## Budget

Warrensville Heights City (045005) - Cuyahoga County - 2015 - Straight A Fund - Rev 0 - Straight A Fund - Application Number (176)

**U.S.A.S. Fund #:**

### Plus/Minus Sheet (opens new window)

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**Adjusted Allocation** | 0.00

**Remaining** | -981,335.08
A) APPLICANT INFORMATION - General Information

1. Project Title:
ACEM: Access to Creative Engagement for Mastery Through Technology

2. Executive summary: Please limit your responses to no more than three sentences.
Warrensville Heights City Schools, in partnership with Cleveland University College of Education and Human Services, the Center for Innovation in STEM Education (CISE) at the Great Lakes Science Center, McElwain Educational Consulting, LLC, and Scholastic, Inc. will implement a technology immersion project-based learning (PBL) program that prepares teachers and students for 1) significant academic improvement through 21st Century teaching and learning supported by the use of technology; 2) collaboration with other schools and districts for future large scale authentic PBL projects that address local issues with resource management and energy conservation; and, 3) reduced dependence on paper and traditional printed texts. In addition to a newly renovated outdoor learning space, greenhouse, and planetarium, students and teachers will have daily immediate internet access with Chromebooks and iPads in order to assess and track academic progress, to individualize instruction and to allow the students to responsibly create, collaborate, learn, and assess their own growth. Teacher teams will participate in year-long professional development in classroom technology integration and project-based learning and prepare to expand the reach of the grant into additional classrooms throughout the grant cycle using a train-the-trainer model, in which teachers will support their peers through embedded coaching, coordinated by the district's technology integration specialist.

This is an ultra-concise description of the overall project. It should not include anything other than a brief description of the project and the goals it hopes to achieve.

3. Total Students Impacted:
900
This is the number of students that will be directly impacted by implementation of the project. This does not include students that may be impacted if the project is replicated or scaled up in the future.

4. Please indicate which of the following grade levels will be impacted:
- Pre-K Special Education
- Kindergarten
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12

5. Lead applicant primary contact: - Provide the following information:
First Name, last Name of contact for lead applicant
Marva K. Jones, Superintendent
Organizational name of lead applicant
Warrensville Heights City Schools
Address of lead applicant
4500 Warrensville Center Road, Warrensville Heights, OH 44118
Phone Number of lead applicant
216-865-4737
Email Address of lead applicant
marva.jones@whcsd.org

6. Are you submitting your application as a consortium? - Select one checkbox below
- Yes
- No
If you are applying as consortium, please list all consortium members by name on the "Consortium Member" page by clicking on the link below. If an educational service center is applying as the lead applicant for a consortium, the first consortium member entered must be a client district of the
B) PROJECT DESCRIPTION - Overall description of project and alignment with goals

8. Describe the innovative project: - Provide the following information

The response should provide a clear and concise description of the project and its major components. Later questions will address specific outcomes and the measures of success.

The current state or problem to be solved; and

The most glaring issue for the school district is the State Report Card performance rating of "D", and an "F" rating and persistent pattern of LOW STUDENT ACHIEVEMENT on all state indicators. Students will not learn if they are not first present and engaged. Therefore, it is imperative that the district overhaul its culture of teaching and learning to one that engages students in creative inquiry into real world issues that impact their lives and provides teachers with web-based tools for differentiating and scaffolding instruction so that student academic needs are identified and addressed. Students will be empowered and inspired when their work addresses real issues and is visible to the community. Learning through Project Based Learning (PBL) will encourage them to take responsibility for solving real problems in their community and to increase their interest in STEM fields. An additional issue is LIMITED STUDENT ACCESS TO TECHNOLOGY. While progress has been made in the last three years in building the IT infrastructure to support online learning is all schools, the district only has student technology in place in selected classrooms and not systemic across the district. A third issue is LACK OF CROSS-CURRICULAR TEACHING AND LEARNING needed to support effective STEM education and project-based learning (PBL). Making these changes will require extensive teacher and staff professional development in order to bring about a shift from traditional front-of-the-room teaching practices to "flipping the classroom" where students are required to take charge of their own learning with the teacher as motivator, assessor, diagnostician, small group and individual instructional coach, expert consultant, and guide.

Therefore, it is therefore critical to provide teachers with access to real world 21st century-ready laboratory spaces for exploration and problem-solving. The district will use part of this grant to upgrade current district spaces, including the planetarium, the high school greenhouse, and outdoor learning spaces on school grounds in addition to increasing STUDENT ACCESS TO TECHNOLOGY by equipping classrooms for digital learning. Initial PBL projects will generate student design ideas that will be used in the renovation of these spaces. Community partners, including the College of Education and Human Services at Cleveland State University, the Center for Innovation in STEM Education (CISE) at the Great Lakes Science Center, and a consultant working with the Education Department at NASA Lewis Research Center will provide professional development, curriculum design, and technical assistance to the district to optimally use new learning spaces and to prepare for STEM Project Based Learning (PBL) that integrates science and, math across the curriculum. The Center for Innovation in STEM Education (CISE), a partner on this grant, will provide professional development to teachers in grades 5-12 around project-based instruction to INCREASE CROSS-CURRICULAR TEACHING AND LEARNING. The approach CISE uses includes teaching teachers to plan using standards across content areas; the projects that are produced are transdisciplinary (cross several content areas for a holistic approach). The teachers will engage with professors from Cleveland State University, teachers from MC2STEM High School who use project-based learning in grades 9-12, and education specialists from the Great Lakes Science Center when learning the project-based learning planning process. PBL 101 and 102 guide teachers through the planning process and ultimately producing a plan for one project across content areas. PBL 201 and 202 broaden the planning process and facilitate yearly planning. Teachers leave the professional development with ideas for projects throughout the academic year. CISE has been providing professional development for teachers for almost two years and is funded through the Ohio STEM Learning Network and supported by the Battelle Foundation. The title of the grant, ACEM through Technology stands for Access to Creative Engagement for Mastery through technology. PBL will be the vehicle for creative engagement. The immediate access to technology, such as Chromebooks and iPads, will allow students to collaborate on projects and attain mastery of curriculum objectives.

