

Budget

Carrollton Exempted Village (045278) - Carroll County - 2014 - Straight A Fund - Rev 0 - Straight A Fund - Application Number (443)

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		100,000.00	16,000.00	200,000.00	25,000.00	552,500.00	0.00	893,500.00
Support Services		0.00	0.00	447,000.00	0.00	0.00	0.00	447,000.00
Governance/Admin		0.00	0.00	36,000.00	0.00	0.00	0.00	36,000.00
Prof Development		2,000.00	400.00	55,000.00	6,200.00	0.00	0.00	63,600.00
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	20,000.00	0.00	20,000.00
Facilities		0.00	0.00	0.00	0.00	850,000.00	0.00	850,000.00
Transportation		0.00	0.00	750,000.00	0.00	1,000,000.00	0.00	1,750,000.00
Total		102,000.00	16,400.00	1,488,000.00	31,200.00	2,422,500.00	0.00	4,060,100.00
Adjusted Allocation								0.00
Remaining								-4,060,100.00

Application

Carrollton Exempted Village (045278) - Carroll County - 2014 - Straight A Fund - Rev 0 - Straight A Fund - Application Number (443)

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:POWER - Providing Opportunities With Extraordinary Results

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.

Carrollton Exempted Village School District serves nearly 2,300 students in grades K thru 12 in communities throughout rural Carroll County, OH (population 29,000). On the most recent state report card, the district received an Excellent with Distinction. There are no postsecondary main campuses or joint vocational schools located in the county. Despite retaining a stable population, the district has responsibly cut over \$6.3 million in the last decade (nearly 25 percent the overall operating budget) while maintaining excellent academics and programs. These cuts have driven the closing of three elementary schools, a reduction in teachers and administrators, and elimination of 15 bus routes. Without additional efficiency measures, the district will face a deficit in 2015. The POWER project aims to leverage partnerships and resources in the Carroll County energy and agricultural sectors to improve opportunities for students. Carroll County is experiencing unprecedented growth due to the rapid expansion of the shale economy. Carroll County has more wells (333) than any other county in Ohio and more than the next five largest producing counties combined. Carrollton's streets are literally jammed with energy industry representatives. It is estimated that nearly 95 percent of Carroll County land is under lease to an energy company. International pipeline connectivity has occurred in the county and a new \$750 million energy conversion plant is due for completion in 2017. This proposal focuses on one major objective - to engage the energy and agriculture industries in new symbiotic relationships supporting enhancements for students. This bold challenge is to create connections with these industries and retain revenue in the district that can be leveraged to benefit students, not only in the Carrollton school district, but throughout Ohio, the United States, and globally! Two Straight A Fund goals are addressed in this proposal: - Student achievement - Significant advancement to utilize a greater share of resources in the classroom Three strategies are proposed: - Strategy 1: Significantly partner with energy industry businesses to create an Energy Resource Dynamics program that establishes new pathways for students leading to jobs and postsecondary opportunities in the energy field. - Strategy 2: Enhance project-based STEM education to prepare all students for career and college readiness in engineering, agriculture, and safety. - Strategy 3: Reduce operating costs by becoming a leader in the use of lower-cost natural gas technologies and distance/blended learning technologies. There is major emphasis on emplacing systems and discipline enabling performance management, continuous improvement, and evaluation. A primary challenge is a lack of in-house capacity to organize these new systems and protocols. As such, new systems will be developed and implemented in partnership with Battelle for Kids and New Growth Group. One goal of engaging external service providers is to develop high quality systems that are sustainable. To accomplish this, the external service providers will be required to provide professional development services to teachers and staff as part of their scopes of work. The total proposed budget is \$4,060,100. The conservative estimate is that the project will save the district \$215,000 annually. This project is designed to be entirely sustainable. Nearly all costs are one-time expenditures for curriculum upgrades, facilities upgrades, bus conversion, technology purchases, and professional development to support adoption of new curricula. The ongoing new costs totaling \$36,000 will support the newly created POWER Coordinator position. The cost of the position will be sustainable due to savings in other aspects of the project.

