

Budget

Amherst Exempted Village (045195) - Lorain County - 2015 - Straight A Fund - Rev 0 - Straight A Fund - Application Number (305)

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		306,000.00	52,000.00	0.00	833,907.74	2,265,892.75	0.00	3,457,800.49
Support Services		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Governance/Admin		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Prof Development		0.00	0.00	15,000.00	0.00	0.00	0.00	15,000.00
Family/Community		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Safety		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Facilities		0.00	0.00	0.00	0.00	20,000.00	0.00	20,000.00
Transportation		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total		306,000.00	52,000.00	15,000.00	833,907.74	2,285,892.75	0.00	3,492,800.49
Adjusted Allocation								0.00
Remaining								-3,492,800.49

Application

Amherst Exempted Village (045195) - Lorain County - 2015 - Straight A Fund - Rev 0 - Straight A Fund - Application Number (305)

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

A) APPLICANT INFORMATION - General Information

1. Project Title:

enVisioning Mathematics Innovation and Transforming Learning in the Technology Era (eMIT LITE)

2. Executive summary: Please limit your responses to no more than three sentences.

Project eMIT LITE will transform mathematical and technological learning and achievement by preparing all Kindergarten through sixth grade students in the Amherst and Avon Lake Consortium for college and career readiness through the implementation of a rigorous mathematical curriculum with a technology based approach to personalized learning that allows anywhere, anytime learning for initial instruction, intervention, remediation, and enrichment. Through the use of state of the art technology, proven teaching and learning strategies, and individualized learning plans, our students will be engaged and challenged while achieving mastery of the Ohio Common Core Mathematical Standards and we will emit new light on our pedagogy with transformative professional development. Cutting edge technologies, including iPads and Chrome Books will immerse our teachers and students in high-level personalized instruction that supports each student's specific needs and interests, while engaging them in learning to accelerate the technological proficiency necessary for success in a global economy.

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.

4000 3. Total Students Impacted:

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:

- | | |
|--|--|
| <input type="checkbox"/> Pre-K Special Education | <input checked="" type="checkbox"/> Kindergarten |
| <input checked="" type="checkbox"/> 1 | <input checked="" type="checkbox"/> 2 |
| <input checked="" type="checkbox"/> 3 | <input checked="" type="checkbox"/> 4 |
| <input checked="" type="checkbox"/> 5 | <input checked="" type="checkbox"/> 6 |
| <input type="checkbox"/> 7 | <input type="checkbox"/> 8 |
| <input type="checkbox"/> 9 | <input type="checkbox"/> 10 |
| <input type="checkbox"/> 11 | <input type="checkbox"/> 12 |

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

First Name, last Name of contact for lead applicant

Michael Molnar

Organizational name of lead applicant

Amherst Exempted Village School District

Address of lead applicant

185 Forest Street, Amherst, Ohio 44001

Phone Number of lead applicant

440-988-4406

Email Address of lead applicant

mike_molnar@amherstk12.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 educational service center.

[Add Consortium Members](#)

7. Are you partnering with anyone to plan, implement, or evaluate your project? - Select one checkbox below

Yes

No

If you are partnering with anyone, please list all partners by name on the "Partnering Member" page by clicking on the link below.

[Add Partnering Members](#)

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

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

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

The current state or problem to be solved; and

Amherst and Avon Lake students are striving to become 21st century learners with outdated mathematical curriculum and limited technology access. Our K-3 diagnostic and 4-6 value added data indicate a causal relationship demonstrating that our students are not realizing desired learning gains relative to ability levels despite differentiated in-class instruction, strategic interventions, and purposeful enrichment. We find these conditions unacceptable in any circumstance, but alarming when faced with the challenge of rigorous mathematics standards, demanding new assessments, and the knowledge that college and career readiness brings with it the inherent need to educate a technologically proficient workforce. Mathematics knowledge is integral to success. Math bombards our lives daily. We use data to inform decisions and to propel the foundation of everyday life. Actions like making purchases, choosing health insurance or planning for retirement require mathematical competence. The global workforce demands workers who can solve real-world problems, communicate their logic to others, identify and analyze data trends, and interface proficiently with technology. The Bureau of Labor and Statistics indicates that more students must pursue mathematical and technical occupations. Employment projections reveal that jobs in STEM related fields will grow faster than any other professional category in the next twenty-five years, estimating that sixty percent of all jobs in the twenty-first century will require high-level mathematical skills. The National Council of Teachers of Mathematics reports that these skills are currently possessed by a mere twenty percent of the current workforce (National Commission on Mathematics and Science for the Twenty-first Century 2000). It is our responsibility, and indeed a mandate, to deploy the most challenging mathematics instruction ever experienced in our schools.