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

To achieve the goals of this grant the vision must be larger than simply putting technology in classrooms. To ensure that STUDENT ACHIEVEMENT can be measured and monitored, teachers and administrators need research-proven tools for online assessment, differentiated instruction and on-time feedback on student progress. The district is investing in new instructional online systems for reading for grades K-8 in 2014-15. Through this grant, the district will be able to provide teachers with similar online instruction and data tools for math through Math 180 beginning in Grade 5 at the Middle School to ensure readiness for algebra and higher level math in Grade 8. To make rigorous academic work matter to students the learning environment beyond the classroom, both on the district grounds and in the community-at-large must provide students and teachers with access to real world 21st century-ready laboratory spaces for exploration and problem-solving. The district will use part of this grant to upgrade current district spaces, including the planetarium, the high school greenhouse, and outdoor learning spaces on school grounds in addition to increasing STUDENT ACCESS TO TECHNOLOGY by equipping classrooms for digital learning. Initial PBL projects will generate student design ideas that will be used in the renovation of these spaces. Community partners, including the College of Education and Human Services at Cleveland State University, the Center for Innovation in STEM Education (CISE) at the Great Lakes Science Center, and a consultant working with the Education Department at NASA Lewis Research Center will provide professional development, curriculum design, and technical assistance to the district to optimally use new learning spaces and to prepare for STEM Project Based Learning (PBL) that integrates science and, math across the curriculum. The Center for Innovation in STEM Education (CISE), a partner on this grant, will provide professional development to teachers in grades 5-12 around project-based instruction to INCREASE CROSS-CURRICULAR TEACHING AND LEARNING. The approach CISE uses includes teaching teachers to plan using standards across content areas; the projects that are produced are transdisciplinary (cross several content areas for a holistic approach). The teachers will engage with professors from Cleveland State University, teachers from MC2STEM High School who use project-based learning in grades 9-12, and education specialists from the Great Lakes Science Center when learning the project-based learning planning process. PBL 101 and 102 guide teachers through the planning process and ultimately producing a plan for one project across content areas. PBL 201 and 202 broaden the planning process and facilitate yearly planning. Teachers leave the professional development with ideas for projects throughout the academic year. CISE has been providing professional development for teachers for almost two years and is funded through the Ohio STEM Learning Network and supported by the Battelle Foundation. The title of the grant, ACEM through Technology stands for Access to Creative Engagement for Mastery through technology. PBL will be the vehicle for creative engagement. The immediate access to technology, such as Chromebooks and iPads, will allow students to collaborate on projects and attain mastery of curriculum objectives.

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

Applicants should select any and all goals the proposal aims to achieve. The description of how the goals will be met should provide the reader with a clear understanding of what the project will look like when implemented, with a clear connection between the components of the project and the stated goals of the fund. If partnerships/consortia are part of the project, this section should describe briefly how the various entities will work together in the project. More detailed descriptions of the roles and activities will be addressed in Question 16.

☑ Student achievement (Describe the specific changes in student achievement you anticipate as a result of this innovation (include grade levels,
Baseline data for middle and high school students in grades 5 -12 on 2013-14 state required assessments in reading, math, and science will be used in 2014-15, the grant year, to begin tracking student cohort results through 2020 and beyond. State required testing in each of the following five years will show a minimum of 7% growth in these subject areas. In addition, a new online interactive learning and formative assessment program for reading and math will allow for on-time continuous data tracking on student progress with mastering Common Core State Standards (CCSS). Utilizing the tools and services requested in this grant will support formative assessment during content instruction and use of cloud-based differentiation / intervention modules available from various sources (examples: Khan Academy, the Ohio Resource Center and iLearnOhio). These resources will allow the student and teacher to obtain rapid feedback which will allow opportunities to identify individual and group misunderstandings, and it will also provide teachers with more efficient ways to re-teach educational concepts in which students may be deficient. This differentiation/intervention process will be customized for each student and implemented rapidly to maximize the education for each student, regardless of educational achievement level. This grant will allow for the delivery of Common Core and Next Generation Standards lessons and assessments to WHCSD students much quicker than the standard paper method. Faster formative assessment results and related instruction will assist students to become successful much more quickly, allowing the WHCSD to show significant improvement upon the state report card. Students will learn and practice 21st Century skills, giving each student the opportunity to obtain important college and career-ready skills that will be critical as they enter the workforce and/or college.

Implementing this plan will make more efficient use of resources. The 2013-14 school year will be used to set the baseline for high school and middle school expenditures on copier use, copy paper, and text purchases in reading, math, and science. Successful program implementation should yield a minimum of a 10% drop in copier use (Instruction/Purchased Services), a 10% drop in copy paper and paper text costs (Instruction/Supplies) in each year following the grant year. Savings already identified in the Financial Impact Table (FIT) include 1) INSTRUCTION/PURCHASED SERVICES: Discontinued online licenses for reading and math data tracking systems - $10,000 per year, online math intervention programs no longer needed with new grant purchased systems - $14,000 per year; 2) INSTRUCTION/SUPPLIES: Reduction in textbook purchase costs by 1/2 in year 1 following the grant year due to shift to class set rather than a text per student with the use of online texts and resources - Average text cost = $54 X 900 students = $48,600/2 = $24,300 savings; Reduction in copy paper cost by 10% each year projected from 2012-13 vendor payment for the Middle School and High School of $5,220 or $522 in year 1 following the grant year, and increasing incrementally by 10% the following years; and, 3) SUPPORT SERVICES/INSTRUCTION: 10% annual reduction in copier contract costs ($11,561)projected from 2012-13 vendor payment for the Middle School and High School - $1,156 in year 1 after the grant year and increasing 10% each year thereafter. Utilizing the tools and services requested in this grant will help reduce the non-instructional time spent by teaching staff when seeking ways to best educate a diverse group of student skill levels, but actual financial savings due to this is not verifiable at this time.