2300 3. Total Students Impacted:

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

First Name, last Name of contact for lead applicant: Edward J. Robinson

Organizational name of lead applicant: Carrollton Exempted Village School District (CEVSD)

Unique Identifier (IRN/Fed Tax ID): 045278

Address of lead applicant: 252 N. Third St. Carrollton, OH. 44615

Phone Number of lead applicant: 330-627-2181

Email Address of lead applicant: ed.robinson@carrolltonschools.org

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

First Name, last Name of contact for secondary applicant: Dr. David Quattrochi

Organizational name of secondary applicant: Carrollton Exempted Village School District (CEVSD)

Unique Identifier (IRN/Fed Tax ID): 045278

Address of secondary applicant: 252 N. Third St. Carrollton, OH. 44615

Phone number of secondary applicant: 330-627-2181

Email address of secondary applicant: david.quattrochi@carrolltonschools.org

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.

Jim Mahoney-Executive Director Battelle for Kids Tax-ID: [REDACTED] 1160 Dublin Rd. Ste. 500 Columbus, OH 43215 jmahoney@BattelleforKids.org Kelly Sedlak Agricultural, Natural Resource, 4H Educator The Ohio State University-Extension Tax-ID: [REDACTED] 613 High St. Carrollton, OH 44615 330-627-4310 sedlak.19@osu.edu James Baber, PhD-Executive Vice President for Academic and Student Affairs Eastern Gateway Community College Tax-ID: [REDACTED] 4000 Sunset Blvd Steubenville, OH 43952 740-264-5591 jbaber@egcc.edu Todd Davis-Director Ohio FFA Camps, Inc. Tax-ID 31-6035993 3266 Dyewood Rd.SW Carrollton,OH 44615 330-627-2208 tdavis@wildblue.net Dave Zehala-President Plug Smart Energy Services Tax-ID: [REDACTED] 1275 Kinnear Rd. Ste. 229 Columbus, OH 43212 800-518-5576 dave.zehala@plugsmart.com Terry Mulhern- Chief Operating Officer EMG- Epiphany Management Group Tax ID: [REDACTED] 526 S. Main St. Akron,OH. 44311 216-469-8851 tmulhern@epiphanymgmt.com Jonathan Winslow - Project Manager Carroll County Energy LLC Tax ID: [REDACTED] 31 Milk Street Ste. 1001 Boston, MA 02109 617-456-2208 jwinslow@carrollcountenergy.com Dewey Chapman, Superintendent Portage County Educational Service Center IRN#: 049163 326 E.Main St. Ravenna, OH 44266 330-297-1436 dchapman@portage-esc.org Chris Spence-Principal New Growth Group TaxID: [REDACTED] 1788 Wilton Rd. Cleveland Heights, OH 44118 216-767-6262 cspence@newgrowthplanners.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 POWER project aims to leverage partnerships and resources in the Carroll County and Utica Shale energy and agricultural sectors to improve opportunities for students. The project team reflects new partnership relationships between Pre/K-12 and postsecondary education, energy and agricultural businesses, and other critical community partners. Carrollton Exempted Village School District (CEVSD) will be the anchor partner providing project management and overall accountability. Project Management Team: - Dr. David Quattrochi, Superintendent, CEVSD; Dr. Quattrochi will chair the POWER Executive Committee and be overall responsible for the implementation and continuous improvement of the POWER initiative. -Edward Robinson, Director of Programs, CEVSD; Mr. Robinson will manage community relations, partner engagement, and communications. Additionally, he will supervise the POWER Coordinator and provide leadership for project teams ensuring activities, timelines, and budgets are met. Mr. Robinson has extensive administrative, teaching, and leadership experiences in comprehensive and career-technical public school settings for 27 years. -Dan Kirk, POWER Coordinator; Dan, a retired agriculture educator, will provide full-time staffing to the POWER initiative. Responsibilities include facilitating activities, timelines, reporting, resource development, and fiscal accountability. Partnership agreements: -Eastern Gateway Community College (EGCC) is a two-year college located 45 minutes from CEVSD in Steubenville, OH. They will assist to develop dual enrollment stackable certificates and distance/blended learning curricula and aid in employer engagement. -Carroll County Energy is a local subsidiary of Boston-based Advanced Power. They are building a \$750 million power conversion plant in Carroll County due for completion in 2015. They will assist the design of energy and STEM curricula and contribute general resources. -The Ohio State University Extension provides community education and research to farmers and communities in Carroll County. They will assist curriculum development in STEM agriculture. -Epiphany Management Group provides information technology support to K-12 school districts. They will assist in the installation, operation, and maintenance of digital and distance/blended learning technologies. -Battelle for Kids is a technical assistance and research organization that provides strategic support to K-12 districts improving educator effectiveness and stakeholder communication. They will support strategic communications and performance management efforts. -New Growth Group provides formative and impact evaluations of K-12, postsecondary, and workforce development initiatives. They will provide external evaluation support for this initiative. -Portage Educational Service Center provides technical assistance and professional development to K-12 districts on curriculum innovation and technology implementation. They will contribute technical assistance and teacher professional development. -Future Farmers of America Camp Muskingum provides STEM education camps focusing on agriculture, natural resources, and conservation. They will assist in curriculum development in STEM agriculture. -PlugSmart is an energy services company that provides, among other services, diesel-to-natural gas vehicular conversions. Team members close to the project include: -Chesapeake Energy, an oil and gas drilling company operating a majority of wells in the county, will assist the design of energy and STEM curricula and contribute general resources. -Carroll County Farm Bureau, an association of farmers and land owners in Carroll County, will assist the design of energy and STEM curricula and contribute general resources. -Bob Givens is a consultant who developed Ohio's first high school oil and gas technology program and an energy stackable, dual enrollment curricula for the Marlington School District in Stark County, 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.

