

Budget

Toledo (044909) - Lucas County - 2014 - Straight A Fund - Rev 0 - Straight A Fund - Application Number (115)

U.S.A.S. Fund #:

[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	0.00	202,500.00	0.00	202,500.00
Support Services		8,760.00	1,557.00	0.00	0.00	154,000.00	0.00	164,317.00
Governance/Admin		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Prof Development		0.00	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	0.00	0.00
Transportation		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total		8,760.00	1,557.00	0.00	0.00	356,500.00	0.00	366,817.00
Adjusted Allocation								0.00
Remaining								-366,817.00

Application

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

A) APPLICANT INFORMATION - General Information, Experience and Capacity

1. Project Title: Closing the Gap in Urban Education through Technology and Energy Conservation

2. Executive summary: Provide an executive summary of your project proposal and which goal(s) in question 9 you seek to achieve. Please limit your responses to no more than three sentences.

In the effort to close the gap in urban education through the use of classroom technology, the district will utilize an Educational Energy Conservation Dashboard and participate in energy-saving competitions. These resources will increase student achievement by using real-life data and experience to identify with energy conservation and gain a higher-level understanding of how the world works. The savings generated by the competitions will fund additional classroom technology that can be utilized for future competitions and integrated technology in the classroom and the program is self-sustaining through its ability to fund technology upgrade and additional programs through energy savings.

3645 3. Total Students Impacted:

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

First Name, last Name of contact for lead applicant: James Gault

Organizational name of lead applicant: Toledo Public Schools

Unique Identifier (IRN/Fed Tax ID): 044909

Address of lead applicant: 420 E. Manhattan Blvd. Toledo, Ohio 43608

Phone Number of lead applicant: 419-671-8200

Email Address of lead applicant: jgault@tps.org

5. Secondary applicant contact: - Provide the following information, if applicable:

First Name, last Name of contact for secondary applicant: N/A

Organizational name of secondary applicant: N/A

Unique Identifier (IRN/Fed Tax ID): N/A

Address of secondary applicant: N/A

Phone number of secondary applicant: N/A

Email address of secondary applicant: N/A

6. List all other participating entities by name: Provide the following information for each additional participating entity, if applicable: Mention First Name, Last Name, Organizational Name, Unique Identifier (IRN/Fed Tax ID), Address, Phone Number, Email Address of Contact for All Secondary Applicants in the box below.

Geoff HunterPalmer Conservation Consulting [redacted] 7110 W Central Ave. Toledo, OH 43617 419-517-0137 ghunter@palmerc2.com

7. Partnership and consortia agreements and letters of support: - (Click on the link below to upload necessary documents).

* Letters of support are for districts in academic or fiscal distress only. If school or district is in academic or fiscal distress and has a commission assigned, please include a resolution from the commission in support of the project.

* If a partnership or consortium will be established, please include the signed Straight A Description of Nature of Partnership or Description of Nature of Consortium Agreement.

[UploadGrantApplicationAttachment.aspx](#)

8. Please provide a brief description of the team or individuals responsible for the implementation of this project including relevant experience in other innovative projects. You should also include descriptions and experiences of partnering entities.

The team that will be implementing this project is made up of Toledo Public School's James (Jim) Gant, Business Manager and other district and school representatives. The innovative project will be implemented by Palmer Conservation Consulting, Energy Consultant: Jill Owed. Palmer Conservation has experience in control integration and applying for/project managing capital improvement projects such as House Bill 264. Palmer Conservation Consulting also acts as the energy consultant for several school districts and government entities throughout the state of Ohio.

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

9. Which of the stated Straight A Fund goals does the proposal aim to achieve? - (Check all that apply)

Student achievement

Spending reductions in the five-year fiscal forecast

Utilization of a greater share of resources in the classroom

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

New - never before implemented

Existing and researched-based - never implemented in your district or community school but proven successful in other educational environments

Mixed Concept - incorporates new and existing elements

Enhancing/Scale Up - elevating or expanding an effective program that is already implemented in your district, school, or consortia partnership

