases student control over learning and teachers become coaches, facilitating inquiry/reflection. Communication/Stakeholder Engagement: NAPLS teacher leaders assigned to coordinate project will facilitate project & coordinate with staff, other districts & partners. Project Leadership Team will lead the work during implementation & sustainability years. To develop the plan, District leadership engaged students, teachers, leaders & community members in project design. NA Board is familiar with this project, will approve all contracts & be updated at least quarterly. This collaboration creates resources for many partners across the central OH community to ignite the imaginations of students of all ages and inspire them to study and pursue careers in three critical Ohio STEM career pathways - energy, engineering.

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.

Outcomes Goal: New Albany E3 Innovation will collaborate with industry/higher education partners to design & scale real world problem solving experiences, exposing students in the region with deeper learning in knowledge, skills, & work habits essential for success in 3 highly in -demand STEM career fields (Energy, Engineering, Environ. Science). OUTCOMES:1)Participation rates & achievement will rise in Engineering pathway & Environ. Science courses as measured by end of course exams(such as PLTW and teacher made), state tests, AP, & dual enrollment courses.2)Percentage of gr 5 & 8 students scoring 4-5 on A.I.R. science test will increase.3)Pre/post survey results for students in selected grades 2- 12 will demonstrate increased E3 career- awareness & interest as measured by an inventory such as Naviance. 4)Research, internship and invention projects in the E3 fields during Senior Seminar will increase in number.

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.

NAPLS students are academically successful but need deeper, authentic learning experiences to prepare for careers in STEM. Research: According to the ACT National Curriculum Survey (Aug. 2015) "College readiness levels in math/science are higher for STEM interested students than ACT-tested students overall." Students with STEM interest outperform peers.To raise achievement,build interest. All students from young age need exposure to highly engaging experiences in E3 fields so that achievement is wide spread. Teachers will need PD & real world PBL lessons will need to be developed for use with the solar house. Higher levels of teacher skill and knowledge through working with partners and access to rigorous PBL will provide students deeper learning experiences which will lead to high interest and achievement in STEM as well as soft skills required for success in workplace. Finally,the Solar House must be installed and updates to the facility completed for functional use in STEM learning

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

According to Dr. Susan Tave Zelman in her 2005 introduction message within the Ohio Standards for Education document "Excellence can be achieved when we have high expectations for ourselves and our students. ... The research is clear: what matters most is the quality of the teacher we put before every student. It is the interaction between teacher and student that is critical to producing high-level student learning and achievement. " NAPLS has had a rich history of investing in teacher professional development, collaborating with the community and there are strong examples of deeply embedded real world learning. Eastland Fairfield Career and Technical Schools and New Albany Plain Local Schools already partner to offer the Environmental Science Program at New Albany High School. The Environmental Science program's curriculum is based around the 80 acres of natural areas surrounding the high school campus. The wetlands and outdoor learning spaces are already actively integrated into the teachers' approach to instruction. Partners have for years helped to build walkways and rock circles and outdoor seating spaces so that students can engage in hands on research and investigation. The Solar House will provide an authentic learning experience that is not currently available to Environmental Science students. It will offer current technologies with renewable energies and state of the art monitoring data that can be accessed in real time. These learning tools will offer a higher level of data and relevance not currently available to students in the Environmental Science program.

Specific examples of this strategy include our PBL environmental science instruction through Eastland Career Center(mentioned above), the K-12 use of the New Albany wetlands embedded in district science curriculum, high school Senior Seminar capstone projects in energy, engineering, & environmental sciences which have led to students pursuing STEM college coursework & STEM careers. Our AP Environmental Science classes are already working with wind-turbine technology in real-world applications on campus. The wind-turbine was donated by AEP & the New Albany Community Foundation. Another example includes three middle school teachers who are piloting Project Lead the Way (PLTW) modules in their classrooms and embedding these PBL lessons into their grade level science content in order to deliver the Ohio Next Generation Science Standards. Current examples of relationship with OSU include experiential learning curriculum planning & support with Dr. LingYing Zhao, Associate Professor of the Department of Food, Agriculture, & Biological Engineering. The curriculum & planning supports the following courses at NAPLS high school: AP Environmental Science, Introduction to Engineering Design, Principles of Engineering, and energy/environment Senior Capstone courses. The Easton-OSU STEM & Nature Center(Solar House) is currently resting stagnantly on NAPLS campus. The structure is currently stored in three separate modules for prior transportation purposes, & each module is sealed off to prevent internal weather damage. Upon renovation, the three separate modules will be reassembled into one, built on a permanent cement foundation, & completely transformed into a living outdoor learning lab equipped with data collection and STEM lab tools. This new space will be used as an energy neutral community learning lab that can be used not only by NAPLS students, but by other central Ohio schools, local universities, business partners, and the community as a whole.

