

Budget

Caldwell Exempted Village (045252) - Noble County - 2014 - Straight A Fund - Rev 0 - Straight A Fund - Application Number (274)

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	4,000.00	307,650.00	120,000.00	0.00	431,650.00
Support Services		0.00	0.00	3,000.00	0.00	0.00	0.00	3,000.00
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		0.00	0.00	7,000.00	307,650.00	120,000.00	0.00	434,650.00
Adjusted Allocation								0.00
Remaining								-434,650.00

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:CSI - Caldwell Students Investigating

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.

The CSI program is an innovative approach to STEM learning through engaging projects and investigations which is currently offered at our district's two schools - Caldwell Elementary and Caldwell High School. As a district, we feel that we will be able to meet all three component objectives with the funds from this grant: increasing student achievement, reducing spending, and utilizing classroom resources. Through the use of scientific inquiry, netbook/tablet applications, and the purchase of aligned digital text, students will be afforded the opportunity to be engrossed in Ohio's New Learning Standards for Math and Science.

543 3. Total Students Impacted:

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

First Name, last Name of contact for lead applicant: Carey Block

Organizational name of lead applicant: Caldwell Exempted Village School District

Unique Identifier (IRN/Fed Tax ID): 045252

Address of lead applicant: 44350 Fairground Rd. Caldwell, OH 43724

Phone Number of lead applicant: 740-732-4614

Email Address of lead applicant: cblock@caldwell.k12.oh.us

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.

N/A

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.

Our project team consists of a variety of instructional leaders. The elementary principal, Rebecca Johnson, as well as the high school principal, Devvon Dettra, will be provide instructional support to teachers as they begin the implementation process of digital text for Math and Science. Carey Block, the Director of Federal Programs, will coordinate the transition from hardback to digital text with teachers and students. The IT Coordinator, Phil Theobald will take the lead on purchasing netbook/tablets and installing the texts on them. The elementary teachers have already been provided with netbook/tablet training. Aaron Stiver, a 6th grade teacher and Administrative Graduate Student, will research and provide insight into the purchase of high quality digital text that is aligned to Ohio's New Learning Standards. Jeanne Yontz, CSI Instructor, will facilitate the CSI program for our middle school STEM students. Mrs. Yontz currently serves as one of the lead teachers for 5th grade science in Ohio, helping to construct our new interactive assessment in collaboration with ODE. Mike Schott, Auto Cad and Robotics teacher, will facilitate the CSI program for our High School Students.

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.

The primary objective of our proposed project is that the district would like to expand our existing CSI program at the Middle and High School levels. It will first be necessary to obtain new texts that are aligned to Ohio's New Learning Standards for Math and Science. During Phase I, digital textbooks would be installed on our middle school netbooks/tablets. Teachers will instruct on Ohio's New Learning Standards using aligned digital text. The CSI Program is a hands-on approach to STEM instruction. Eligible students in 5th and 6th grades are engaged in projects that make the application of science and math come true to form. For example, last year the students traveled to Duck Creek and took water samples from various points in the creek and analyzed the data, drawing conclusions about the variations in the water from one location to another. They have also conducted an investigation into the cleanliness of the school. Over 75 bacteria samples were collected throughout the school and cultures were grown to determine areas that needed to be addressed by the teachers and custodial staff. Currently the CSI students are examining the reconstruction of a crime scene. They are analyzing fingerprints, DNA and hypothesizing about suspects and motives. In order to raise funds for a CSI field trip to the WILDS, students can pay \$.50 to dress like Duck Dynasty on Fridays in November. They will be studying the science behind duck calls and other animal calls, how they are made and how they attract animals. These are just a few examples of how the Middle School Students use the process of investigation to connect with their science standards. At Caldwell High School, students have the opportunity to expand their investigative skills with courses in Robotics, Formula I Racing, Computer Aided Drafting (CAD), and Industrial Technology. These courses are unique to Southeastern Ohio. The skills that are obtained with these courses are comparable to collegiate level engineering programs. A combination of hydraulics, electricity, Computer Numerically Controlled (CNC), industrial control technology, laser technology, 3-D printing, and robotics are available to students in this one-of-a-kind classroom. Currently, there is over \$300,000 worth of equipment in the Caldwell High School Advanced CSI program, none of which was paid for out of the general fund. Grant money, fundraisers, and community donations have paved the way for this academic experience. We would like to be able to offer entry-level CAD courses to the Jr. High students, exposing them to the opportunities that await them at the High School. We are continually looking for ways to encourage students to continue their high school education at Caldwell High School through their senior year. In our current financial situation at Caldwell, the program is in jeopardy because the Scan Tech Education Modules that are used to run each of the technologies need to be upgraded (\$100,000). This is a must for the Advance CSI program to continue. Money from the Straight A Fund would allow us to expand CSI to the entire middle school and high school population. At this time, we are only able to offer the CSI Program to a limited number of students. The Straight A

Fund can provide Caldwell with the chance to make Learning Come to Life for all of our science and math students in grades 4-12.