This proposal is classroom and student centered in that all budgeted resources other than teacher professional development will go directly into classrooms or enhanced student learning spaces. Teacher professional development, provided by the College of Education and Human Services, Civil and Environmental Engineering at Cleveland State University and the Center for Innovation in STEM Education (CISE) at the Great Lakes Science Center will prepare a core group of Grades 6-12 teachers to coach peers in planning and delivery of STEM Project Based Learning (PBL) in the Middle and High Schools. A consultant working with the NASA Research Center Education Department will work with science teachers to create a curriculum for the planetarium and provide professional development in the use of this resource with classes. Follow-up coaching PD will be embedded in the classroom. Consultants from Scholastic, Inc. will provide English and math teachers with PD targeted at use of an online assessment and instructional program that tracks student learning, differentiates based on student needs and learning gaps, and takes students to mastery. This series of PD offerings will build teacher expertise in the use of on-time formative assessment data for planning instruction as well as increasing student engagement in rigorous research and problem solving. The initial core teacher group will commit to training and coaching peers in the five years following the grant year in a train-the-trainer model. The resource of teacher time that is currently devoted to researching and creating lessons and assessments will be used more efficiently and effectively through online tools and can be targeted to more creative and effective ways to educate our students. The district's Technology Integration Specialist will guide this delivery of peer coaching to expand the number of teachers who are upgrading their teaching practice each year following the grant year. Through peer coaching, teachers will spend less time out of the classroom for professional development and will be using their own classroom as a lab for improving instructional practices. Course offerings will be richer and more relevant with the use of online resources that are continually updated and are aligned to the Common Core State Standards and the Next Generation Science Standards. Although this proposal does not focus on the goal of implementing a shared services model, sharing of services will occur among the districts that are working with the Center for Innovation in STEM Education (CISE) at the Great Lakes Science Center, including the MC2STEM High School that resides at the Center. Costs for professional development will be less due to shared access to training opportunities. For example, a neighboring district, Maple Heights, is planning a centralized STEM lab as a district resource and will be using CISE expertise for teacher PD. Warrensville Heights can collaborate with Maple and other CISE districts to reduce training costs for PBL. This project can be replicated because we will be documenting electronically our planning, implementation, and evaluation steps, including barriers, solutions, and mid-course corrections. District staff will be willing to share information with any district that wishes to use the model just as other districts shared their programs with Warrensville Heights staff during exploration for this proposal. This project could be scaled down to as small as one classroom or as large as an entire district. A shared focus on the engagement of students and not just on the equipment that is being used, will allow students to achieve at greater levels. With $189,480 spent on PD and evaluation and $791,855 invested in instruction, over 80% of the requested funds for this grant are going directly into classrooms and other learning spaces.

Implementing a shared services delivery model (Describe how your shared services delivery model will demonstrate increased efficiency and effectiveness, long-term sustainability, and scalability in the box below.)

10. Which of the following best describes the proposed project? - (Select one)
C) SUSTAINABILITY - Planning for ongoing funding of the project, cost breakdown

11. Financial Documentation: All applicants must enter or upload the following supporting information. The information in these documents must correspond to your responses in questions 11-14.

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

Enter Budget

* If applicable, upload the Consortium Budget Worksheet (by clicking the link below)

* Upload the Financial Impact Table (by clicking the link below)

* Upload the Supplemental Financial Reporting Metrics (by clicking the link below)

Upload Documents

For applicants without an ODE Report Card for 2012-2013, provide a brief narrative explanation of the impact of your grant project on per pupil expenditures or why this metric does not apply to your grant project instead of uploading the Supplemental Financial Reporting Metric.

The project budget is entered directly in CCIP. For consortia, this project budget must reflect the information provided by the applicant in the Consortium Budget Worksheet. Directions for the Financial Impact Table are located on the first tab. Applicants must submit one Financial Impact Table with each application. For consortium applications, each consortium member must add an additional tab on the Financial Impact Tables. Partners are not required to submit a Financial Impact Table.

Applicants with an "Ohio School Report Card" for the 2012-2013 school year must upload the Supplemental Financial Reporting Metrics to provide additional information about cost savings and sustainability. Directions for the Supplemental Financial Reporting Metrics are located on the first tab of the document. If your organization does not have an "Ohio School Report Card" for the 2012-2013 school year, please provide an explanation in the text box about how your grant project will impact expenditures per pupil or why expenditure per pupil data does not apply to your grant project.

Educational service center, county boards of developmental disabilities, and institutions of higher education seeking to achieve positive performance on other approved fiscal measures should submit the budget information approved by an executive board or its equivalent on the appropriate tabs of the Financial Impact Table. Educational service centers should use the "ESC" tab and county boards of developmental disabilities and institutions of higher education should use the "non-traditional" tab.

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

Responses should provide rationale and evidence for each of the budget items and associated costs outlined in the project budget. In no case should the total projected expenses in the budget narrative exceed the total project costs in the budget grid.

981,335.08 State the total project cost.

* Provide a brief narrative explanation of the overall budget.

The budget reflects the instructional supplies, programs, and equipment needed to create the teaching and learning environments outlined in the proposal, including: INSTRUCTION/SUPPLIES (400) Purchase of Scholastic Math 180 for MS and HS Grades 5-8 $216,885.

INSTRUCTION/CAPITAL OUTLAY (600): 480 Chromebooks @ $299 = $143,520; 90 iPads @ $500 = $45,000; 19 security charging storage carts for Chromebooks and iPads @ $1,800 = $34,200; 12 Sony Bloggie 8 MP video cameras @ $200 = $2,400; 12 iMacs @ $1,200 = $14,400; 15 iMovie for iPads @ $30 = $450; 50 interactive whiteboards for HS and MS core classrooms @ $200 = $10,000; planetarium projection and computer equipment @ $220,000; HS greenhouse structure, lighting and shelving replacement and upgrade = $15,000. Total: $574,970.

In addition, the professional development needed to overhaul how teaching and learning occur in order to engage students and increase academic success include: PROFESSIONAL DEVELOPMENT/SALARIES (100): Teacher PD stipends @ $25 per hour X 60 hours per teacher X 8 teachers in the grant year = $12,000; substitutes for demonstrating peer support teachers @ $100 per day X 8 teachers X 5 days each in the grant year = $4,000. PROFESSIONAL DEVELOPMENT/BENEFITS (200): retirement, FICA/MC, WC @ 17.1068% = $2,737.08.