11. Describe the innovative project.

This project will center on the implementation and use of technology in the form of an Educational Energy Conservation Dashboard, in the classroom. This program has been specifically designed to engage, educate, motivate and empower students and teachers by providing the ability to visualize building energy consumption. Through this program, students learn about energy and energy management, they compare and share building energy and water use information and allow for innovative participation in energy conservation through friendly competitions. Competitions are held twice a year to see which schools can reduce their energy consumption the most. Financial savings from the energy competitions pay for technology and learning enhancement through the use of the Dashboard, classroom computers, learning software, training and real-life experiences. The savings generated provide sustainability of the program (two annual, four-week competitions) and fund the purchase of classroom technology (notebooks/laptops) that will be used for program participation as well as for future educational classroom needs. This program provides resources that help "Close the Gap" in education by providing additional technology and software that deliver a self-funding mechanism to provide educational enrichment and support parent-teacher-student communication. The Educational Energy Conservation Dashboard was recently implemented through the Green Schools Alliance (<http://www.greencupchallenge.net/energy.html>) with over 300 K-12 schools from across the US and around the world participating. Numerous colleges and university, such as, The Ohio State University and Oberlin College also participated in this challenge.

12. Describe how it will meet the goal(s) selected above. - If school/district receives school improvement funds/support, include a brief explanation of how this project will advance the improvement plan.

Student Achievement: This project will increase student achievement by using real-life data and experience to identify with energy conservation and gain a higher-level understanding of how the world works. Teachers will be able to incorporate technology into their daily curriculum and each student will benefit by gaining hands-on experience with research, data analysis (Dashboard) and real-life experiences. The Educational Energy Conservation Dashboard give students the ability to view resource consumption patterns and manipulate consumption data, making it an excellent tool for students and educators to better understand resource use in buildings. Spending reductions in the five-year fiscal forecast: All components of this project will fulfill this goal by reducing the five-year fiscal forecast. The Educational Energy Conservation Dashboard will raise student, teacher and staff awareness of utility usage and will provide opportunities for competitions that will lower overall energy usage and associated costs. The awareness will not be limited to the competitions, but will carry on when competitions are not in effect because that awareness will be heightened. Utility Savings to the district will be ongoing including any innovative opportunities identified by the students and implemented by the district as a result of the competitions. These savings will be tracked and documented. The savings achieved will be budgeted to support the ongoing costs to continue the program as well as support the addition of other schools to the program. The savings generated through the program also provide a funding mechanism for adding technology to the classroom they may not have otherwise been available. Utilization of a greater share of resources in the classroom: By adding the Educational Energy Conservation Dashboard,

Teachers will have access to local and regional competitions regarding the sustainability of energy. The Dashboard is an effective tool for making data collection and analysis "come alive" in unique ways for science, technology, engineering and mathematics. When students are asked to interpret and analyze patterns of data that reflect their own behavior in buildings in which they learn, play, work or live, exercises become especially meaningful and inspiring. The Dashboard provides numerous examples and lesson plans that have been incorporated in K-12 classrooms around the country. The Laptops included in this program will be utilized for daily interaction and assignments during the competitions as well as classroom activities beyond the competition. The value of the laptops also assist in "bridging the gap" for students who may otherwise have limited access to technology. The Laptops will also serve as a classroom tool to integrate the State of Ohio's model curriculum.

C) SUSTAINABILITY - Planning for ongoing funding of the project, cost breakdown

13. Financial Documentation - All applicants must enter or upload the following supporting information. Responses should refer to specific information in the financial documents when applicable:

a. Enter a project budget

b. Upload the Straight A Financial Impact Template forecasting the expected changes to the five-year forecast resulting from implementation of this project. If applying as a consortia or partnership, please include the five-year forecasts of each school district, community school or STEM school member for review.

c. If subsection (b) is not applicable, please explain why, in addition to how the project will demonstrate sustainability and impact.

Straight A Financial Impact Template is uploaded.

14. What is the total cost for implementing the innovative project?

366,817.00 * Total project cost

* Provide a brief narrative explanation of the overall budget. The narrative should include the source and amount of other funds that may be used to support this concept (e.g., Title I funding, RttT money, local funding, foundation support, etc.), and provide details on the cost of items included in the budget (i.e. staff counts and salary/benefits, equipment to be purchased and cost, etc).

See attached "Toledo Public Schools Financial Breakdown" document.

15. What **new/recurring costs** of your innovative project will continue once the grant has expired? If there are no new/recurring costs, please explain why.

0.00 * Specific amount of new/recurring cost (annual cost after project is implemented)

* Narrative explanation/rationale: Provide details on the cost of items included in the budget (i.e. staff counts and salary/benefits, equipment to be purchased and cost, etc.). If there are no new/recurring costs, please explain why.

Over the course of the next five years, the energy competitions will generate enough savings that the project will fund itself. The district will be able to use the savings generated to pay for Phase II of software licensing as well as the repairs and maintenance required for technology.