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.

With the implementation of the CSI Project, we would be able to achieve all three of the Straight A goals. Student achievement would be impacted through the ability to present text that is aligned to Ohio's New Learning Standards to our students. Our scores on the Science OAA have been historically solid in 5th grade. We have also done well on the Science OGT. Our areas of weakness are the 8th Grade Science OAA and middle school math OAA's across the board. Our OIP is currently focused on improving our math scores at all levels. Aligned text and the expansion of CSI to all students, including Grades 4, 7 and 8, will bridge the gap between elementary school and high school scores on our state assessments. Savings in the 5-year forecast will be realized in the cost of purchasing digital textbooks vs. hardback print textbooks. The cost variance is outlined in the Excel Spreadsheet. The purchase of additional tablets for our students will make multiple resources available to both teachers and their students. For example, students will be able to utilize their netbooks/tablets as mobile science labs for investigations outside the classroom.

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.

a. budget was completed in the CCIP - Narrative explanation found in question #14 b. Straight A Financial Impact Template was uploaded c. N/A

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

429,650.00 * 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, RtT 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.)

The majority of our budget will be consumed with the purchase of I-pads and digital math and science texts to be uploaded on them. The cost of the netbooks/tablets and protective cases is \$244,350. The bandwidth to support the expanded availability of technology would need to be increased (\$3,000). CSI-related apps would be purchased as well (\$4,000). Within the Caldwell High School CSI Program, Technology/Manufacturing Modules upgrade (\$100,000) is a necessity, while a CNC Lathe (\$20,000) and Elementary Lab Supplies (\$5,000) would allow for more extensive lab projects. Digital text books for each student in math would come at a cost of \$29,150 for a 6-year subscription. Digital text books for each student in science would come at the cost of \$29,150 for a 6-year subscription. The need is certainly great. Please refer to the purchase dates below for our middle school and high school math and science curriculum, which is not aligned to the Common Core State Standards for Math and Ohio's New Learning Standards for Science. Middle School Science - 4th grade: currently no book 5th grade: currently no book 6th, 7th, 8th grade: 2005 Middle School Math - 4th grade: 1999 5th grade: 1999 6th grade: 2004 7th & 8th grade: 2001 High School Science - 1992 High School Math -1990

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.

As mentioned above, the purchase of digital texts would be based on a 6-year subscription, at the end of which, the subscription would have to be renewed at the current renewal value.

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

90,000.00 * 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.)

Savings would be incurred by the decision to purchase digital, rather than print, texts to align our curriculum to our new state standards. The cost of purchasing print text for both subject areas would be an estimated \$150,000. By going with a digital text app, we are not only saving money, we are purchasing a product that is continuously being updated by the publisher and affords students the opportunity to read text from a digital medium, much like PARCC.

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.

Upon purchasing the netbooks/tablets technology and digital texts, the subscription will be valid for 6 years. The district can renew on a year to year basis if funds are not available for a 6 year renewal at that time. The CSI project will be established at all grade levels and will be sustained adequately by the general fund.

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): 01/03/2014

* Narrative explanation

Math & Science Department completed the Power Educator Project Curriculum Mapping All science and math teachers grades K-12 worked collaboratively to map Ohio's New Learning Standards for Math and Science. The CSI Team moved on to mapping their CSI curriculum to fit the new standards. Ebook selection process and price locking The science and math departments from both Caldwell Elementary and Caldwell High School will collaborate in teacher-based teams to identify an appropriate text to purchase. Carey Block, Director of Federal Programs will pursue pricing for digital texts and lock in the most formidable pricing.