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).

Progress will be measured by increased enrollment in courses each year as well as increasing career interest over the previous year data on the Naviance career interest inventory. Students in PLTW and Eastland Fairfield courses will complete at least one problem based research project in year one. Science teachers in grades 4-12 will use the solar house to implement at least one PBL lesson in year one. In year two, teachers in grades 2 and 3 will implement at least one PBL lesson. Use projections from multiple data points including state & MAP assessments to ensure students are enrolled in most rigorous & appropriate science course work including AP, STEM, & dual enrollment courses annually Use MAP assessment results (3 times/yr) to identify students not on-track to reach levels 4 or 5 on 5th & 8th gr science assessment. Community partners will host a Summit that engages students and teachers from across the region to learn content & lessons developed at the Summit will be implemented.

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

Improve % reaching ACT college ready benchmark in Science (current 64%) and ACT Science average score (current 24.3). Increase % of students earning 4 or 5 on Ohio AIR science assessments in 5th grade(current 66.3%) and 8th grade(current 59.6%). Increase the participation and the scoring levels in AP, PLTW and Eastland Fairfield Environmental science courses: AP Physics & AP Environmental Science participation and achievement (14-15 baseline): Environ. Sci: 47 students, avg. 3.89; Physics B: 30 students, avg.3.67; Physics C: less than 5 students; PLTW Intro to Engineering (15-16): 16 students. Increase % of students who indicate interest in STEM careers on career interest inventory in grades 6--12. (Baseline to be established fall 2016) (Research indicates that student interest/engagement has direct link to student achievement.)

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

The Project team will review relevant data bi-monthly as available. Annual staff PD surveys & student surveys will include questions that can help identify where recalibration or options may need to be expanded. Curriculum audits will occur each winter to review status of PBL lesson development, course offerings & enrollments. We will use projections to help remove unintended barriers to students access to the most rigorous science course work. MAP data in science along with survey data will be used to adjust the instructional model of the project. Evaluator to provide quarterly reports on project progress & suggestions for improvement if necessary. Project team will provide updates to community two times a year to help communicate both the successes & barriers to the program. Budget is aligned with/ reasonable based on student impact, outcomes, lasting value. New Albany is contracting with Dynamix as an external evaluator at \$23,800 which is 10% of project budget. This amount is in line with industry standards which will allow the vast majority of project funds to be spent directly on work with educators. At the same time, it will provide an in depth formative and summative evaluation. This evaluation will ensure NAPLS meets project outcomes, has strong impact on student achievement, and is fiscally sustainable. The evaluation will also support the district and partners as they fine tune systems in preparation to expand pilots and replicate/ scale project activities. In addition to the external evaluator, project partners have extensive expertise in the three STEM fields and will provide ongoing leadership and shared insight to continually evolve and improve the project implementation plan.

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 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

d. Mixed Concept - Incorporates new and existing elements

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

C) BUDGET AND SUSTAINABILITY

11. Financial Information: - All applicants must enter or upload the following supporting information. The information in these documents must correspond to your responses in questions 12-19.

a. Enter a project budget in CCIP (by clicking the link below)

[Enter Budget](#)

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

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

[Upload Documents](#)

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

261,808.00 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.