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

Our proposal, Project eMIT LITE is a strategic solution to propel the consortium forward in meeting the needs of students in technology, mathematics and core content curriculum. We plan to deploy cutting edge digital, personalized curriculum using enVisionMATH on iPads and Chromebooks for all K-6 students and extend one to one technology based personalized learning in core content areas to all kindergarten through sixth grade students over the five year grant period. These solutions combined with high-level, on-going professional development will transform teaching and learning in the consortium. In year one we will implement EnVisionMATH in a blended learning environment. enVisionMATH has research validated results for student achievement. The U.S. Department of Education's What Works Clearinghouse issued a report validating research on implementations of enVisionMATH elementary school curriculum. These implementations resulted in statistically significant increases in student achievement. The enVisionMATH program, as reviewed by the What Works Clearinghouse, seeks to help students develop an understanding of math concepts through problem-based instruction, small-group interaction, and visual learning with a focus on reasoning and modeling. enVisionMATH is a next generation math program offering synchronized print and digital lessons. After the initial problem solving interaction, enVisionMATH teachers use quick indicators to link students to personalized digital instruction including visual simulations, and visual learning bridges enabling each student to work toward personalized goals. enVisionMATH and 1:1 technology enabled with data plans will enable personalized mathematics learning plans for all students. Students will be able to use a vast collection of digital resources on the enVisionMATH platform at home and at school for 24/7 learning. To ensure a smooth transition to digital and blended learning, consortium schools initiated infrastructure updates in 2013-2014 so that all are wireless. As part of our innovative solution, we will acquire the necessary bandwidth to effectively and efficiently run 21st century learning technology. Our students need access to digital learning in a mobile society, therefore, we will purchase charging carts for devices so that digital learning is not interrupted by power needs. Building based leadership, instructional coaches, media specialists, technology coordinators and lead technology teachers will participate in high quality professional development to become school based leaders to increase the capacity of educators to incorporate technology in the classroom effectively. Our partners at the Educational Services Center of Lorain County (ESC) will assist this effort as they provide leadership for the transformation to technology based personalized learning. While our initial focus will be in mathematics, the 1:1 ratio will enable core content areas to embrace digitally driven personalized learning. All teachers will participate in on-going technology professional development with the goal of transforming technologically driven, blended or digital, personalized learning in all core content classrooms in the consortium over the five year grant period. In year two of the grant period, we will implement technology driven personalized instruction in ELA, in year three this instruction will extend to science classrooms, and in year four social studies classrooms will function as technology driven personalized learning environments. By year five, instruction in all four core content areas, mathematics, ELA, science and social studies will reflect a 21st century technology orientation. An added bonus to our initiative is that by becoming more technologically proficient, our students will be prepared for web based outcome assessments such as PARCC. Students will need skills for dragging and dropping, video streaming, using virtual manipulatives, and interactive answering.

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, content areas as appropriate) in the box below.)

Project eMIT LITE has identified student achievement as its primary goal. To increase student achievement we will deploy one to one devices such as iPads and Chromebooks to all K-6th students. New digital math curriculum, enVisionMATH, will be implemented in all K-6th grade classrooms. enVisionMATH is a research validated curriculum containing all of the critical elements required by the Common Core State Standards, including the required focus on conceptual understanding, procedural skill and fluency, and applications. A significant advancement in student achievement will be measured through a variety of benchmarks. We will examine the previous two years of data by comparing the beginning of the year, middle of the year, and end of the year results with the data collect over the next five years after the inclusion of the technology using NWEA MAP and STAR Math. We will examine the previous two years of OAA data and compare it with the data collected over the next five years on the PARCC assessments after the inclusion of the technology. We will analyze the increase in the number of students that score in the Accelerated and Advanced ranges on each assessment and the increase in our student growth and value-added data in grades 4-6. The 1:1 student to computer ratio will be realized by purchasing iPads or Chromebooks for all Kindergarten through 6th grade students. Professional development for implementing enVisionMATH and professional development in technology driven pedagogy will be provided to all instructional stakeholders in order to increase their capacity to lead instruction in personalized, digital and blended learning environments. Instructional coaches, media specialists, and technology coordinators will attend professional development designed to increase their leadership capacity for our digital learning transformation and will attend professional development for the enVisionMATH implementation during year one of the grant period. School based leadership will explore curriculum options with the goal of implementing digital or blended learning in all four core content areas by the end of the five year grant period. According to the U.S. Department of Education and recent studies by the National Training and Simulation Association, technology based instruction can reduce the time students take to reach a learning objective by 30% to 80%. According to a meta- analysis and review of online learning studies by the U.S. Department of Education, on average, students in online learning conditions performed better than those receiving face-to-face instruction. Project RED, Revolutionizing Education, a study of 1:1 implementations in the United States, identifies nine key factors as predictors of success using 1:1 technology to achieve increases in student performance: 1) Intervention classes: Technology is integrated into every intervention class period. 2) Change management leadership by principal: Leaders provide time for teacher professional learning and collaboration at least monthly. 3) Online collaboration: Students use technology daily for online collaboration (games/simulations and social media). 4) Core subjects: Technology is integrated into core curriculum weekly or more frequently. 5) Online formative assessments: Assessments are done at least weekly. 6) Student-computer ratio: Lower ratios improve outcomes. 7) Virtual field trips: With more frequent use, virtual trips are more powerful. 8) Search engines: Students use daily. 9) Principal training: Principals are trained in teacher buy-in, best practices, and technology-transformed learning. These nine predictors of student success will guide the consortium and our partners at the Educational Services Center of Lorain County (ESC) as we move forward with 1:1 implementation in grades K-6.

Spending reductions in the five-year fiscal forecast or positive performance on other approved fiscal measures (Describe the specific reductions you anticipate in terms of dollars and spending categories over a five-year period in the box below or the positive performance you will achieve on other approved fiscal measures. Other approved fiscal measures include a reduction in spending over a five-year period in the operating budget approved by your organization's executive board or its equivalent.)