PROFESSIONAL DEVELOPMENT/PURCHASED SERVICES (400) Center for Innovation in STEM Education (CISE) 6 cohorts of 8 teachers annually through 2020 participation in 4 PBL courses (60 hours) to learn PBL planning, classroom delivery aligned to standards, assessment = $43,296. The first cohort of teachers being trained as peer support for teacher cohorts in subsequent years will have the option to purchase four hours of Cleveland State University graduate credit at a reduced rate ($150 per credit hour) with money received as a stipend. McElwain Educational Consulting, LLC. Curriculum development for planetarium 40 hours $2,000 and PD for 15 teachers for 60 hours in the grant year $3,000 for a total of $5,000; Scholastic, Inc. Math 180 professional development for the grant year and one follow up year HS and MS $75,960. Support for a six year consistent external evaluation is budgeted as follows: SUPPORT SERVICES/PURCHASED SERVICES (400): Cleveland State University - Center for Urban Education - Justin Perry, Ph.D. Contracted program evaluation for the grant year and annually through 2020 - 6 years $46,487.

13. Will there be any costs incurred as a result of maintaining and sustaining the project after June 30th of your grant year?
Sustainability costs include any ongoing spending related to the grant project after June 30th of your grant year. Examples of sustainability costs include annual professional development, equipment maintenance, and software license agreements. To every extent possible, rationale for the specific amounts given should be outlined. The costs outlined in the narrative section should be consistent and verified by the financial documentation submitted and explained in the Financial Impact Table. If the project does not have sustainability costs, applicants should explain why.

Yes - If yes, provide a narrative explanation of your sustainability costs as detailed in the Financial Impact Table in the box below.

Recurring costs will not impact the Five Year Forecast due to redirection of funds from other grant sources, or savings that offset these potential costs. The only expense for the General Fund is possible replacement of Chromebooks; it may be necessary to replace damaged or stolen Chromebooks beginning in Year 2 after the grant, so $12,000 is indicated in the FIT and will be budgeted each year in the General Fund to allow for replacement of up to 40 Chromebooks each year. This cost, however, is offset by other savings, as indicated in the Financial Impact Table.

No - If no, please explain why (i.e. maintenance plan included in purchase price of equipment) in the box below.

14. Will there be any expected savings as a result of implementing the project?

Yes

No

Applicants with sustainability costs in question 13 or seeking to achieve significant advancement in spending reductions in the five-year forecast must address this response. Expected savings should match the information provided by the applicant in the Financial Impact Table. All spending reductions must be verifiable, permanent, and credible. Applicants may only respond "No" if the project will not incur any increased costs as a result of maintaining and sustaining the project after June 30th of your grant year. The Governing Board will use the cost savings as a tiebreaker between applications with similar scores during its final selection process. Cost savings will be calculated as the amount of expected cost savings less sustainability costs relative to the project budget.

68,690.00 If yes, specify the amount of annual expected savings. If no, enter 0.

If yes, provide details on the expected savings (i.e. staff counts and salary/benefits, equipment to be purchased and cost, etc.). If no, please explain.

As indicated in Goal 3, implementing this plan will make more efficient use of resources. Savings will increase from $61,978 in 2016 to $68,690 in 2020. The 2013-14 school year will be used to set the baseline for high school and middle school expenditures on copier use, copy paper, and text purchases in reading, math, and science. Successful program implementation should yield a minimum of a 10% drop in copier use (Instruction/Purchased Services), a 10% drop in copier paper and paper text costs (Instruction/Supplies) in each year following the grant year. Savings already identified in the Financial Impact Table (FIT) include 1) INSTRUCTION/PURCHASED SERVICES: Discontinued online licenses for reading and math data tracking systems - $10,000 per year; online math intervention programs no longer needed with new grant purchased services - $14,000 per year; 2) INSTRUCTION/SUPPLIES: Reduction in textbook purchase costs by 1/2 in year 1 following the grant year due to shift to classroom sets rather than a text per student with the use of online texts and resources - Average text cost = $54 X 900 students = $48,600/2 = $24,300 savings; Reduction in copy paper cost by 10% each year projected from 2012-13 vendor payment for the Middle School and High School of $5,220 or $522 in year 1 following the grant year, and increasing incrementally by 10% the following years; and, 3) SUPPORT SERVICES/INSTRUCTION: 10% annual reduction in copier contract costs ($11,561) projected from 2012-13 vendor payment for the Middle School and High School - $1,156 in year 1 after the grant year and increasing 10% each year thereafter. Although not quantifiable or verifiable at this time, utilizing the tools and services requested in this grant will help reduce the non-instructional time spent by teaching staff when seeking ways to best educate a diverse group of student skill levels.

15. Provide a brief explanation of how the project is self-sustaining.

All Straight A Fund grant projects must be expenditure neutral. For applications with increased ongoing spending as documented in question 11-14, this spending must be offset by expected savings or reallocation of existing resources. These spending reductions must be verifiable, permanent, and credible. This information must match the information provided in your Financial Impact Table. Projected additional income may not be used to offset increased ongoing spending because additional income is not allowed by statute. Please consider inflationary costs like salaries and maintenance fees when considering whether increased ongoing spending has been offset for at least five years after June 30th of your grant year. For applications without increased ongoing spending as documented in questions 11-14, please demonstrate how you can sustain the project without incurring any increased ongoing costs.

For educational service centers and county boards of developmental disabilities that are members of a consortium, any increased ongoing spending at the educational service center or county board of developmental disabilities may also be offset with the verifiable, permanent, and credible spending reductions of other members of the consortium. This increased ongoing spending must be less than or equal to the sum of the spending reductions for the entire consortium.

Explain in detail how this project will sustain itself for at least five years after June 30th of your grant year.

As indicated in the Financial Impact Table, any ongoing costs after the term of the grant are offset by savings by elimination of programs or a shift in use of district grant funds. The district's existing liability insurance for technology would cover any large scale theft or damage and district has contracted IT services that manage all district technology acquisitions. Teachers will be trained in the use of online assessment, instruction and data tracking, Project-Based Learning (PBL) and the integration of STEM applications into cross-curricular units. The first group of teachers participating in the grant professional development in 2014-15 will be trained to provide peer support and coaching to each additional cohort of teachers who participate with their students in the subsequent five years. The Technology Integration Specialist will coordinate the delivery of professional development by partner providers and will lead the ongoing in-class coaching and technical support as new cohorts of teachers at the MS and HS are added each year. After being trained, teachers will implement new strategies with the new equipment directly with their students and expand learning from the classroom to the new learning environments provided by the renovated...
planetarium, greenhouse, and outdoor learning spaces. Use of Title I and Title II-A funds to support the continuation of teacher professional development for improved teaching practices and technology integration is within the guidelines for use of these funds. The goal is to create a critical mass of teachers and staff within the two schools who can demonstrate how these changes in teacher practice can lead to measurable significant improvement in student academic achievement, and thus bring about a strong sense of efficacy for students as well as teachers as part of the shift in the teaching and learning culture in the schools.