Total of the budget is broken down: Salaries-\$23,520: Stipends for staff to administer program broken down for three teacher leaders for \$6,000 each for a total of \$18,000; Stipends for curriculum work for 20 teachers, 12 hours each @ \$23 / hr for total of \$5,520; (one time cost) Benefits - \$3,763: 16% of stipend costs for teacher leader coordinators of \$2,880; 16% of stipend costs for curriculum work of \$883; (one time cost) Purchase Services-\$16,000: \$10,000 for professional development registrations, presenters and consultants in working with the teacher leaders as well as providing sessions to teachers in PBL; Substitute Costs for classroom coverage during training of staff \$6,000; (after the one time training of teacher trainers costs will reduce and be integrated into current district PD budget); Dynamix, external program evaluation/reporting \$24,110 (multi-year contract (thru 6/22) allowable per guidance - evaluation is implementation cost). Supplies - \$18,818: Classroom supplies to set up the solar house science classroom which includes but not limited to large thermometer for outside solar building, binoculars, magnifying glasses microscopes & hot plates (Most items will be one time grant costs during implementation, other items will be sustainable after 6/17 by including them in building budgets). Capital Outlay-\$175,907: Total construction estimated \$291,604 however the district will be co-funding the construction cost by \$152,947 for an actual construction request from the grant of \$135,657; the estimate for these building costs are: Phase I- Dry-in and protect the asset: \$46,202; Phase II-Occupancy permit and ADA compliance: \$46,125 and upgrade of deck for outdoor classroom space: \$43,330. Equipment and furniture: total-\$40,250: the break down of these costs are: Wireless, web-based data collection system \$34,866 (one time cost); Lab demonstration tables \$1,508(one time cost); Portable electronic balances \$3,876 (one time cost)

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.

3,972.00 a. Sustainability Year 1

3,972.00 b. Sustainability Year 2

3,972.00 c. Sustainability Year 3

3,972.00 d. Sustainability Year 4

3,972.00 e. Sustainability Year 5

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 amount of the grant for sustaining costs is very minimal based on the benefit to the district for the total amount of the grant. There will be a need for custodial staff to clean the building on a twice per week basis for 1 hour per day of \$1,872 per year for salary; the increase in the benefits will be for the retirement and Medicare of \$300 per year; the district also believes that there will be an increase of utilities of \$1,500 per year; the final increase will be classroom supplies of \$300 per year is consistent with the annual budget for supplies for a classroom and as most of the supplies are consumable supplies they will be paid for through student fees as are all other programs for the district. The total for sustainable costs is \$3,972 per year and a total for the five years of \$19,860. The district liability policy has been reviewed and there will not be any increased costs in the current policy to carry the liability on the Solar House. In addition, the PD and supplies will be sustained by maximizing the teacher leader/trainer model and incorporating costs of sustainability into current PD and supply budgets. Ongoing maintenance for general repair to the structure or the solar panels is included in our 10 year capital maintenance budget.

38.00 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 grant is to reconstruct and install the 2009 OSU Solar Decathlon competition house as an energy neutral community learning lab to studying energy, engineering, & environmental sciences that will help the district to lower the cost of electricity. The building is designed to generate enough electricity to cover all that is used by the building and also add more to the actual grid to lower NAPLS actual electricity costs. Since the actual energy generation will not happen until after the implementation year, NAPLS is being very conservative in only estimating the cost savings of \$1,500 per year is estimated to be the same amount as the actual increase in utility costs for a total of savings over the five years of \$7,500. The district expects that it will be much more than this once all of the instruction begins and the actual savings are put into place for the utilities.

62.00 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.

The total amount of the reallocation per year is \$2,472 for a total of \$12,360 which allows for total decrease over sustaining costs for the grant. NAPLS will incorporate the PD into its existing PD budget of \$350,000 annually. NAPLS has designed the PD needed as a "train the trainer" model thus decreasing the cost of the PD over time.