Utilization of a greater share of resources in the classroom (Describe specific resources (Personnel, Time, Course offerings, etc.) that will be enhanced in the classroom as a result of this innovation in the box below.)

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)

New - never before implemented

Existing: Never implemented in your community school or school district but proven successful in other educational environments

Mixed Concept: Incorporates new and existing elements

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

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.

3,492,800.49 State the total project cost.

* Provide a brief narrative explanation of the overall budget.

The costs associated with this proposal represent the total costs for implementation of 1:1 technology in all consortium schools in grades K-6, the implementation of enVisionMATH program in grades K-6, the professional development associated with math curriculum implementation, and building the capacity of consortium teachers to embrace and deploy digital and blended personalized learning. Additional curriculum added during years 2-5 in ELA, science, and social studies will be funded through district textbook allotments. The total cost for the enVisionMATH materials and eBooks for Amherst and Avon Lake is \$355,407.74. Professional development membership fee with Lorain County ESC for both districts will incur an annual fee of \$3000 per year, \$15,000 for the grant period. Additional substitute costs for professional development for both districts will cost \$358,000. The cost of Chromebooks for Avon Lake with management piece, batteries, insurance and charging carts is \$900,000. Technology upgrades to 91 classrooms will be necessary in the Avon Lake District at a cost of \$13,650. A secondary network to support K-6 Chromebooks with 10-year licensing agreement (to include hardware replacement and web filter) will be needed in the Avon Lake District at a cost of \$300,000. Other infrastructure upgrades in the Avon Lake District will incur a cost of \$20,000. The cost of 1200 iPad Air with Retina Display for Amherst (grades 3-6) is \$694,800. The cost for 800 iPad Mini with Retina Display for Amherst (grades K-2) is \$223,200. Vouchers for iPad applications cost is \$100,000. The cost of 250 Apple TVs for wireless visual presentation in each classroom will cost \$24,750. The cost for HDMI cables and VGA adapters for each Apple TV is \$15,937.50. JAMF Casper IOS8 and OSXB8 management software plus a 3 year maintenance contract will cost \$72,000. Apple Architecture and Integration Services to set up the management software will cost \$6,500. iPad protective covers will cost \$56,000 and iPad keyboards for giving the PARCC assessments will cost \$47,960. The iPad charging carts will cost \$41,995.25. An internet filter appliance called iBoss will cost \$247,600.

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.

The cost of replacing or purchasing additional Chromebook devices at the end of the grant will be absorbed by district technology and permanent improvement funds. The cost of purchasing the iPads after the end of the lease is a \$1.00 buy-back. The 3-year maintenance plans on IOS software are included in the requested amount and addition years (\$72,000) will be absorbed by district technology funds. The overall costs for sustaining the project over five years is \$72,001 for the Amherst Exempted Village School District. There are no sustainability costs for the Avon Lake City School District.

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.

1,742,060.00 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

Cost reductions will be realized as we move toward digital and blended instruction. The nature of digital curriculum is that it can be inexpensively updated and requires less expenditure on printing and consumable materials. Curriculum cost savings on consumable materials of 6 to 8% can be expected when implementing digital curriculum. Over the five year period of this grant, the expected savings in consumable materials is \$81,632 in year one and \$408,160 over the five year grant period for each school district (Amherst and Avon Lake). Savings will also be realized in professional development as Amherst and Avon Lake work together as a consortium. Avon Lake and Amherst will combine forces to provide in-house professional development and classroom support for new pedagogies. Avon Lake implemented pilot programs in school year 2013-2014 using enVisionMATH. Pilot teachers will extend the expertise they have gained to other teachers in the consortium as we move forward with this curriculum implementation. This will reduce professional development costs by \$4000 per year, or \$20,000 over the grant period. There are additional cost factors in professional development and technology devices that will increase cost savings as a direct result of grant funding. Avon Lake elected to purchase Chromebooks for all 3rd and 4th grade students in school year 2013-2014. With grant funding, a \$207,900 savings will be realized on the purchase of the Chromebooks in FY2015. Over the five-year grant the consortium will realize another \$358,000 in professional development savings for substitute costs for integrating devices into instruction in Avon Lake and Amherst. Due to the 1:1 technology we will implement with this project the consortium districts will realize significant savings in textbook acquisition. The nature of digital curriculum is that it can be easily updated at little cost to the districts. The consortium expects to realize a \$600,000 savings in textbook costs over the five-year grant period by implementing 1:1 technology. 1:1 technology also supports cost savings in paper and copying. The expected savings for Project eMIT LITE will result from a reduction in paper, copy, and printing costs by \$200,000 over five years for both districts through the sharing of digital resources in a paperless environment. Cost savings on printing and copying of 50% can be expected when implementing 1:1 computer initiatives. A study of 1:1 implementations in 49 states and the District of Columbia, Project RED, The Technology Factor: Nine Keys to Student Achievement and Cost-Effectiveness, reports that effective implementations of 1:1 technology can reduce printing and copy costs by half especially when considering labor and productivity as cost factors.

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.