D) IMPLEMENTATION - Timeline, scope of work and contingency planning

16. Please provide a brief description of the team or individuals responsible for the implementation of this project, including other consortium members and/or partners.

* List of scope of work (activities and/or events including project evaluation discussions, communication and coordination among entities).

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
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<tbody>
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<td>9/27/13 Planning began with attendance by four district administrators and teachers at an ESC Round 1 orientation meeting. A team of high school and middle school teachers had a release day to work with the Technology Integration Specialist to draft grant ideas in Google Docs. The central office team then gathered teacher input and drafted a Round 1 submission that requested a one-on-one Chromebook technology immersion with teacher training and support for PBL. When the Round 1 submission was not awarded, reviewer comments were used by the planning team to revise and strengthen the proposal for Round 2. In the intervening months, the vision for what could be done to enhance resources within the district grew, including how to regenerate resources like the greenhouse and planetarium. With input from the district Executive Director in charge of curriculum and instruction, the Treasurer, Business Manager, Federal Programs Administrator, and IT personnel, ideas were vetted based on feasibility, fit with the district technology infrastructure, sustainability and the Five Year Forecast. External partners and an eternal evaluator were identified in February, 2014. Planning meetings with partners to discuss PD and technical assistance took place in March. Once the grant is awarded, planning will continue as follows: -8/14- Prepare communication about the grant to the school community. Set a planning team meeting to transition to an implementation team. Review goals, the evaluation plan, and data to be tracked with the external evaluator. Create the budget with codes for purchasing. Process vendor contracts and MOU’s. Order technology components. Set the calendar of PD events and evaluation meetings. Meet with the cohort 1 teacher team to discuss commitment to the span of the grant; Hold an orientation meeting for HS and MS staff at the opening of school.</td>
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</table>

* Anticipated barriers to successful completion of the planning phase

Rather than a barrier, one potential challenge may be the timeframe for when the grant in awarded and when the funds are available to the district, particularly considering that notification may not be until later in July. This shortens the window for ordering, particularly for equipment. Knowing this, it is important to have clear detailed implementation plan that can guide the team step-by-step through start-up implementation. Also, the grant proposes many upgrades that will take organization to mount and make operational. This will require a careful plan for equipment distribution, security, and calendar for set-up in classrooms.

18. Implementation - Process to achieve project goals

* List of scope of work (activities and/or events, including deliverables, project milestones, interim measurements, communication, and coordination).

The Executive Director in charge of curriculum, instruction, assessment and professional development will work with the Technology Intervention Specialist to coordinate external partner profession development using an annual calendar of PD events in the two schools. The Technology Intervention Specialist will provide on-site coaching to the first cohort of teachers who will prepare to become peer coaches in the five years following the grant year. These teachers will become comfortable with PBL and use of Chromebooks and iPads and use of tools for authentic research, and the design of common assessments within iLearnOhio. Additional teacher cohorts will participate in subsequent rounds of training in Spring and Summer, 2015 and each semester through 2020. Science teachers will participate in the development of the planetarium curriculum with a consultant through NASA Glenn Research Center. Math teachers in Grades 5-8 will have two years of onsite PD and support in the use of Math 180. The goal is to build a critical mass of teacher expertise that grows during the six year period by teacher-to-teacher collaboration for professional learning. Each new cohort of teachers through participation will have access to Chromebooks and other classroom technology. Teachers will have the additional support of modeling and planning with a peer expert to bridge toward confident implementation. Teacher self assessment surveys on readiness and growth in use of technology will continue semiannually. Reflection on change in classroom practice and teacher collaboration will be ongoing through discussion threads in an online course and on inservice release days. In May of each year the MS and HS will hold a PBL Fair to showcase student projects for the community. In June of each year...
19. Summative Evaluation - Plans to analyze the results of the project

* Date Range: May 1 - June 30 annually

* List of scope of work (activities and/or events, including quantitative and qualitative benchmarks and other project milestones).

STUDENT ACHIEVEMENT: The External Evaluator will guide the annual summative evaluation and report results to the Superintendent.

PARCC assessment results will be used to measure overall change in student performance each year by student cohort. By the end of the 2019-20 school year state test results will show a trend of significant improvement in reading, math, science, and social studies. The External Evaluator and BLT in each school will evaluate the degree to which the ACEM project had an impact on results. The number of subject area common assessments and online formative assessment will increase over the five year period and alignment of formative assessment results to end of year PARCC assessment results will improve to where teacher assessments will be a useful predictor of state assessment results. The trend in development of PBL across the five years will show an increase in the number and quality of student developed projects and the connection to authentic community issues will increase. SPENDING REDUCTIONS: The district leadership team will track spending reductions. UTILIZING A GREATER SHARE OF RESOURCES IN THE CLASSROOM: Teacher self-assessment surveys, completed semi-annually will track teacher readiness and growth in using technology to support formative assessment, targeted instruction, and student engagement in learning. The number of PBL projects will increase each year with a Year 1 benchmark of having one small scale PBL implementation in at least one classroom per grade level and increasing to a minimum of two participating teachers per year. At the end of each school year the number of online common assessments designed by teachers will be measured and tracked over the five year period. The Technology Integration Specialist will document the hours and content of embedded classroom support for technology integration into curriculum delivery with a target of at least fifty percent of time being spent in classroom support.

* Anticipated barriers to successful completion of the summative evaluation phase.

To have meaningful results that can inform program improvement, the data over the life of a grant must be collected and analyzed in a consistent form and manner. Changes in assessments or the way data is collected, for example, can mean that data from one year to the next may not be compared. Transitioning into the Common Core and PARCC assessments may mean that data at the beginning of the grant period may not speak to data at the end of the grant period. Add student and staff mobility and it becomes a challenge to identify definitive trends. This is an advantage of having an experienced external evaluator who can advise the district with an evaluation design and guide the implementation team to remain on course over the life of the grant and the sustaining years.