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 6/20/2016 to 9/30/2016

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

Upon award: media notification; board approvals/contracts signed; planning team gathers to identify specific dates and review strategies throughout the plan; finalize professional learning surveys & evaluation plan; weekly Project meetings during planning period to ensure all processes are in place for implementation; By 8/1/2016 submit final evaluation plan to ODE Teacher PD: Training and planning time for trainers with partners in July - September. Resources: Supplies & materials ordered through End-of-Year ordering procedures By 8/15/2016 Renovation: Solar house construction, installation and renovations underway immediately upon notification and nearing completion. Benchmarks by 9/30: Teacher PD for introduction to the solar house planned by Teacher trainers; renovation is student-ready, initial student learning experiences in Intro to Engineering and Environmental science courses are launched and embedded into curriculum: Pre/post of first E3 career awareness survey created; Student participation in STEM courses audit by HS course enrollment; and communication/key stakeholder engagement from all required officers, governing bodies completed. NAPLS will offer stipends to 3 teachers to share Project Management and work with stakeholder communication, coordinating resources, managing day/day project activities & budget. Superintendent and key project leaders will continue community outreach and planning efforts with OSU and business partners. Teacher participation will ensure staff buy-in; The Director of Communication will work with the key leadership team to develop a communication strategy which will include media releases, email blasts, announcements of program activities, etc. Board has been actively engaged in project and will continue. Key project leaders will update board at least quarterly.

22. Implementation (grant funded start-up activities)

a. Date Range 10/1/2016 to 6/30/2022

b. Scope of activities - include all specific completion benchmarks

Summer/Fall 16: Installation, construction, and renovation of solar house Summer/fall 16: Launch of project leadership team and professional development/curriculum development work begins which includes 3 Day Buck Institute PBL training for Central Ohio held in New Albany(NA). Fall/Winter 2016-17: OSU-Establish Advisory Group, PLTW training ongoing, CAYCI survey administration, OSU-Partnering on Engineering courses continues; OSU team - NAHS teachers develop experiential learning curricula begins Spring/Summer 2017: OSU-Partnering on Engineering courses; PLTW & PBL PD continues. By 9/30/17 & annually: CAYCI survey administration annually; Refine program plans based on evaluations quarterly through 6/30/22; Project Leadership Team meetings, evaluation, recognition Benchmarks to demonstrate success; Renovation student-ready; Pre/post E3 career awareness survey results across grades 2-12 Naviance Inventory annually to selected grades 6-12; Staff survey results on student engagement Projection data from state assessments/MAP for scheduling. Outcomes will include: Increase % students earning 4/5 on state science assessments; Improve % students who are interested in STEM careers on career interest inventory; Improve # student opportunities to earn college credit in STEM; Improve student participation in STEM courses; Participate in Youth Energy Summit; Improve AP Physics/Environmental Science participation rates/scores; Improve % students indicating interest in STEM careers on career inventory; evidence of multiple communications/opportunities for key stakeholder engagement; quarterly planning meetings to review data & refine processes; Teacher Project managers communicate with staff/ partners; Board receives quarterly reports from evaluator.

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

a. Date Range 6/20/16 to 6/30/2022

b. Scope of activities - include all specific completion benchmarks

By 9/1/2016 & annually through project execute evaluation plan approved by ODE including Annual project evaluation & fiscal reports Quarterly through Project end 6/30/2022. Quarterly project evaluation to assess PBL impact. Project Leadership Team quarterly planning to adjust based on evaluation & plan for sustainability. By 6/30/2019 through Project end 6/30/22, all science teachers in grades 2 - 12 are conducting PBL projects in their classrooms. Benchmarks to demonstrate success: renovation student-ready; Pre/post E3 career awareness survey results across grades 2-12 Naviance Inventory annually to selected grades 6-12; Staff survey results on student engagement; Projection data from state assessments/MAP used for scheduling; Increase % students earning 4/5 on state science assessments; Improve % students who are interested in STEM careers on career interest inventory; Improve # student opportunities to earn college credit in STEM; Improve student participation in STEM courses; Participate in Youth Energy Summit; host multiple school districts and community groups; improve AP Physics/Environmental Science participation rates/scores; communications/key stakeholder engagement including multiple collaborations with partners that provide training for teachers and opportunities for students outside NAPLS; Teacher Project Managers continue stakeholder engagement and report regularly to building staff; Dr. Tom Fry (Dynamix) outcome reporting throughout sustainability period; semi-annual board reports; administer and manage scope of work/ develop interdependent system of change. District admin sustain management during sustainability years to administer and manage scope of work & conduct effective data collection. NAPLS will provide required data for analysis & include project related surveys and other relevant data needed to effectively access and analyze data.