16. Are there **expected savings** that may result from the implementation of the innovative project?

827,000.00 * Specific amount of expected savings (annual)

* Narrative explanation/rationale: Provide details on the anticipated savings (i.e. staff counts and salary/benefits, equipment to be purchased and cost, etc.)

Projected annual utility savings is \$125,000 annually for five years. A one time technology savings of \$202,000 due to a reduction in investment of classroom computers.

17. Provide a brief explanation of how the project is self-sustaining. If there are ongoing costs associated with the project after the term of the grant, this explanation should provide details on the cost reductions that will be made that are at least equal to the amount of new/recurring costs detailed above. If there are no new/recurring costs, explain in detail how this project will sustain itself beyond the life of the grant.

The Program is self-sustaining based on the fact that the initial funding covers the "one time" cost for setup and necessary technology. Annual competitions can be held without any additional cost to the district. The Energy savings generated from each competition provide the funding to add additional schools and classrooms to the program. This would include the addition of site metering, kiosks and classroom laptops or smart notebooks as directed by the district.

D) IMPLEMENTATION - Timeline, communication and contingency planning

18. Fill in the appropriate dates and an explanation of the timeline for the successful implementation of this project. In each explanation, be sure to briefly describe the largest barriers that could derail your concept or timeline for implementation and your plan to proactively mitigate such barriers. In addition, the narrative should list the stakeholders that will be engaged during that stage of the project and describe the communication that occurred as the application was developed.

Describe the ongoing communication plan with the stakeholders as the project is implemented. (Stakeholders can include parents, community leaders, foundation support and businesses, as well as educational personnel in the affected entities.)

* Proposal Timeline Dates

Plan (MM/DD/YYYY): 11/01/2013

* Narrative explanation

The Program has been developed, written and ready for implementation. Five K-8 Schools have been identified and Energy Baselines are available. Competition documentation and training are available

Implement (MM/DD/YYYY): 01/01/2014

* Narrative explanation

The project will be installed in January and district will begin to collect baseline data. The first 4-week competition will be held in April, 2014.

Summative evaluation (MM/DD/YYYY): 06/01/2014

* Narrative explanation

Results are provided in real-time for the energy impact to the district. A complete review and evaluation of the results would be completed during the month of May and delivered to the Board of Education in June. Technology provided under this application would also assist in supporting State testing as well - keyboard entry.

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

Within the classroom, this program will provide instructional and enrichment opportunities, specifically for Science and Math. The program comes with sample lessons that teachers can modify to include new technology. Teachers will have the opportunity to create individual, group or school-wide lessons for specific days such as Earth Day or Ozone Action Days. The results are available and displayed within each building via Kiosk and are accessible for viewing on the districts Web site. Students are able to view their efforts via web access in real-time. An initial Pep Rally/Rollout is provided to explain the program, competition, awards and strategies that impact results. Laptops and smart devices are provided and readied over Winter Break so there is no interruption with regularly scheduled class plans or activities. Classroom participation options and class plans are implemented at the discretion of the teacher. Each participating school receives program promotion materials that can be utilized during the implementation period. Best practices are shared and rewarded at the end of each competition. Understanding the pressure that exists with the new State Curriculum and testing requirements, the objective of the program is make it simple for teacher and student participation and implementation.

E) SUBSTANTIAL IMPACT AND LASTING VALUE - Impact, evaluation and replication

20. Describe the rationale, research or past success that supports the innovative project and its impact on student achievement, spending reduction in the five-year fiscal forecast or utilization of a greater share of resources in the classroom.

Impact on Student achievement The primary rationale behind the program is to encourage and cultivate sustainable student behavior and student engagement through fun learning and competition. During a four week event, Schools take a team approach (students, teachers, custodians and administrators) and work together to reduce wasteful behaviors while learning about energy and energy conservation - while having fun doing it. The program provides a secondary benefit by which the energy savings help sustain the program and continue to support adding technology to the classroom which helps "Bridge the Gap" in learning for students who have limited access or financial means to technology. See NEA policy brief which addresses the ongoing challenge of access, adequacy and equity in student achievement in schools: http://www.nea.org/assets/docs/PB19_Technology08.pdf. Impact on five-year fiscal forecast Program generates annual energy savings which reduces the Districts Utility budget. Savings will be applied to adding technology to the classroom for program engagement and ongoing educational support. This "Self-funding" opportunity will also relieve the district of capital dollars from the technology budget. The applied grant monies will be used to support initial training, project admin and promotional costs as well as necessary hardware and software needed to initiate the program. Greater share of resources in the classroom Laptops will be used by students to participate in the energy challenge as needed to learn, develop and implement energy saving strategies (Science based learning) as well as track and report. These same laptops will continue to be used for classroom learning as directed by the district and classroom teachers. Past and Current Success This

program/Project has been successfully implemented nationally via numerous competitions (New York Public Schools) http://schools.nyc.gov/Offices/mediarelations/NewsandSpeeches/2012-2013/042213_earthdaychancellorcongratulates.htm. This program is also being implemented in the State of California under prop 39 and numerous other K-12 and higher level education institutions <http://www.prweb.com/releases/2013/2/prweb10386854.htm>