Additional expenditures are associated with the cost of purchase of the iPads after the 3 year lease period expires. The agreement with Apple allows the Amherst school district to purchase all iPad devices for \$1.00 at the end of the lease. IOS management software maintenance contracts were included for a three year period. The additional two year cost over a five year period would equal \$48,000. The anticipated savings from the eMIT LITE project will more than offset the annual maintenance costs for IOS software. Additional curriculum needs as we move forward with digital and blended learning will be attributed to district textbook allocations. The expected combined cost savings of \$1,742,060 for Amherst and Avon Lake outlined in question #14 is more than enough to offset the \$72,001 in ongoing expenditures within the five year period following the grant for Amherst. The cost saving of \$408,160 for both districts due to the reduction in consumable math materials after the purchase of enVisionsMATH alone is enough to cover ongoing and unexpected costs.

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.

This response should include a list of qualifications for the applicant and others associated with the grant. If the application is for a consortium or a partnership, the lead should provide information on its ability to manage the grant in an effective and efficient manner. Include the partner/consortium members' qualifications, skills and experience with innovative project implementation and projects of similar scope.

Enter Implementation Team information by clicking the link below:

[Add Implementation Team](#)

For Questions 17-19 please describe each phase of your project, including its timeline, scope of work, and anticipated barriers to success.

A complete response to these questions will demonstrate specific awareness of the context in which the project will be implemented, the major barriers that need to be overcome and the time it will take to implement the project with fidelity. A strong plan for implementing, communicating and coordinating the project should be outlined, including coordination and communication in and amongst members of the consortium or partnership (if applicable). It is recognized that specific action steps may not be included, but the outline of the major implementation steps should demonstrate a thoughtful plan for

achieving the goals of the project. The time line should reflect significant and important milestones in an appropriate and reasonable time frame.

17. Planning - Activities prior to the grant implementation

* Date Range August 2013 - April 2014

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

During the 2013-2014 school year, the Amherst/Avon Lake Consortium researched mathematics curriculum in anticipation of adopting CCSS aligned materials for the 2014-2015 school year. Concurrently, a technology blueprint was being developed to move forward with one to one technology in each district with the Lorain County Educational Service Center (ESC). The two discussions naturally synergized into integrating the technology initiative and mathematics curriculum choice so that digital and blended learning environments would become a reality in our classrooms. Furthermore, the decision to develop a consortium opened up a wealth of shared resources in terms of internal professional development, fiscal incentives, technology service and support, and collegial collaboration. The curriculum and technology leadership of both districts identified Ohio Straight A Grant funding as method of realizing this transformation in our schools and a grant leadership team was formed. The goal of increased student achievement was identified as the primary focus of this project, and a secondary goal of cost savings was embraced. The consortium agreed on the adoption of enVisionMATH after months of study and communication among stakeholders. Research demonstrated that iPads and Chromebooks would be an effective means of putting 1:1 technology and anytime, anywhere learning in the hands of our students but also revealed the need for data plans and charging stations at our schools. All parties agreed on extensive professional development as a key factor in the success of this initiative. The grant leadership team met with the vendor to discuss meshing enVisionMATH with the districts' 1:1 initiative and positive results spurred moving forward with grant funding. In working with the ESC, we determined that infrastructure and bandwidth updates currently underway at district schools would support 1:1 technology, and that both iPads and Chromebooks would be compatible learning devices.

* Anticipated barriers to successful completion of the planning phase

The anticipated barrier determined to be the most crucial to the outcome of this initiative is the need for extensive, on-going professional development that will transform stand-and-deliver pedagogy into 21st century technology driven instruction. To mitigate that barrier, both districts have begun a process to identify teachers who can become trainers for their peers. It is the grant committee's strong belief that significant change will only come about if we meet the need for on-going support. To that end, we have begun the process of identifying a first tier of educators who will attend a train-the-trainer technology professional development seminar in early September 2014. We are also working with the vendor to develop a professional learning plan for onsite, online, and on-demand professional development for the enVisionMATH program. Additional professional development in technology-based instruction for ELA, science, and social studies is planned as part of our long-range goals for this initiative.

18. Implementation - Process to achieve project goals

* Date Range August 2014 - June 2019

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

Project eMIT LITE will have four workstreams: 1) ESC will conduct professional development to create leadership in information age schools. ESC will work with instructional coaches, media specialists, lead technology teachers, and technology specialists in a train-the-trainer model designed to develop a leadership team of technology trainers at each school. Milestones and benchmarks: ESC will conduct quarterly professional development. Trainers will complete post surveys to track learning and focus next sessions. ESC trained school based leaders will conduct professional development at the school level to increase capacity for technology based instruction. Trainers will document side-by-side coaching in classrooms and facilitate development of a model classroom at each school. 2) Pearson professional development specialists will work with lead math teachers in a train-the-trainer model. Milestones and benchmarks: In-service training for lead teachers in August 2014. Training (facilitated by lead teacher trainers) for all mathematics teachers K-6 will occur in September 2014. Quarterly progress monitoring assessment data will be reviewed in professional learning community meetings to assess student achievement and determine next steps in mathematics instruction. 3) This workstream will focus on curriculum planning directed by the project coordinators working with building based administration, curriculum specialists, and instructional coaches to implement digital personalized learning in ELA, science, and social studies in years 2-5 of the grant period. 4) Building level administration will be responsible for device deployment. Milestones and benchmarks: Conduct parent meetings to introduce project eMIT LITE and inform stakeholders in early September 2014, development of parent information letters and videos to be uploaded to district websites early September 2014, and deployment of devices in late September 2014.