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

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

Please enter your response below:

CHANGES IN INSTRUCTIONAL PRACTICE: At the end of five years there will be a measurable increase in the number of teachers who effectively: 1) use online instructional resources to engage students in their learning and to provide them access to current real-time resources; 2) use online formative assessment to inform their instructional planning; and, 3) regularly use communication and information management online tools such as Google Docs to increase efficiency in planning and documentation. There will be a measurable increase in the number of students who can apply what they know to solving real world problems through project based learning. Through projects the students will gain the skills necessary to compete and participate in the 21st century including: use of Google Docs, project management, collaboration, critical thinking, reflecting, and creativity. The students will communicate with professionals in the field on a real time basis to further enhance their learning by using Google Hang Outs. The teachers will utilize a learning platform such as iLearnOhio or Schoology within the classroom to encourage differentiated instruction within the content area. Individualized instruction will be implemented using assessment data that drives individualized learning goals tied to the Common Core State Standards for reading and math and Next Generation Science standards. Using the resources from iLearnOhio, teachers will spend less time preparing questions for mastery. Students will receive faster feedback from their teachers and third party instructional sites that close the gap between the student's initial effort and remediation. Assumptions and illogical thinking can be challenged so that correct thinking can stick. Students can take charge of their learning process. CHANGE IN ORGANIZATIONAL PRACTICE: At the end of five years there will be a measurable decrease in district reliance on print, paper, copier, and text resources through an increased use of online communication and information management tools.

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

The responses in this section are focused on the ability to design a method for evaluating the project's capacity for long-term sustainable results. Therefore, the questions focus on the method of defining the problem(s) the project hopes to solve and the measures that will determine if the problem(s) have been solved.

21. 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.
22. Describe the overall plan to evaluate the impact of the concept, strategy or approaches used in the project.

This plan should include the methodology for measuring all of the project outcomes. Applicants should make sure to outline quantitative approaches to assess progress and measure the overall impact of the project proposal. The response should provide a clear outline of the methods, process, timelines and data requirements for the final analysis of the project’s progress, success or failure. The applicant should provide information on how the lessons learned from the project can and will be shared with other education providers in Ohio.

* Include the name and contact information of the person who will be responsible for conducting the evaluation and whether this will be an internal or external evaluation.

External Evaluator: Justin C. Perry, Ed.D., Director, Center for Urban Education, Cleveland State University STUDENT ACHIEVEMENT. The two main quantitative metrics used to measure impact on student academic performance are: 1) the percentage of students passing the new Common Core assessments (PARCC) in reading and math and the percentage of students passing state assessments in social studies and science; and 2) data from pre, post, and formative assessments of all students from iLearnOhio and other online formative assessments to assess level of mastery. Additional quantitative data gathered throughout the five year grant period will include student surveys regarding access and engagement in the curriculum. SPENDING REDUCTIONS: Members of the district’s central leadership team, including the Treasurer, the Assessment and Grants Coordinator who manages the CCIP, the Executive Director to the Superintendent, will meet quarterly with the External Evaluator and two principals to monitor progress with spending reductions as outlined in this proposal.

RESOURCE UTILIZATION IN THE CLASSROOM. Quantitative metrics to be gathered annually will include: 1) the number of PBL classroom projects completed; 2) teacher self-assessment surveys regarding readiness and growth in integration of technology; and, 3) the hours and percentage of time logged monthly for classroom coaching and support by the Technology Integration Specialist. The Building Leadership Team (BLT) in each school, which includes the principal and department and grade level representatives, will review data quarterly and work with the External Evaluator to identify areas of need and mid-course corrections. Administrators will be monitoring classroom implementation as part regular walkthroughs and observations.

* 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 project’s progress).

The main analytic methods will be the following: (a) analysis of covariance (ANCOVA), (b) clustering correction of the statistical significance of effects estimated with multiple comparisons, and (d) logistic regression analyses. Based on procedures recommended by the What Works Clearinghouse (WWC), effect sizes (i.e., Hedge’s g, improvement index, odds ratio) will be computed. Intervention effects will be further represented in percentile form. If equivalence for the comparison group is not found, matching methods and/or statistical adjustments will be used to control for pre-existing differences. Longitudinal growth using structural equation modeling will be employed to measure students each year on change in their assessment scores. The practical significance of the project’s impact on outcomes and longitudinal growth will be benchmarked relative to the size of effects found in similar interventions and normal patterns of student academic growth.

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

Online formative assessments designed to assess level of student mastery, teacher self-assessment surveys, and frequency of classroom coaching and support will be tracked on a quarterly or bi-annually basis in coordination with the BLT. Based on analyses of this data immediately after collection, the evaluation team will provide timely feedback to key project personnel in the form an official report and presentation so that continuous improvements can be made. The number of PBL classroom projects completed will be recorded each year; progress toward their completion via quarterly open-response online surveys will be administered by the evaluation team. These surveys are designed to efficiently assess perceptions of what is working and what is not working, and what can be done to improve the process. This data, too, will be reported in a timely manner to the BLT. All qualitative data will be analyzed via content and/or narrative analyses and will be audited.

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

The response should provide specific quantifiable measures of the grant outcomes and how the project will lead to successful attainment of the project goals. Applicants should describe how the program or project will continue after the grant period has expired.

Please enter your response below.

STUDENTS: will not only master rigorous internationally benchmarked standards, but will also gain 21st century skills necessary to compete in today’s global economy. We want to produce lifelong learners who know how to solve the problems that occur in today’s world. If a student applies for a job, we hope that the interviewer can ask, “What problems did you solve in your community while attending Warrensville Heights City Schools?” and “Tell me about your experiences in working in a team.”. We want to develop students who are able to collaborate well with others, and also have a sense of personal responsibility with their own learning goals. TEACHERS: Increasing teacher skills in use of online tools and technology resources will bring about more efficient use of teacher time and more effective assessment driven instruction. DISTRICT: The district will continue to upgrade the technology infrastructure and planning for expanded and current resources for classrooms. COMMUNITY: With increased use of project based learning (PBL) in schools and the application of student problem solving to authentic issues in the neighborhood, students will have a real and positive impact on the community.
City Schools?" and "Tell me about your experiences in working in a team.". We want to develop students who are able to collaborate well with others, and also have a sense of personal responsibility with their own learning goals. TEACHERS: Increasing teacher skills in use of online tools and technology resources will bring about more efficient use of teacher time and more effective assessment driven instruction.