CEVSD serves 2,300 students in grades P-K thru 12 in communities throughout rural Carroll County, OH. On the most recent state report card, the district received an Excellent with Distinction. A once-in-a-lifetime opportunity has arisen in the district. CEVSD is the epicenter of the Utica Shale Play in Ohio. Carroll County has more wells (333) than any other county in Ohio and more than the next five largest oil and gas producing counties combined. Carrollton's streets are literally jammed with energy industry representatives. This proposal focuses on one major goal - to engage the energy and agriculture industries in new symbiotic relationships supporting enhancements for students. The challenge is to create connections with these industries and retain revenue in the district that can be leveraged to benefit not only Carrollton students, but students digitally throughout Ohio. Three strategies are proposed: Strategy 1: Significantly partner with energy industry businesses to create an Energy Resource Dynamics program in Appendix C (Uploaded question #7/docs to view) that establishes new pathways for students leading to jobs and postsecondary opportunities in the energy field. There is untapped potential to innovate new relationships with energy businesses to drive instructional enhancements for students and leverage industry interests to attract investments in schools. We propose to: - Leverage postsecondary stackable credential models to provide new dual enrollment postsecondary options for students leading to credentials and jobs in the energy industry. - Formalize a venue for businesses to partner with education, including postsecondary, to communicate and address workforce challenges. These efforts will be aligned with energy partnerships throughout this region of Ohio. Strategy 2: Enhance project-based STEM education to prepare all students for career and college readiness in engineering, agriculture, and safety. CEVSD proposes create three new STEM curricula. Substantial partnerships and resources are already in place to develop and implement programs and curricula immediately. -The STEM School of Engineering will enhance higher education readiness with a focus on engineering. This will include project-based learning focusing on energy including sustainability, environmental responsibility, alternative energy, and oil and gas. -The STEM School of Agriculture will leverage the growing fortunes of farmers resulting from land leases with energy companies and partnerships with the OSU Extension and FFA Camp Muskingum to create a 21st century farm on CEVSD grounds. CEVSD has 160 acres of unused land on which we propose to establish a Future Farmers of America farm. The curriculum will incorporate land and resource management, digital agriculture management, and bio-sustainability. -The STEM School of Safety will leverage growing local demand for individuals with environmental safety training. CEVSD is immediately prepared to partner with EGCC to offer environmental ground water education in partnership with Operating Training Committee of Ohio (OTCO) - Ohio's only certified water quality training organization. Additionally, curricula will incorporate basic safety certifications such as CPR, First Aid, SafeLandUSA, OSHA 10 and OSHA 30. Strategy 3: Reduce operating costs by becoming a leader in the use of lower-cost natural gas technologies and distance/blended learning technologies. -CEVSD is currently permitted to drill a natural gas well on school grounds. We propose to convert our bus fleet to run on Compressed Natural Gas (CNG). We estimate that this may save our district 50 percent (or \$150,000 annually) in fuel costs. --Carrollton is a 45-minute drive from the nearest postsecondary main campus or vocational school. We propose to engage teachers and re-envision instructional approaches that enhance distance and blended learning enabling students to take advantage of interactive, remote opportunities.

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.