Implement (MM/DD/YYYY): 07/01/2014

* Narrative explanation

Purchase netbooks/tablets and protective devices, purchase aligned Ebooks for science and math Phil Theobald, IT Coordinator, recently conducted the purchase of 30 I-pads and protective devices (Otter Boxes). He would then utilize his established process for purchasing I-pads for the CSI Program. Bandwidth expansion project to support new technology - Mr. Theobald will move forward with expanding our existing bandwidth in both the High School and the Elementary School to support the new I-pads. Purchase CSI apps - Our CSI leaders, Mrs. Yontz and Mr. Schott will recommend apps to be purchased that will enhance the process of scientific inquiry. All students in grades 4-12 utilize digital presentation of Science and Math text - The Science and Math teachers grades 4-12 will begin using their digital curriculum to instruct on the new standards. Students will transition from print to digitally constructed text. Open CSI program in grades 4, 7 & 8, expand Advanced CSI to offer full courses in Robotics and Forensic Science - CSI will be offered at each grade level, in grades 4-12. Currently at the high school, students are able to take a CSI course that has elements of CAD, Robotics, Formula I, Electronics, CNC, hydraulics, and industrial technology. With the expansion of the CSI program, full course offerings will be available in Robotics and Forensic Science. Purchase/Installation of Advanced CSI Lab Equipment - As this point, Mr. Schott will initiate the purchase of the CNC Lathe and 3-Axis Laser.

Summative evaluation (MM/DD/YYYY): 06/30/2015

* Narrative explanation

? Evaluation of Program - Look at the number of 8th graders who have enrolled in Advanced CSI courses at Caldwell High School. Examine the number of students who opt to stay at Caldwell High School, as opposed to Post Secondary or Vocational Learning Programs, to continue with Advanced CSI coursework. We will also look at our OAA and OGT scores, particularly in 8th grade for improvement based on the implementation of the project in this area.

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

Overall, we believe that students will transition smoothly to digital text. Emphasizing the care and maintenance of the netbooks/tablets will be critical moving forward. We have introduced three I-pads per classroom at the elementary school this year and students have very receptive and respectful toward the new devices. We also need to work with our Jr. High Science teacher, Dugan Hill, to develop a Jr.

High CSI curriculum that will transition smoothly from 4/5/6 to High School. Mrs. Yontz currently uses the CSI program in the 5th grade and would be responsible for expanding it to 4th grade. Mr. Stiver will continue with CSI in the 6th Grade. Mr. Schott will continue to teach the Advanced CSI courses, utilizing the opportunity to make some of his component areas of instruction into full-blown course offerings.

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.

For one, students are begging to see the program expanded. The 5th and 6th Graders are wild about CSI. Caldwell High School has yielded an entire crop of engineers, doctors, dentists, machinists, and electricians who have made a substantial living off of their training with Mr. Schott. Our 5th grade OAA and 10th grade OGT scores in science have been historically strong. Last year we had 82% of students passing the 5th grade OAA in science; whereas, we only had 67% passing the 8th grade OAA in science, 91% of our 10th graders passed the OGT during the 2012-2013 school year. We believe that the CSI Program is the key element in this formula for success, and that the expansion of the program to grades 4, 7, & 8 will narrow the gap in the Jr. High Science Program.

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

Yes

No

22. If so, how?

The curriculum for CSI can be regenerated. Mrs. Yontz and Mr. Schott are willing and able to share their wisdom regarding projects and implementation. They both have a passion for science and engineering. Both individuals have experience writing and developing their own curriculum for courses, even in the absence of state standards for a particular course or subject. CSI could be implemented within any middle or high school - our project ideas, tool kits, and curriculum mapping can all be regenerated within other school districts. Both teachers are in the process of constructing a CSI Tool Kit that other districts could purchase and use in their own classrooms. They are also available to provide high quality professional development and training for other districts as well.

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

Ultimately, Caldwell Exempted Village School District would like to see students at the high school, remain at the high school during all four years of their education. Mr. Schott's innovative course offerings hold the key to keeping students in the high school. Additionally, we would like to see our District Report Card reflect improvement in student achievement, particularly in the areas of Math and Science. Within our OIP, we have written goals for improving our performance in Math at all grade levels. This is an area of weakness for the district that we plan to address with innovation instructional practices, such as the CSI Program. We recognize that the foundation of the Common Core State Standards in Math and in Ohio's New Learning Standards in Science is grounded in scientific inquiry, investigation, and practice. The CSI Program is learning come to life for our students.

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.

Short Term Objectives - Obtain curriculum that is aligned to new standards Upgrade technology modules to sustain the advanced CSI Program Expand CSI Program to Grades 4, 7, & 8 Expand Course Offerings in Advanced CSI Program Long Term Objectives- Improved student achievement in the areas of science and math in grades 4-12 Increased number of students enrolling in Advanced CSI courses at Caldwell High School Increased number of students finishing all four years on the Caldwell High School campus

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.

To measure the success of the CSI Program, report card data from previous schools years will be compared to the 2014-2015 report card and the years moving forward in the area of science and math. We will also collect and analyze enrollment numbers within the Advanced CSI Program to look at interest and need. Additionally, we will collect and analyze retention numbers in the Junior/Senior Advanced CSI Program to look at interest and need.

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 Carey Block Director of Federal Programs Caldwell Exempted Village School District 10/25/2013