E) SUBSTANTIAL IMPACT AND LASTING VALUE

24. Describe the expected changes to the instructional and/or organizational practices in your institution.

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

Please enter your response below:

The partnership opportunities with The Ohio State University, Eastland Fairfield CTEC, Central Ohio corporations and community will greatly improve teacher efficiency & effectiveness as we improve student achievement in energy, engineering, & the environmental science pathways. Instructional changes: With The E3 Innovation, students will experience problem based inquiry in the real world context of a net zero energy house across the years of their school experience which will raise student achievement in math and science as well as expand the vision of a generation on their own role and future in STEM careers. The District expects these instructional practice changes to positively impact student achievement with the increased use of PBL. Through business & community partnerships, students will experience rigorous work based problems and access greater depth of college & career exploration opportunities. PBL and engineering program/resources will help teachers engage children in becoming responsible for their own learning and more deeply scaffold 21st century skills especially targeting communication, creativity, innovation, collaboration; problem solving, tenacity & grit. Organizational Changes: NAPLS anticipates the following organizational practices will change in ways that positively impact student achievement & reduce operational costs. The expanded relationships with OSU and central Ohio businesses will impact future curriculum design and create new and additional funding sources for ongoing evolution of the program and the lab facility. The 2-12th grade systemic approach will result in strong common language and expectations for rigor and relevance in science instruction. District is creating and expanding mutually beneficial relationships with partners to support & expand student learning opportunities & build career readiness skills important to employers that will continue for years to come and extend to students across the region.

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:

Name: Dr. Tom Fry Contact information: Dynamix LLC, 6617 Dublin Rd., Delaware, OH 43015; 614.218.1569; tom@dynamixllc.org

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

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

The evaluation will use a both qualitative & quantitative methods & data. Qualitative analysis will include student interest inventories, career awareness surveys, & staff engagement surveys. Quantitative analysis will include student & staff surveys, data analysis of student achievement both internally & compared to state & similar districts, AP participation data, data analysis of student performance on assessments, course enrollment data, college credits earned by students participating in project, data analysis of community partnerships, data analysis of teacher professional development outcomes, & data analysis of project efficiencies & productivities. Completeness of timeline, including scope of activities & clear benchmarks for evaluation (link to Question 9 data points) By 9/1/2016 and annually through project Annual student and staff surveys Annual review of fiscal reports Annual review of student course enrollment & achievement Quarterly through Project end 6/30/2022 Quarterly project evaluation to assess PBL system changes and impact Quarterly review of STEM course opportunities Project Leadership Team quarterly planning to adjust based on evaluation Process final analysis of progress, success or shortfall Ongoing formative annual evaluation submitted to the Board of Education & the ODE will continue beyond the grant period & will conclude with a summative program evaluation at the end of the 5 years. All reports will adhere to national standards of confidentiality protecting any personal information. Project team will summarize formative results of The E3 Innovation to be shared with community & Board of Education semi-annually. Sharing lessons learned across Ohio Annual summative results will be shared with ODE. Project team will submit proposals for state conferences & forums to share project progress.

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.

New Albany's model of experiential problem-solving & PBL lessons is designed to be replicated. The 2009 OSU Solar Decathlon building in NA will be reconstructed to be able to be used as a lab for students across central Ohio. This facility in combination with the 2012 OSU Solar Decathlon building on OSU campus will create experiential sites for learning in energy, engineering and the environment for the entire region. The district's work in outdoor learning spaces beyond the Solar House is replicable by other districts and the district can serve as a support to others. The teacher leader training is a one-time cost and results in the district being able to provide ongoing PD at reduced cost. Units/lessons will be available for public use and can be completed in a variety of settings, including classroom, Learning Lab or any natural environment. These lessons will be openly shared and training will be provided to other teachers outside the district. This model can also guide other district/university partnerships on how to integrate curriculum and college students into the K-12 program. In a comparable size school district, full replication of these innovations could take place over 1-2 years. The Dynamix LLC evaluation process will provide critical information to New Albany regarding process & implementation strengths/challenges so the work can be refined & scaled quickly. Other districts can model this program by building infrastructure that supports faculty as professional developers so teachers are supporting each other as they approach new instructional practices. New Albany plans to submit proposals for statewide conference presentations such as Ohio Innovative Learning Environments, Ohio Capital Conference. The district will host other districts and will readily share resources. OSU plans to submit journals for higher education. We anticipate industry partners sharing the work within their networks. Dynamix may submit journal articles/white papers as well.