A logic model is included in Appendix A (Uploaded in question #7/documents to view) depicting mechanisms that will produce outcomes addressing the goals identified above. Narratively, the outcomes produced by the proposed strategies are: Straight A Fund Goal #1: Student achievement; All three strategies will enable CEVSD to improve student achievement. Thirty-five percent of CEVSD graduates do not go to college indicating an opportunity to enhance postsecondary connectivity for students, as well as, enable better career trajectories for workforce-bound students. Strategy 1 (Energy Resource Dynamics program) brings postsecondary programs into the high school to accelerate education leading to good paying, high demand energy jobs and accelerated postsecondary completion. The long-term outcomes of this strategy will be 40 students enrolled in ERD programs per year, 30 completers per year of ERD dual enrollment postsecondary certificates at the time of high school graduation. Additional outcomes measured through the continuous improvement and third-party evaluation will include postsecondary credential attainment, job attainment in the energy industry, and earnings. Strategy 2 (enhance project-based STEM education) invests in innovative project-based STEM curricula leading to improved student performance in STEM disciplines, including science and math scores. The long-term outcomes are improved standardized test scores district wide, and more students enrolled in postsecondary STEM programs. Strategy 3 (reduced operating costs, including distance learning) seeks "to do more with less" by incorporating distance and blended learning opportunities for students, not only in Carrollton, but globally. These strategies will not displace face-to-face instruction, rather augment it with opportunities for students to engage in subjects that were previously inaccessible. Teachers will be engaged to fundamentally change education delivery utilizing new technologies. Straight A Fund Goal #3: Significant advancement to utilize a greater share of resources in the classroom All three strategies will enable CEVSD to utilize a greater share of resources in the classroom. Strategy 1 (Energy Resource Dynamics) and Strategy 2 (enhance project-based STEM education) will leverage relationships with employers and community partners to attract new resources into the classroom. Examples include donated equipment, student internships, and subject matter experts who can contribute to project-based program development and instruction. A goal has been set in partnering with local businesses on project-based learning environments to attract \$25,000 of donated resources into the classroom. Strategy 3 (reduce operating costs) will enable a reallocation of existing funds. As stated previously, the CNG conversion project is estimated to save the district \$150,000 annually, which will be used to support instruction in CEVSD classrooms. Additionally, the introduction of distance technologies into classroom is projected to save the district \$20,000 annually due to savings from reducing the number of busses used to transport students to/from Buckeye Career Center from two to one. Finally, we project that the agricultural activities proposed in the grant will reduce food service costs by \$20,000. While there is no estimate for the impact on resource allocation, CEVSD envisions significant emphasis to advance and improve systems for performance management, continuous improvement, and evaluation. Battelle for Kids and New Growth Group are engaged as strategic partners in POWER to assist in building out and implementing data collection and performance management systems. The intent of these efforts is to increase the efficiency of resource allocation focusing on "doing more with less" and investing in effective strategies. These partners will assist in the development and training of teachers and staff to ensure sustainability of systems.

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.
n/a

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

4,060,100.00 * 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).

Instruction: Total \$893,500 - Salaries (\$100,000): There will be a total of 20 instructors at \$5000 each used to customize and design energy and STEM curricula in partnership with postsecondary partners and Project Lead the Way staff; \$5,000 x 20 = \$100,000 - Fringe (\$16,000) is calculated at 16%; \$100,000 x 16% = \$16,000 - Purchased Services (\$200,000): Project Lead the Way is a provider of STEM curricula. They are included as a Purchased Service @ \$200,000; - Supplies (\$25,000): Instructional supplies - Capital Outlay (\$552,500): 200 computers (\$280,000), 5 Smartboards (\$27,500) installation and wiring (\$120,000), furniture (\$125,000) Support Services: Total \$447,000 - Purchased Services (\$447,000): o \$167,000 is budgeted for technical support for new information technology for 1 year; will be sustained with existing funds thereafter o Communications Services (\$100,000): \$100,000 is for strategic counsel and implementation support of the collateral identified in phases 1 through 5 of the plan in collaboration with all partners. o Performance Management Services (\$100,000): \$100,000 is for online performance management courses, discovery and design of performance management processes, development of response to data protocols, and ongoing consulting to support the effective management of continuous improvement and performance management efforts. o Third-party formative and summative evaluation services (\$60,000) o EGCC faculty are budget \$20,000 to cover release time for faculty to develop curricula and dual enrollment agreements with CEVSD Governance and Administration: Total \$36,000 - Purchased Services (\$36,000): A 0.5 FTE POWER Coordinator will be contracted through Portage County Education Service Center. Professional Development: Total \$63,600 - Salaries (\$2,000): Substitute teachers while regular teachers undergo professional development - Fringe (\$400): 20% * \$2,000 = \$400 - Purchased Services (\$55,000): Portage County Education Services Center will provide professional development services to teachers on STEM education and project-based learning - Supplies (\$6,200): Supplies for professional development instruction Family/ Community: n/a Safety - - Capital Outlay (\$20,000) o Security cameras, video equipment, and software (\$20,000) Facilities: Total \$850,000 - Capital Outlay (\$850,000): o A structural engineering lab will be retrofitted in an existing or new facility to support STEM engineering (\$700,000); 6 structural analysis and design stations (\$315,750), building retrofit (\$61,250), installation, plumbing, wiring, and infrastructure (\$295,000), furniture (\$28,000) o A high tunnel/ greenhouse will be constructed to support STEM farming (\$50,000) o Trails, kiosks, and basic shelters will be built on CEVSD's 160 acres creating access to farming, sustainability, and arboretum instructional sites and basic overhead coverage for inclement weather instruction (\$100,000) Transportation - \$1,750,000 - Purchased services (\$750,000) o \$750,000 is budget for conversion of bus fleet to run on Compressed Natural Gas; \$30,000 per bus * 25 buses - Capital Outlay (\$1,000,000): o A new Compressed Natural Gas fueling station will be constructed to fuel CEVSD's bus fleet from the district's own well (\$1,000,000). Engineering and construction (\$300,000), ventilation, gas dryers, compressors, and high pressure storage systems (\$600,000), fuel dispensers (\$100,000)