* Anticipated barriers to successful completion of the implementation phase.

Anticipated barriers include professional development attendance and logistics for a large number of stakeholders. To mitigate this barrier, professional development sessions will be recorded and made available in a web based format whenever possible. Instructional coaches and lead teachers at the building level will work with teachers in monthly professional learning communities to ensure the goals of professional development for creating information age schools are met. Another anticipated barrier is the coordination of workstreams. The project coordinator position was added to the grant plan to mitigate this barrier. Converting digital immigrant teachers to pedagogy designed to engage a digital native generation has inherent barriers. Lead teachers will be identified, model classrooms will be established, and the assistance of technology coordinators will be harnessed to mitigate this barrier. We anticipate a potential barrier related to parent resistance to informational age learning. We will mitigate this barrier with strong lines of communication beginning with initial parent meetings and continuing communication throughout the grant period.

19. Summative Evaluation - Plans to analyze the results of the project

* Date Range August 2014 - June 2019

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

Project eMIT LITE will be analyzed to determine that the goal of increasing student achievement through blended and digital, personalized learning is achieved and that we have effectively established 21st century schools in the consortium. To that end, our partner at the ESC will use Clarity BrightBytes teacher, student, and parent surveys. Clarity BrightBytes is an online software platform that measures whether

technology programs are impacting student learning. Clarity BrightBytes's proprietary CASE framework reports focuses on four key areas of technology in schools: the classroom use of technology, student access to devices and technology learning, the skill level of all stakeholders, and environment for success of technology learning. Schools receive a score in each of these areas. The Clarity BrightBytes data will be obtained in September/October 2014 before implementation of the project and then each year thereafter to review progress. In addition to analyzing the use of technology, the grant coordinators and grant leadership team will analyze student achievement data using NWEA MAPS (Avon Lake) and STAR Math (Amherst), beginning with mathematics data in year one to determine that the initiative is having a positive impact on mathematics achievement. As new digital and blended curriculum is added in years 2-5, the leadership team will extend data monitoring to all core content areas. The grant leadership team will also be responsible for monitoring the project's efficiency at meeting its second stated goal of cost savings. The grant coordinators and leadership team will examine spending at each school on paper and printing, textbook acquisitions, and professional development to ensure the project is on track for fiscal savings.

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

On the student achievement side of the evaluation, we do not see any anticipated barriers because both school districts already have a process in place to collect and analyze student achievement data and student growth measures. Anticipated barriers on the technology side of the evaluation is the possibility of limited data from parent surveys. We will mitigate this barrier with strong lines of communication beginning with initial parent meetings and continuing communication throughout the grant period. We will also provide parents with easy access to parent surveys during various school-related functions and activities.

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:

Project eMIT LITE will create transformational change in teaching and learning in the Amherst and Avon Lake Consortium as we become a community of informational age schools using 1:1 technology and digital or blended personalized learning. With assistance from our partners and vendors, we will support consortium teachers as they embrace this change and expand their abilities to use technology and personalized learning strategies effectively in their classrooms. Technology plays an increasingly critical role in intensifying student engagement and facilitates the development of personalized learning and 21st century skills. It is integral to the future of our students that we move forward with this systemic change. By entering into a partnership, the districts of Amherst and Avon Lake will begin an unprecedented era of collegial collaboration, which will expand professional development resources, enhance buying power, and increase potential partnerships for both districts enabling us to reach these ambitious goals. As we move forward with the implementation of 1:1 technology and personalized learning in our districts, our combined instructional leadership resources will serve as a powerful support for teachers. Reforming existing pedagogy to match the needs of 21st century students will be an unparalleled advancement. Beginning with the implementation of enVisionMATH and continuing with implementations of digital and blended instruction in all four core content areas, we will see the development of 21st century personalized, anytime, anywhere instruction become a reality for our students. Project eMit LITE will truly shed new instructional light on our consortium.

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.

The response should provide a concise explanation of items which provide rationale that will support the probability of successfully achieving the goals of the project. Answers may differ based on the various levels of development that are possible. If the proposal is for a new, never before implemented project, the response should provide logical, coherent explanations of the anticipated results based on some past experience or rationale. For projects that have been implemented on a smaller scale or successfully in other organizations, the response should provide the quantifiable results of the other projects. If available, relevant research in support of this particular proposal should also be included.

Please enter your response below.

Research regarding 1:1 computer initiatives has shown positive outcomes for implementation. An article in the International Journal of Education and Development entitled, "Large-scale 1:1 computing initiatives: An open access database," reports significant academic gains realized from 1:1 programs. In addition to academic gains, additional reported benefits of 1:1 programs include transformations in student and teacher behaviors and attitudes. Multiple studies cite increases in student interest and engagement as a result of 1:1 implementation. (Bebell 2005; Lemke & Martin 2004a, 2004b; Mouza 2008; Russell, Bebell & Higgins 2004; Shapley et al. 2006; Warschauer & Grimes 2005; Zucker & McGhee 2005). Bebell and Kay (2010) analyzed the impact of a 1:1 program on five middle schools in Massachusetts. Teachers in the middle schools participating in the study indicated that students using laptops were more motivated to complete tasks and remained engaged longer than they had before the laptop initiative. Adjustments to both teacher behaviors and pedagogy also have been reported as an outcome of 1:1 programs (Dawson, Cavanaugh and Ritzhaupt 2008). In a 447-classroom 1:1 implementation, Florida's Leveraging Laptops Initiative determined that pedagogy was impacted in a manner that found teachers making greater use of project-based learning and collaborative learning. Weston and Bain (2010) asserted that 1:1 programs might have more impact on making positive change in schools than any other reform effort. Research relative to the two fold strategic actions outlined for year one of this proposal, implementation of enVisionMATH and 1:1 devices, demonstrates that these strategies have produced positive results for student achievement. The consortium has identified extending digital or blended learning in four core subject areas, math, ELA, science and social studies over the five-year grant period. enVisionMATH is a core curriculum for students in kindergarten through grade 6. The program assists students in developing an