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).

April Domine, Superintendent, New Albany Plain Local School District, May 6, 2016

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Consortium Contacts

No consortium contacts added yet. Please add a new consortium contact using the form below.

Partnerships

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Partnerships

First Name	Last Name	Telephone Number	Email Address	Organization Name	IRN	Address	Delete Contact
LingYing	Zhao	614-292-9448	zhao.119@osu.edu	The Ohio State University		2070 Neil Avenue, , Columbus, Ohio, 43210	
Tom	Fry, Ph.D.	614-218-1569	tom@dynamixllc.org	Dynamix LLC		6617 Dublin Road, , Delaware, Ohio, 43015	
Bill	Resch	614-264-9778	whresch@aol.com	Community Leader and Volunteer		5610 Morgan Road, , New Albany, Ohio, 43054	
Aimee	Kennedy	800-201-2011	kennedya@battelle.org	Battelle		505 King Ave., , Columbus, OH, 43201	
Tresa	Durkin	614-836-4530	tdurkin@efcts.us	Eastland Fairfield Career Center		4300 Amalgamated Place, , Groveport, OH, 43125	
Meera	Parthasarathy	614-855-8085	meera_parthasarathy@hotmail.com	Spatial Synergy Studio LLC		7574 Bevelhymer Road, New Albany, OH, 43054	
Michael	Triplett	614-477-5445	michael@carmenpartners.com	Carmen Partners		5061 Cloudberry Pass, , New Albany, OH, 43054	

Implementation Team

New Albany-Plain Local (046995) - Franklin County - 2017 - Straight A Fund - Rev 0 - Straight A Fund

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Implementation Team								
First Name	Last Name	Title	Responsibilities	Qualifications	Prior Relevant Experience	Education	% FTE on Project	Delete Contact
Marilyn	Troyer	Assistant Superintendent	Will identify key staff to manage the project details including the project leadership team in the development of curriculum and programming including monitoring progress and ensuring the grant is implemented with fidelity by the project leadership tem.	Over thirty years of experience in education including over fifteen years at the Ohio Department of Education leading major initiatives for school improvement and reform, working closely with USDOE, districts, higher education institutions and education non profits.	Extensive experience designing and implementing millions of dollars of state and federal grants and initiatives in education.	Doctorate in Education Policy & Leadership from OSU MA in Literacy - OSU BS in Elementary Education - OSU	5	
Pete	Barnes	5th grade science teacher	As a teacher leader in the project, Mr. Barnes will work with Dr. Troyer and the other teacher leaders to take the responsibilities of extended training in the use of the Solar House and in the fields of energy, engineering and environmental science. He will participate in collaboration with project partners as well as in trainings in order to design training for other teachers and lead teacher teams in building PBL units for use in the Solar House. He will work with the other teacher leaders and Dr. Troyer to handle project oversight & partnership development who will receive an annual stipend. This will include working with Dr. Troyer to manage project budget, regularly review progress, address barriers & ensure project	Fifth grade teacher in New Albany since 2004. 19 years total teaching experience. STEM related experience: former teacher co-chair of district STEM Academy exploration committee, co-leader of greenhouse, co-director of district science fair, teacher leader of Elementary Science Olympiad. Has positive relationships with district staff; strong project management and training skills .	former teacher co-chair of district STEM Academy exploration committee, co-leader of greenhouse, co-director of district science fair, teacher leader of Elementary Science Olympiad. Author of multiple children's books on STEM topics	B.A. College of William and Mary, 1996 M.Ed. Ohio State, 1999	5	