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.

36,000.00 * 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.

The ongoing new cost will total \$36,000 per year: o Governance/ administration: Purchased Services of \$60,000 for POWER Coordinator through the Portage Educational Service Center. - Other recurring costs will be absorbed by CEVSD's annual budget. For example, supplies, and supportive services such as contracted services for technology maintenance (\$25,000 per year), bus fleet maintenance (\$100,000 per year), and facilities maintenance are already budgeted in the district's annual budget. This project is designed to be entirely sustainable. Nearly all costs are one-time expenditures for curriculum upgrades, facilities upgrades, bus conversion, technology purchases, and professional development to support adoption of new curricula. The ongoing new costs totaling \$36,000 will support the newly created POWER Coordinator position. The POWER Coordinator is an ongoing necessity to cultivate and maintain relationships with energy and agriculture industry employers in Carroll County. Additionally, this position will ensure connectivity and alignment with energy and agriculture workforce and education projects in other regions of Ohio. The cost of the position will be sustainable due to savings in other aspects of the project.

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

215,000.00 * 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.)

The conservative estimate is that project will save the district \$215,000 annually. The savings come from a reduction in transportation and fuel costs, food costs, and leveraged investments from business partners. The installation of distance learning technologies will reduce the number of daily bus routes from CEVSD to Buckeye Joint Vocational School from two to one, saving the school district \$20,000 annually from reduced fuel usage, maintenance, and driver cost. The price of compressed natural gas is 50 percent lower than that of diesel fuel, which the CEVSD bus fleet currently uses. A 50 percent reduction in fuel costs would save the district \$150,000 per year. CEVSD is currently negotiating with Chesapeake Energy for use of free or reduced price natural gas from the well soon to be drilled on our grounds, which could reduce costs further. We estimate a yield from the agricultural program - Produce in the form of fruits, vegetables, and possibly dairy - that will offset \$20,000 food costs annually either through sales in the community or direct farm-to-school food provision. Additionally, although it is not reflected in the projection of financial impact, POWER is setting a strategic goal to attain \$25,000 annually in direct or leveraged resources from industry partners to support educational delivery. Based on verbal agreements, we anticipate this will come in the form of supply donations for energy and agriculture programs and volunteer support to operate the 21st Century Farm program, which will displace expenses from other science programs.

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.

As stated above, this project is designed to be entirely sustainable. Nearly all costs are one-time expenditures for curriculum upgrades, facilities upgrades, bus conversion, technology purchases, and professional development to support adoption of new curricula. The ongoing new costs totaling \$36,000 will support the newly created POWER Coordinator position. The POWER Coordinator is an ongoing necessity to cultivate and maintain relationships with energy industry employers in Carroll County and convene the POWER Executive Committee described in response to Item 18 below. Additionally, this position will ensure connectivity and alignment with energy sector education, postsecondary, and workforce projects in other regions of Ohio. The cost of the position will be sustainable due to savings anticipated following the conversion of the bus fleet to Compressed Natural Gas.