understanding of math concepts through problem-based instruction, small-group interaction, and visual learning with a focus on reasoning and modeling. Differentiated instruction and ongoing assessment are used to meet the needs of students at all ability levels. The What Works Clearinghouse (WWC), an arm of the Department of Education's Institute of Educational Sciences, validated that enVisionMATH had statistically significant and positive effects for students as compared to their peers using other math programs. The study began 2007-2008 with second and fourth grade students and followed these students into third and fifth grade. The final sample was comprised of 708 students who participated in both years of the study. Fifty-six teachers participated in the first year of the study and forty-four participated in the second year. Schools and students were represented from a variety of rural and suburban geographical areas across the United States. The What Works Clearinghouse (WWC) report confirmed findings of this independent study by Planning, Research & Evaluation Services (PRES) Associates, noting that the randomized control study provides strong evidence of enVisionMATH's effectiveness. The WWC report noted that when examining the results by areas of mathematics achievement, the improvement index showed significant increases in Concepts & Communications and Math Concepts & Problem-Solving. For example, the average enVisionMATH student: outperformed peers using other math programs by nine percentiles in Concepts & Communications; eight percentiles in Math Concepts & Problem Solving; seven percentiles in Problem-Solving; and six percentiles in Math Computation.

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.

Project eMIT LITE will undergo formal external evaluation conducted by the Lorain County ESC (Dave Miller) for technology and an internal evaluation by Michael Molnar and Natalie Fior for increased student achievement.

* 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).

Short and long term objectives for student achievement will be measured by data resulting from formative and summative assessments, beginning with mathematics in year one and extending to all four core content areas (mathematics, ELA, science, social studies) by year five of the grant period. The data will be collected through NWEA MAP, STAR Math, and the 3-6 PARCC assessments. Stakeholder surveys, focus groups, and interviews will provide qualitative data regarding on-going professional development and the development of 21st century schools. The grant leadership team will monitor budgets from each consortium school to evaluate the efficacy of the cost savings goal.

* 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.

Should progress be insufficient in student achievement at any consortium school, a member of the grant leadership team will work directly with that school by attending professional learning community meetings each month. Instructional coaches and lead teachers from successful consortiums will form liaisons for coaching with the struggling schools. This involvement will continue until struggling schools demonstrate two consecutive data periods of adequate achievement. Should schools fall short of technology goals, ESC will deploy its support by conducting onsite visits and maintain a presence at professional learning community meetings. ESC will also design and deploy specific and personalized professional development to increase individual teachers or groups of teachers proficiency with digital and blended learning.

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.

Project eMIT LITE will have transformational and lasting impact on the consortium schools. The most significant impact of this proposal will be the emphasis on digital and blended teaching and learning that has the potential to close achievement gaps and impact graduation rates in our districts. By implementing 1:1 technology in combination with high quality professional development to transform a digital emigrant teaching force into one that serves the interests, needs, and personalized learning goals of a digital native student population is the most powerful, long-lasting, and impactful aspect of this proposal. Prensky (2001) identified the gap between digital emigrant teachers and digital native students as one of the biggest problems facing education today, therefore, mitigating that problem will have positive repercussions for multiple cohorts of students moving forward. Assessment data will demonstrate the results of our mathematics initiative beginning in the first year of the grant period. As eMIT LITE moves forward to deploy digital and blended learning in all four core content areas, additional quantifiable student achievement data for other disciplines will be available. Evaluation measures including classroom observation tools, teacher, student, parent surveys, and focus groups will demonstrate the value of technology-based instruction in our classrooms. Quantifiable results will also be demonstrated in our teachers' capacity to deliver instruction that is personalized and engaging through the use of new technological tools and digital curriculums. Increased instructional capacity and increased collegial collaboration, as determined by the external evaluation, will have long lasting impact in consortium schools.

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.

* Student Achievement

We expect to demonstrate statistically significant growth in individual student achievement in mathematics in year one and continuing thereafter. Results of a two year randomized control trial designed to look at the effects of the enVisionMATH program on student learning show that the enVisionMATH program produced significant effects on student learning, student attitudes towards math, teacher levels of preparation and classroom practices. We will determine similar effects NWEA MAP Math and STAR Math assessments administered in the fall, winter, and spring of each year. These tests are aligned to Ohio Common Core Standards and research demonstrates that proficiency ratings of 70% or higher are highly associated with college and career preparedness, therefore, we will use that percentage as a benchmark of success. We believe that by implementing enVisionMATH with fidelity we can have a positive impact on student achievement. We will also judge the quality of our implementation based on students' anticipated growth scores generated by fall assessments and their ability to meet or exceed expected growth. We will also review our K-2 diagnostic data and 3-5 Value Added data to assess student achievement and growth during the implementation of Project eMIT LITE. As new digital and blended curriculum is added in years 2-5, we will assess achievement in all four core content areas. We will also measure success of other key outcomes. A long-term study will be conducted to determine if Project eMITLIGHT met the goal of creating 21st century classrooms in our consortium. Qualitative data for this key outcome will be gathered by means including surveys such as Clarity BrightBytes, questionnaires, and school climate evaluation studies. We will use qualitative analysis to determine our teachers' use of and comfort with technology in the classroom. We will require all teachers to provide lesson plans that document the growing use of technological tools in their classrooms.