21. Is this project able to be replicated in other districts in Ohio?

Yes

No

22. If so, how?

The objective of the program is to eventually include all schools within the Toledo Public District. The program could also be implemented throughout the State of Ohio. Success of this project has been documented in numerous districts, colleges and universities: (Green Alliance, National College Cup Challenge, Prop39 State of California). Lesson plans and supporting classroom resources can be shared between districts. Technology (Utility Metering) exist in many of the districts as the result of the OFCC (OSFC) new buildings program. This could reduce the initial cost to implement considerably. Statewide and District wide Utility Dashboard could also allow for competitions between school districts statewide with awards for innovation, classroom achievement and savings achievement.

23. Describe the substantial value and lasting impact that the project hopes to achieve.

The goal of the project is to increase student achievement through the integrated use of technology and environmental awareness. The use of technology and engaging classroom experiences will bring substantial value and lasting impact to students, teachers and staff by introducing real-life experiences and encouraging students to be part of something "bigger". The Dashboard is designed to instill in students the importance of sustainability and the belief their actions matter. This program has been designed to include students, teachers, staff and the community.

24. What are the specific benchmarks related to the fund goals identified in question 9 that the project aims to achieve in five years? Include any other anticipated outcomes of the project that you hope to achieve that may not be easily benchmarked.

The project will increase student achievement through technology, using the Educational Energy Conservation Dashboard and the added technology within each school. The project will decrease overall utility usage and costs by using the real-time data on the Dashboard to monitor day to day usage, ultimately using less electricity, water and natural gas. This will be benchmarked on the dashboard and easily read by all necessary parties. The district will collect baseline data throughout February and March and begin their competition in April. They will be able to document savings based on real-time data, following the implementation of the project over the summer. There are no components of the project that will not be easily benchmarked. The project also provides resources, in the form of technology and software, for education use in classrooms.

25. Describe the plan to evaluate the impact of the concept, strategy or approaches used.

* Include the method by which progress toward short- and long-term objectives will be measured. (This section should include the types of data to be collected, the formative outputs and outcomes and the systems in place to track the program's progress).

* Include the method, process and/or procedure by which the program will modify or change the program plan if measured progress is insufficient to meet program objectives.

The Educational Energy Conservation Dashboard will provide real-time measurement and verification of utility usage for Facility Director, and can be used as an educational resource within the classroom. Included in the Dashboard is an application of real-time data collection. The Facility Director, as well as building maintenance will have the ability to control building usage from a mechanical standpoint. This will be measured by analysis of utility usage and monthly bills. The success and energy savings of competitions will be measured through this technology. The Educational Energy Conservation Dashboard was recently implemented through the Green Schools Alliance (<http://www.greencupchallenge.net/energy.html>), where over 300 K-12 schools from across the US and around the world, as well as numerous colleges and universities such as The Ohio State University and Oberlin College have competed in energy saving competitions. Each building will compete in two, four-week energy competitions that will educate, encourage and bring awareness to the reduction of utility usage. The progress will be measured short term through the collection of baseline data and the first year's competitions. Long term, the project will be measured based on the continued reduction of utility usage and savings. The program will be monitored and evaluated before, during and after competitions. The program will be modified and other methods of implementation will be reviewed with the curriculum director and the facility director to ensure that there are continued savings and active participation.

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 timeframe. The Governing Board of the Straight A Fund reserves the right to conduct evaluation of the plan and request additional information in the form of data, surveys, interviews, focus groups, and any other related data to the legislature, governor, and other interested parties for an overall evaluation of the Straight A Fund.

PROGRAM ASSURANCES: I agree, on behalf of this applicant agency and/or all identified partners to abide by all assurances outlined in the Assurance section of the CCIP. In the box below, enter "I Accept" and indicate your name, title, agency/organization and today's date.

I Agree James Gault Transformation Leader Toledo Public Schools 10/24/2013