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): 06/30/2014

* Narrative explanation

The Plan stage will be complete by the end of the 2013/2014 school year. There is tremendous momentum and immediate readiness among partnering organizations to plan and implement. Nonetheless, there are aspects of the proposal that will require aggressive planning in order to implement by the start of the 2014/2015 school year. To mitigate this challenge, each partnering organization has been engaged in the planning of this initiative, roles and responsibilities have been clarified for each. Additionally, project leaders within each organization have been identified and project scopes have been communicated. - By 1/15/14, Assign project management and project leadership positions - By 1/31/14, Establish procedures for project implementation and accountability - By 1/31/14, Innovation teams begin facilitation - By 2/28/14, Implement communication protocols and guidelines - By 5/1/14, Strategy designs and budgets completed - By 6/30/14, Supplies and equipment ordered, supportive services and contractors procured, remaining funds encumbered

Implement (MM/DD/YYYY): 08/01/2014

* Narrative explanation

A two-year implementation timeline is envisioned prior to summative evaluation. One challenge will be to ensure fidelity to the project's intent. To mitigate this challenge, a project organizational structure (illustrated in Attachment B and uploaded in #7/documents to view) will engage leaders and staff at multiple levels. The organizational structure for the project has been designed to facilitate collaboration. A POWER Executive Committee will review progress and engage in strategic decision-making. A full-time CEVSD POWER Coordinator is accountable for ensuring the project adheres to activities, timelines, and budgets. Three Innovation Teams, (1) Energy Resource Dynamics program, (2) STEM enhancements, and (3) Reduce operating costs, will bring together partners to launch and continuously improve projects in each area. The POWER initiative will work with Battelle for Kids to develop a comprehensive communication and performance management plan. We envision a communication process that includes: - Awareness and Commitment-Create a plan that creates awareness and builds commitment for the POWER initiative among stakeholders. - Developing Understanding-Promote a deeper understanding of the POWER initiative among stakeholders and the community through a mixed media communications strategy. - Implementation-Focus on implementation and improvement through regular real time and asynchronous communication and use of data for continuous improvement. - Building Capacity for Continuous Improvement-Successfully scale the POWER initiative with fidelity. Support teachers through professional development and continuous improvement activities. - Sustainability-Build the capacity of the POWER initiative to sustain the communication and continuous improvement strategy.

Summative evaluation (MM/DD/YYYY): 08/31/2016

* Narrative explanation

There is major emphasis on emplacing systems and discipline to use data for performance management, continuous improvement, and evaluation. A primary challenge is a lack of in-house capacity to organize these new systems and protocols. As such, new systems will be developed and implemented in partnership with Battelle for Kids and New Growth Group. Formative evaluation activities will assess the mechanisms that produce outcomes; summative evaluation activities will measure the impact of each strategy on students. The indicated timeline enables summative results to be analyzed following the graduation of two cohorts of eleventh grade students. - 8/26/14, Evaluation protocols developed and implemented - Following each term, in progress reviews and formative evaluation reporting - By 8/31/16, Summative evaluation report

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

CEVSD will fundamentally change instructional and organizational practices to improve opportunities for students to pursue college and careers. Teachers will be significantly engaged in these efforts and supported with professional development and continuous improvement processes. Four fundamental changes are envisioned. - Continuous Alignment of Educational Opportunities with Local Industry Needs: Instruction will become increasingly connected to the energy and agriculture industry through this project. The goal is to redesign roles for businesses to partner with education and for educators to align programs with the business sector. This will require venues and protocols for teachers and staff to communicate with business representatives. We anticipate that significant professional development will be required to familiarize teachers with business environments, communication, and methods for incorporating business input into curricula and instruction. Expectations are heightened for businesses to invest direct and leveraged resources in educational programs. - Leveraging Project-Based Learning and Distance Learning Tools to Transform How Learning Occurs in Schools: CEVSD will fundamentally change the process of STEM learning in our schools from teacher led to student driven. Curricula will be strengthened through integration of project-based learning models and enhanced focus on STEM education. Currently, the district is missing opportunities to integrate nationally proven practices for improving student achievement in these areas. - Increased Career Opportunities at Graduation: CEVSD will grow the skills and capabilities of its graduating students without delaying their entry into the workforce through increasingly integrated postsecondary programming through dual enrollment agreements and distance/blended learning. This will result in the delivery of new distance and blended material at CEVSD. As a result of these increased opportunities, students will be able to pursue a career in the STEM field immediately upon graduation. Teacher professional development and continuous improvement support is incorporated as new models for instruction are adopted to support educators as they implement the project-based learning structure and align their classroom outcomes with industry needs. - Sustaining a Culture of Performance Management and Continuous Improvement: A major emphasis is placed on building processes and discipline around performance management, continuous improvement, and evaluation. This includes effectively utilizing performance data to inform continuous improvement in the classroom. It also incorporates comparative evaluation strategies to assess effective practices, inform course corrections as needed, and guide efficient resource allocation.