			<p>success. The teacher leaders will work as a team and be a resource to other teachers in the district and those who visit to use the Solar House. The team will also continue to reach out to new partners to provide new opportunities & experiences for teachers, students and community.</p>					
Chad	Schwinnen	Eastland Fairfield/NA Environmental Science Teacher	<p>As a teacher leader in the project, Mr. Schwinnen will work with Dr. Troyer and the other teacher leaders to take the responsibilities of extended training in the use of the Solar House and in the fields of energy, engineering and environmental science. He will participate in collaboration with project partners as well as in trainings in order to design training for other teachers and lead teacher teams in building PBL units for use in the Solar House. He will work with the other teacher leaders and Dr. Troyer to handle project oversight & partnership development who will receive an annual stipend. This will include working with Dr. Troyer to manage project budget, regularly review progress, address barriers & ensure project success. The teacher leaders will work as a team and be a resource to other teachers in the district and those who visit to use the Solar House. The team will also continue to reach out to new partners to provide new</p>	Teaching Biology, Environmental Science, and Environmental Research for 7 years.	Led the collaborative efforts regarding the NA Wetlands and the program between Columbus State, OSU, NAPLS and Eastland to use the outdoor learning facility and facilitate research across groups.	M.S. in Biology with a research focus on ecosystem functioning.	5	

			opportunities & experiences for teachers, students and community.					
Bill	Resch	Community Member	Liaison with OSU- College of Engineering and College of Architecture	Wetland and river restoration and renewable energy and the sustainable environment, consulting with other entities	Wetland assemble, design, wetland mitigation Negotiate Eastland/Career Center collaboration environmental and stream restoration	MA BA, The Ohio State University	5	
LingYing	Zhao	Associate Professor , The Ohio State University	Provide leadership and guidance through the high school course development	Food, Agricultural and Biological Engineering. Dr. Zhao's research goal is to discover knowledge and develop new technologies for effective management of indoor environment and air emissions from agriculture animal operations improve health and the environment, promote biogas generation, abate greenhouse effects and enhance competitiveness and sustainability of the animal production industries.	Research interests focus on air quality and bioenvironmental engineering control including measurement, modeling and mitigation of indoor environment air quality and emissions. Alternative environmental control system using renewable energy is a new area of Dr. Zhao's research.	MS/B China Agricultural University	5	
Tom	Fry	Dr.	Responsible for compiling data from all aspects of the project and producing reports that guide the progress of the project.	Dr. Fry has over twenty years in education, thirteen in which he was a director of data research and accountability. He has presented nationally regarding the use of student projections to drive instruction value-added analysis at the school and teacher level, and his dissertation explored the relationship between teacher value added data in reading and math and the Teacher Insight screening instrument.	Administrator responsible for data analysis and research for thirteen years in tow hi achieving school districts. Olentangy Local and Granville Exempted Village SD. The past two years he has worked with school districts across the state on data analysis and served as an external grant evaluator.	Doctorate in Educational Leadership form Ashland University, 2013	5	
Greg	Morris	Physics/Engineering	As a teacher leader	Led development of	I teach	B.S and M.S	5	

		Teacher	<p>in the project, Mr. Morris will work with Dr. Troyer and the other teacher leaders to take the responsibilities of extended training in the use of the Solar House and in the fields of energy, engineering and environmental science. He will participate in collaboration with project partners as well as in trainings in order to design training for other teachers and lead teacher teams in building PBL units for use in the Solar House. He will work with the other teacher leaders and Dr. Troyer to handle project oversight & partnership development who will receive an annual stipend. This will include working with Dr. Troyer to manage project budget, regularly review progress, address barriers & ensure project success. The teacher leaders will work as a team and be a resource to other teachers in the district and those who visit to use the Solar House. The team will also continue to reach out to new partners to provide new opportunities & experiences for teachers, students and community</p>	<p>blended learning approaches to Physics instruction, launched the district's engineering pathway and PLTW program. Recognized as 2015 Educators Voice Award - Teacher of the Year In the award, his principal wrote: "Greg's work at NAHS clearly demonstrates what this award is all about, his passion for teaching, constant focus on innovative practices, collaborative leadership within the Science Department and throughout the building has led to many unique learning opportunities for students. His approach to teaching and learning exemplifies what it means to create a student-centered classroom, especially in a demanding AP Physics course. He focuses on teaching students to think critically about how to solve problems using the skills and experiences they gain by applying the scientific method. Additionally, he embraces different instructional strategies to meet the needs of today's learners"</p>	<p>introductory engineering and helped author an OSU Educational Outreach and Engagement grant for Green Building and Solar Technologies. Establishing the STEM educational and monitoring station on the New Albany campus is directly related to this OSU grant.</p>	<p>degree as well as multiple graduate hours in multiple areas of Science and in Science education.</p>		
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