DISTRICT: The district will continue to upgrade the technology infrastructure and planning for expanded and current resources for classrooms. COMMUNITY: With increased use of project based learning (PBL) in schools and the application of student problem solving to authentic issues in the neighborhood, students will have a real and positive impact on the community.

24. Describe the specific benchmarks, by goal as answered in question 9, which 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 applicant should provide details on the quantifiable measures of short- and long-term objectives that will be tracked and the source of benchmark comparative data points. Responses should include specified measurement periods and preliminary success points that will be used to validate successful implementation of the project. If a similar project has been successfully implemented in other districts or schools, identification of these comparable benchmarks should be included.

* Implementation of a shared services delivery model
* Utilization of a greater share of resources in the classroom

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

- Yes
- No

If the applicant selects "Yes" to the first part of the question, the response should provide an explanation of the time and effort it would take to implement the project in another district, as well as any plans to share lessons learned with other districts. To every extent possible, applicants should...
Outline how this project can become part of a model so that other districts across the state can take advantage of the learnings from the proposed innovative project. If there is a plan to increase the scale and scope of the project within the district or consortium, it should be included here.

* Explain your response

This project can be replicated because we will be documenting electronically our planning, implementation, and evaluation steps, including barriers, solutions, and mid-course corrections. District staff will be willing to share information with any district that wishes to use the model just as other districts shared their programs with us. This project could be scaled down to as small as one classroom or as large as an entire district. We have learned that if we focus on the engagement of students and not just on the equipment that is being used, students will achieve at greater levels. We would pass that learning on to others.

By virtue of applying for the Straight A Fund, all applicants agree to participate in the overall evaluation of the Straight A Fund for the duration of the evaluation time frame. The Governing Board of the Straight A Fund reserves the right to conduct an evaluation of the project and request additional information in the form of data, surveys, interviews, focus groups and other related data on behalf of the General Assembly, Governor and other interested parties for an overall evaluation of the Straight A Fund.

PROGRAM ASSURANCES: I agree, on behalf of this applicant, and any or all identified consortium members or partners, that all supporting documents contain information approved by a relevant executive board or its equivalent and to abide by all assurances outlined in the Straight A Assurances (available in the document library section of the CCIP).

I agree. Marva K Jones, Superintendent Warrensville Heights City Schools 4/18/14
Consortium

Warrensville Heights City (045005) - Cuyahoga County - 2015 - Straight A Fund - Rev 0 - Straight A Fund

Sections

Consortium Contacts

No consortium contacts added yet. Please add a new consortium contact using the form below.
### Part 1

**Debbie Jackson, Ed.D.**  
216-687-3753  
d.jackson1@csuohio.edu  
Cleveland State University - Department of Teacher Education, College of Education and Human Services, Civil and Environmental Engineering  
Cleveland State University, 2121 Euclid Avenue, JH349, Cleveland, Ohio, 44115-2214

**Justin C. Perry, Ed.D.**  
216-687-5434  
j.c.perry96@csuohio.edu  
Cleveland State University - Center for Urban Education, College of Education and Human Services, Civil and Environmental Engineering  
Cleveland State University, Julka Hall, 2485 Euclid Avenue, Cleveland, Ohio, 44115

**Diane L. McElwain, Ph.D.**  
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McElwain Educational Consulting, LLC  
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19945 Shenandoah Ridge, , Strongsville, Ohio, 44149