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.

This project seeks to significantly engage energy industry employers in new symbiotic relationships supporting enhancements for students. Three strategies are proposed to realize this vision: Strategy 1: Significantly partner with energy industry businesses to create an Energy Resource Dynamics program that establishes new pathways for students leading to jobs and postsecondary opportunities in the energy field. Drawing on postsecondary and workforce research, sector-based initiatives involve industry-specific education to prepare students. They improve completion rates, access to good jobs, and increase job quality in ways that strengthen an industry's workforce. Maguire et al (2010) provide strong evidence supporting the benefits of sector-based programs. In a random assignment evaluation of sector-focused programs, researchers found students earned significantly more (+29 percent) than control group members one year after completing of programs. Students were 10 percent more likely to gain and retain employment than controls and were significantly more likely to work in higher-paying jobs and have jobs with benefits. (Maguire et al. "Findings from the Sectoral Employment Impact Study." 2010.). CEVSD is proud to have committed industry partners who have a vested interest in the success of this program and in building the capacity of our students to graduate and enter the workforce ready to engage in a 21st STEM careers. Strategy 2: Enhance project-based STEM education to prepare all students for career and college readiness in engineering, agriculture, and safety. There are decades of accumulated evidence that the instructional strategies and procedures that make up standards-focused Project Based Learning are effective in building deep content understanding, raising academic achievement and encouraging student motivation to learn. Research studies have demonstrated that Project Based Learning can: -Be more effective than traditional instruction in increasing academic achievement on annual state-administered assessment tests. o Geier, R., Blumenfeld, P.C., Marx, R.W., Krajcik, J.S., Fishman, B., Soloway, E., & Clay-Chambers, J. (2008). Standardized test outcomes for students engaged in inquiry-based science curricula in the context of urban reform. Journal of Research in Science Teaching, 45(8), 922-939. - Be more effective than traditional instruction for teaching STEM subjects o Boaler, J. (1997). Experiencing School Mathematics: Teaching Styles, Sex and Settings. Buckingham, UK: Open University Press. o Lynch, S., Kuipers, J.U., Pyke, C., & Szesze, M. (2005). Examining the effects of a highly rated science curriculum unit on diverse students: Results from a planning grant. Journal of Research in Science Teaching, 42, 921-946. - Improve students' mastery of 21st-century skills. o Gallagher, S.A., Stepien, W.J., Rosenthal, H. (1992) The effects of problem-based learning on problem solving. Gifted Child Quarterly, 36, 195-200. -And, be especially effective with lower-achieving students. o Mergendoller, J.R., Maxwell, N., & Bellisimo, Y. (2006). The effectiveness of problem based instruction: A Comparative Study of Instructional Methods and Student Characteristics. Interdisciplinary Journal of Problem-based Learning, 1(2), 49-69. Strategy 3: Reduce operating costs by becoming a leader in the use of lower-cost natural gas technologies and distance learning technologies. The conversion to CNG has been demonstrated to significantly reduce fuel costs in school districts. The high upfront investment cost for bus conversion and the cost of constructing a fueling station are deterrents for most districts. However, given CESVD's strategic position in the center of the Utica Shale play, we believe this investment will produce a positive return within 10 years. o Department of Administration and Information, Economic Analysis Division. (2012).A Feasibility Study of Natural Gas Vehicle Conversion in Wyoming Public Schools

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

Yes

No

22. If so, how?

Specific aspects of this project pertaining to natural gas conversion (CNG) and energy and agriculture industry partnerships are replicable in certain agricultural or Utica shale geographical areas of Ohio. More broadly, principles of industry partnerships, communication, and performance management are widely replicable. The creation of meaningful connections to local businesses coupled with the redesign of project-based STEM curricula is high replicable regardless of school district location or industry. The distance/blended learning concept could allow digital based learning throughout Ohio, the United States, and globally!