* Spending Reduction in the five-year fiscal forecast

* Utilization of a greater share of resources in the classroom

* Implementation of a shared services delivery model

* Other Anticipated Outcomes

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.

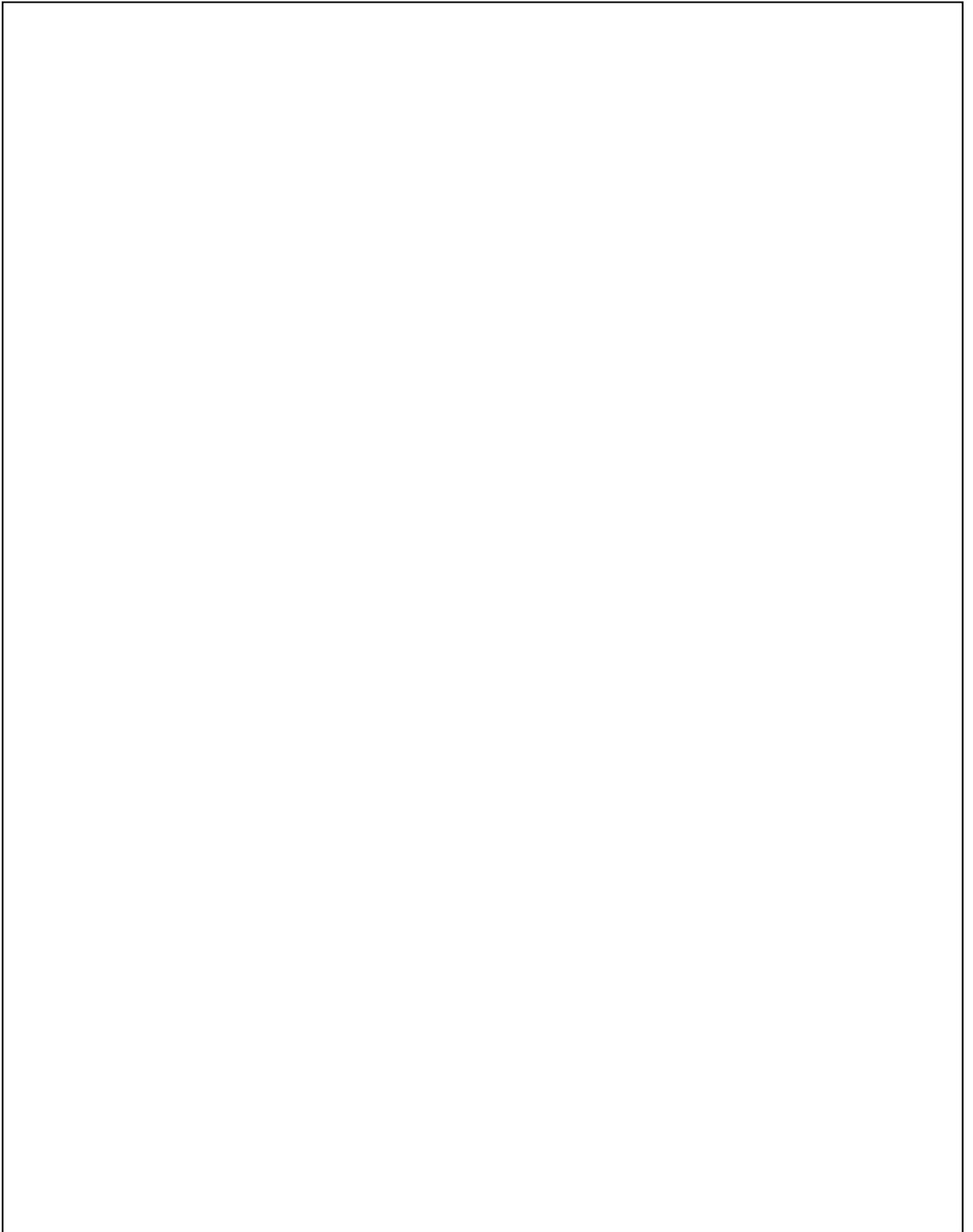
* Explain your response

Our project can be fully replicated in any district. We will provide all of our planning and research documents to any district wishing to implement a similar initiative. We intend to study the differences, if any, in student engagement and achievement between schools using Chromebooks and those using iPads. When it comes to technology, the question of which device to use is critical. Amherst and Avon Lake will compile real data, student information, and teacher information on the pros and cons of using the Chromebook for 1:1 initiatives and the iPad for 1:1 initiatives. We will make those findings available as well as our successes and lessons learned moving forward with enVisionMATH and additional digital and blended curriculum added in years three and four of this grant period. We welcome site visits to consortium schools at any time during the process of Project eMIT LITE, but especially in year five when we will have all aspects of our digital and blended personalized, technology based transformation evident in our districts. Our partner, the Lorain County Educational Services Center (ESC) welcomes replication of their efforts to make Project eMIT LITE a success and pledges their support to all districts wishing to replicate this project.