**Whitney Owens**  
216-621-2400  
owensw@glsc.org  
Center for Innovation in STEM Education (CISE)  
Great Lakes Science Center, 601 Erieside Avenue, Cleveland, Ohio, 44114
<table>
<thead>
<tr>
<th>First Name</th>
<th>Last Name</th>
<th>Title</th>
<th>Responsibilities</th>
<th>Qualifications</th>
<th>Prior Relevant Experience</th>
<th>Delete Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terri</td>
<td>Olix</td>
<td>High School Environmental Science Teacher</td>
<td>Reports to the High School Principal. Responsibilities with this grant will be to: 1) Collaborate as a member of the planning team in the creation of the ACEM project; 2) Participate in professional development provided by partners; 3) Collaborate in the design of STEM learning spaces; 4) Implement PBL within the classroom and beyond during the grant year; 5) Prepare to coach peers in implementation of grant supported strategies in the 5 years following the grant year; 6) Participate with the initial teacher team in ongoing program evaluation activities; and, 7) Use evaluation feedback to make mid-course corrections and establish improvements for successive years of program implementation</td>
<td>4-year Resident Educator License - Adolescence to Young Adult (7-12) Life Sciences</td>
<td>PBL trained; tries to keep fun in science by providing authentic learning situations; is experienced with using Schoology in her classroom to differentiate learning.</td>
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<tr>
<td>Mark</td>
<td>Kendel</td>
<td>Middle School Science and Social Studies Teacher</td>
<td>Reports to the Middle School Principal. Responsibilities with this grant will be to: 1) Collaborate as a member of the planning team in the creation of the ACEM project; 2) Participate in professional development provided by partners; 3) Collaborate in the design of STEM learning spaces; 4) Implement PBL within the classroom and beyond during the grant year; 5) Prepare to coach peers in implementation of grant supported strategies in the 5 years following the grant year; 6) Participate with the initial teacher team in ongoing program evaluation activities; and, 7) Use evaluation feedback to make mid-course corrections and establish improvements for successive years of program implementation</td>
<td>5-year Professional License - Elementary (K-8)</td>
<td>Over 10 years experience in the middle school setting. Strives for differentiation to meet student needs and student choice in units. Wants to increase student access to technology for project-based science learning.</td>
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</tr>
<tr>
<td>Constance</td>
<td>Rudolph</td>
<td>Middle School Principal</td>
<td>Reports to the Executive Director. Responsibilities with this grant will include: 1) Supervise the participation of teachers who commit to participate in grant activities; 2) Facilitate monthly communication between the BLT and the Technology Integration Specialist and teacher participants; 3) Participate in the quarterly progress review meetings with district leadership and the External Evaluator</td>
<td>5-year Professional License - Principal; 5-year Professional License - Superintendent</td>
<td>Middle School Principal - 3 years High School Assistant Principal - 2 years</td>
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<tr>
<td>Daniel</td>
<td>Drew</td>
<td>High School Science Teacher</td>
<td>Reports to the High School Principal. Responsibilities with this grant will be to: 1) Collaborate as a member of</td>
<td>5-year Professional License - Adolescent to Young Adult (7-12)</td>
<td>He has been PBL and Common Core trained. He was a Project Astro</td>
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<tr>
<td>Name</td>
<td>Position</td>
<td>Responsibilities</td>
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<tr>
<td>Nevin Jenkins</td>
<td>Technology Integration Specialist</td>
<td>Reports to the Executive Director to the Superintendent. Responsibilities include: 1) Coordinate the professional development for technology integration provided by vendor partners; 2) Facilitate the on-site PD and peer coaching provided by teachers who participate in the training; 3) Communicate all activities and program progress to the Executive Director, HS and MS principal, and BLTs in each building once a month; 4) Participate in the quarterly progress monitoring meetings with district leadership, principals, and the External Evaluator; and, 5) Document all program activities, log all classroom services, and maintain data in relation to the program goals.</td>
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<tr>
<td>Donald Gambal</td>
<td>Treasurer</td>
<td>As the district Treasurer, Don Gambal will 1) set up the program budget with appropriate USAS codes aligned to the CCIP grant budget; 2) monitor spending in relation to grant purposes and budgets; 3) participate with the district leadership and the External Evaluator in quarterly progress review meetings; and, 4) provide all necessary financial reporting documents for audit and program review.</td>
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<tr>
<td>Denise Ward</td>
<td>Executive Director to the Superintendent</td>
<td>Reports to the Superintendent. Responsibilities in relation to this grant will include: 1) Oversee all program activities related to curriculum, instruction, assessment, professional development and school planning; 2) Supervise the Technology Integration Specialist in all tasks related to the grant; 3) Maintain ongoing communication with the Superintendent regarding all grant activities; 4) Facilitate communication and review of progress with principals and district leadership; 5) Arrange for and participate in the quarterly progress review meetings.</td>
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<tr>
<td>Mark Fritz</td>
<td>Business Manager</td>
<td>Reports to the Superintendent. Responsibilities with this grant will be: 1) Participate and advise in the planning for the grant in relation to the planetarium and greenhouse upgrade, the creation of outdoor learning spaces and the purchase, maintenance, and security of all equipment; 2) Maintain communication with the Executive Director regarding the alignment of technology and facility decisions with curriculum and instruction; 3) Facilitate purchasing and oversee the inventory, maintenance, and security of all equipment; and, 3) participate in leadership quarterly meetings with the External Evaluator.</td>
<td>Business Manager - Ohio Department of Education License Ohio State University - OASBO PD Building and Construction Management; Cleveland State University - Masters Degree</td>
<td>Warrensville Heights Business Manager 4 years; Parma City School District Risk Manager 5 years</td>
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</tr>
<tr>
<td>Lori Crum-Glenn</td>
<td>High School Principal</td>
<td>Reports to the Executive Director. Responsibilities with this grant will include: 1) Supervise the participation of teachers who commit to participate in grant activities; 2) Facilitate monthly communication between the BLT and the Technology Integration Specialist and teacher participants; 3) Participate in the quarterly progress review meetings with district leadership and the External Evaluator.</td>
<td>5-year Professional License - Superintendent; 5-year Professional License - Elementary Principal - K-8</td>
<td>Warrensville Hts. High School Principal - 3 years Warrensville Hts. Middle School Principal - 2 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>James Jakubowski</td>
<td>High School Science Teacher</td>
<td>Reports to the High School Principal. Responsibilities with this grant will be to: 1) Collaborate as a member of the planning team in the creation of the ACEM project; 2) Participate in professional development provided by partners; 3) Collaborate in the design of STEM learning spaces; 4) Implement PBL within the classroom and beyond during the grant year; 5) Prepare to coach peers in implementation of grant supported strategies in the 5 years following the grant year; 6) Participate with the initial teacher team in ongoing program evaluation activities; and, 7) Use evaluation feedback to make mid-course corrections and establish improvements for successive years of program implementation.</td>
<td>5-year Professional License - Adolescence to Young Adult (7-12) Integrated Science</td>
<td>5 years of high school science teaching experience. Member of the 21st Century Technology grant team at the high school. Has build expertise in &quot;flipping the classroom&quot; and encourages the use of video with small group work and use of technology for student-to-student teaching.</td>
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</table>
| Aaron Hall | Middle School Social Studies Teacher | Reports to the Middle School Principal. Responsibilities with this grant will be to: 1) Collaborate as a member of the planning team in the creation of the ACEM project; 2) Participate in professional development provided by partners; 3) Collaborate in the design of STEM learning spaces; 4) Implement PBL within the classroom and beyond during the grant year; 5) Prepare to coach peers in implementation of grant supported strategies in the 5 years following the grant year; 6) Participate with the initial teacher team in ongoing program evaluation activities; and, 7) Use evaluation feedback to make mid-course corrections and establish improvements for successive years of program implementation. | 4-year Resident Educator License - Adolescence to Young Adult (7-12) Integrated Social Studies | 3 years of teaching experience. PBL trained and has experience working within a PBL cohort through the NASA Glenn Research Center. Believes strongly in the value of technology and internet access for targeting instruction to student needs. Hopes to have access to cloud-based services and
| Michael Neill | Middle School Math and Science Teacher | Reports to the Middle School Principal. Responsibilities with this grant will be to: 1) Collaborate as a member of the planning team in the creation of the ACEM project; 2) Participate in professional development provided by partners; 3) Collaborate in the design of STEM learning spaces; 4) Implement PBL within the classroom and beyond during the grant year; 5) Prepare to coach peers in implementation of grant supported strategies in the 5 years following the grant year; 6) Participate with the initial teacher team in ongoing program evaluation activities; and, 7) Use evaluation feedback to make mid-course corrections and establish improvements for successive years of program implementation | Permanent Certificate - Elementary (1-8) | 15 years experience in middle school teaching. Uses hands-on learning to teach math and science and hopes for greater technology access for his students for increasing engagement. |