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

The project will have three lasting values: - Sustained synergistic connections and relationships with energy and agriculture industry businesses that improve opportunities for students. - New programming in Energy Resource Dynamics and STEM that improve postsecondary and career preparation for students. These curricula will implement a project-based learning approach in the district that will encompass a distance/blended learning rationale that could affect an immeasurable amount of students globally. - Permanent cost savings from the conversion of the bus fleet to CNG and use of distance/blended learning technologies for the rural CEVSD school district.

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.

Student achievement: - One Year Benchmarks o Energy Resource Dynamics dual enrollment program implemented o Three new STEM curricula implemented (engineering, agriculture, safety) o 40 students enrolled in Energy Resources Dynamics program o 20 students complete an Energy Resources Dynamics postsecondary award o 45 students enroll in a new STEM curricula - Five Year Benchmarks o 40 students enrolled in ERD program annually o 20 students complete an ERD postsecondary award annually o 45 students enroll in a new STEM curricula annually o 100 graduates enrolled in energy-related postsecondary programs o 35 graduates employed in energy industry o 22 graduates enroll in a postsecondary STEM program of study per year Significant advancement to utilize a greater share of resources in the classroom: - One Year Benchmarks o 10 buses converted to compressed natural gas - Five Year Benchmarks o All buses converted to compressed natural gas o 10 distance or blended courses implemented o \$215,000 annual and sustainable reduction in district spending due to grant activities

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.

An external evaluator will be contracted to conduct formative and summative evaluation activities. Impact or outcomes assessment: In order to perform a rigorous evaluation of the project, the evaluator will use a comparison group research design where appropriate. The design will rely on using cohorts of students from new or redesigned programs coupled with parallel cohorts in similar existing or non-redesigned programs and historic cohorts. A difference-in-difference research design will be used to isolate program effects. Additionally, the evaluation will need to measure early indicators of success in addition to summative outcomes. The majority of data can be captured and documented through existing systems. The CEVSD database is a comprehensive database that includes student demographics and enrollment, course performance, standardized test results, and personnel, facilities, and program cost data by term and annually. The system captures individual unit-level data for students enrolled, academic progress, and completing targeted programs. We propose to link student records with postsecondary and Unemployment Insurance (UI) quarterly earnings records to capture a longitudinal view of students' postsecondary and employment outcomes. Formative assessment: In addition to the rigorous analysis of project impacts and outcomes, the third-party evaluator will evaluate the effectiveness of formative implementation and make recommendations for in-progress improvements. This work will have two goals: contribute to continuous improvement process and document and analyze the work for application in future projects. The formative evaluation will primarily consist of interviews, on-site observations, document review, and participation in meetings. The following topics will be included in the formative assessment: -How were curricula selected, used, or created? This includes interactions with businesses and postsecondary partners to determine program design and delivery. - How were the programs designed to improve student outcomes? This includes exploration of classroom delivery methods. -How did project-based learning support student learning, postsecondary enrollments, and job placement in targeted occupations? -How did communication efforts help or hinder the project? -What contributions did each of the partners (businesses, postsecondary partners, and others as applicable) make in terms of: 1) program design, 2) curriculum development, 3) communication, 4) professional development, 5) program delivery and management, 6) leveraging of resources, 7) and commitment to program sustainability? -The college is interested in the integration of businesses in this initiative. The evaluation of this aspect will occur qualitatively under the formative evaluation scope. A continuous improvement protocol will be developed and implemented by Battelle for Kids as part of their scope. The protocol will provide data on aggregate student progress and outcomes by program of study. Innovation Teams and CEVSD leadership will use data to monitor performance, improve programs, eliminate ineffective programs, and improve outcomes. Four mechanisms will be used for continuous improvement. -Monitoring progress of each program each academic term on each outcome and progress measure relative to goals. If programs are lagging, adjustments are made via the Innovation Team structure to drive increases. -Monitoring the progress at each program's students relative to comparison cohorts. Targeted programs that are underperforming relative to comparison cohorts are re-assessed and adjust or discontinued. -Portage Co. Educational Service Center and Battelle for Kids are engaged to support professional development and communications in the continuous improvement cycle. -Employers and postsecondary partners will provide qualitative feedback and data on the job and academic performance of program completers from each program.

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 accept. David Quattrochi, Ed.D., Superintendent, Carrollton Exempted Village School District. 10/25/2013