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 Accept." Steve Sayers, Superintendent Amherst Exempted Village School District April 17, 2014 "I Accept." Barb Donohue, Treasurer Amherst Exempted Village School District April 17, 2014



Consortium

Amherst Exempted Village (045195) - Lorain County - 2015 - Straight A Fund - Rev 0 - Straight A Fund

Sections 

Consortium Contacts

First Name	Last Name	Telephone Number	Email Address	Organization Name	IRN	Address	Delete Contact
Natalie	Fior	440-933-6282	Natalie.Fior@avonlakecityschools.org	Avon Lake City	048124	175 Avon Belden Rd, Avon Lake, OH, 44012-1600	
Michael	Molnar	440-988-4406	mike_molnar@amherstk12.org	Amherst Exempted Village	045195	185 Forest St, Amherst, OH, 44001-1605	

Partnerships

Amherst Exempted Village (045195) - Lorain County - 2015 - Straight A Fund - Rev 0 - Straight A Fund

Sections 

Partnerships

First Name	Last Name	Telephone Number	Email Address	Organization Name	IRN	Address	Delete Contact
Dave	Miller	440-324-3172	miller@nort2h.org	Lorain County ESC	048108	1885 Lake Ave, Elyria, OH, 44035-2551	

Implementation Team

Amherst Exempted Village (045195) - Lorain County - 2015 - Straight A Fund - Rev 0 - Straight A Fund

Sections 

Implementation Team

First Name	Last Name	Title	Responsibilities	Qualifications	Prior Relevant Experience	Delete Contact
Natalie	Fior	Principal	Natalie will be responsible overseeing Avon Lake's implementation of the grant, project oversight, budgeting and purchasing, and program evaluation.	Natalie leads Avon Lake in the areas of curriculum and instruction (K-6), Student Growth Measures, and District Assessments. Natalie is directly responsible for state and federal initiatives and programs (Race to the Top, OTES, Third Grade Reading Guarantee, etc.)	Natalie has led the district decision to implement enVision Math with the Avon Lake City Schools. Natalie has also taught using the Envision math program. Natalie has led the integration of common assessments both with SLOs and NWEA MAPs, which will be used to monitor the progress of the grant project. She is qualified and experienced to co-coordinate the implementation of the grant in Avon Lake.	
Mark	Kostur	Technology Supervisor	Mark will be responsible for the vision and leadership in all areas of technology for Amherst. Mark's responsibilities include the development, administration, implementation, and evaluation of technology to support student learning, teacher learning, and the evolution of innovative ideas.	Mark works collaboratively with administration, faculty, and staff to integrate the most effective tools for student learning using the most efficient technology in Amherst. Mark is Apple certified and is more than qualified to manage the integration of technology into the classroom.	In a prior school district, Mark was hired to implement, manage, and support a researched-based one-to-one Apple Macbook deployment for 1,350 students in a K-12 environment.	
Michael	Molnar	Executive Director of Educational Services	Michael will be responsible overseeing Amherst's implementation of the grant, project oversight, budgeting and purchasing, and program evaluation.	Michael manages the areas of technology, curriculum, instruction, testing, assessments, and professional development in Amherst. Michael is directly responsible for all state and federal initiatives and programs (Race to the Top, Resident Educator, OTES, Third Grade Reading Guarantee, Title I, Title III, etc.).	Michael has experience with all phases of the state and federal grant process: application, oversight, implementation, budgeting, and evaluation. Michael is more than qualified to lead the implementation team and will manage this grant efficiently and effectively towards success.	
Michael	Matthews	Principal	Michael will be responsible for the vision and leadership in all areas of technology for Avon Lake. Michael's responsibilities include the development, administration, implementation, and evaluation of technology to support student learning, teacher learning, and the evolution of innovative ideas.	Michael Matthews is a Principal in Avon Lake City Schools and is also the Local Professional Development Coordinator for the district. He has experience with technology integration, budgeting, and implementation.	Michael led a K-4 implementation of Netbooks and a 21st Century Learning Series (2 year technology class) on implementing 21st century teaching and learning strategies through technology in collaboration with the Lorain County ESC.	
Dave	Miller	Senior Director of Technology & Innovation,	Develop and provide professional development for the successful implementation of blended	Extensive experience in developing and training teachers for the successful implementation of	Classroom teacher with a degree in Marketing education. Worked with business, community-based organizations, higher education as	

		NORT2H	learning for blended learning symposium. Support teachers in the transition to blended learning including the development of teacher content offerings into the Learning Management System and teacher participation in one or more personal learning networks.	technology into instruction. Managed over 2 million dollars in grant funding for the successful implementation of distance learning, videoconferencing, and other innovative classroom technologies.	School to work Coordinator for Mid-East Ohio Career Center. Project manager for the Telecommunity Appalachian Project managing professional development and implementation for videoconferencing at the Muskingum Valley ESC. Develop and provide professional development programming for schools at the Lorain County ESC inside the Northern Ohio Research & Training Technology Hub (NORT2H).	
--	--	--------	---	--	---	--