## Budget

Northmor Local (048819) - Morrow County - 2015 - Straight A Fund - Rev 0 - Straight A Fund - Application Number (121)

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

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

<table>
<thead>
<tr>
<th>Purpose Code</th>
<th>Object Code</th>
<th>Salaries 100</th>
<th>Retirement Fringe Benefits 200</th>
<th>Purchased Services 400</th>
<th>Supplies 500</th>
<th>Capital Outlay 600</th>
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</table>

**Adjusted Allocation** | 0.00 |

**Remaining** | -332,274.00 |
**Please respond to the prompts or questions in the areas listed below in a narrative form.**

**A) APPLICANT INFORMATION - General Information**

1. **Project Title:**
   
   Reconceptualizing Mathematics

2. **Executive summary:** Please limit your responses to no more than three sentences.
   
   The Northmor Local School District seeks to replace traditional math instruction and formative assessment practices approaches with a K-8 vertically aligned, innovative program promoting Ohio's New Learning Standards in Mathematics and Mathematical Practices. Northmor Elementary will partner with OSU-Mansfield (using the Mathematics Literacy Framework), Educational Testing Service (Revised Mathematical Challenges, including teacher flow-chart for redirection based on assessment outcomes), and The Algebra Project (increase teacher mathematical content and pedagogical knowledge using 5-step processes incorporating mathematical communications). This innovative project integrates visual, experiential, verbal and conceptual aspects of mathematics to provide opportunities for students to justify their understanding of mathematical ideas with an additional component of formative assessments based on the rigorously researched Mathematical Challenges designed by ETS to provide guidance for teachers to better understand the direction students should take to master concepts.

   *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:**

   750

   *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
   
   Diane Ervin

   Organizational name of lead applicant
   
   Northmor Local School District

   Address of lead applicant
   
   7819 State Route 19, Galion, Ohio 44833

   Phone Number of lead applicant
   
   419-946-3946

   Email Address of lead applicant
   
   ervin.diane@northmor.k12.oh.us

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
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

Students attending Northmor Local Schools score significantly lower on Ohio Achievement Assessments (OAA) than students attending schools in "Similar Districts" in the area of mathematics. In 2013, 75% of the district's 4th grade students scored at the "Proficient" level in comparison with 84% of students attending in similar districts. Northmor 5th grade students performed at 55% while similar districts achieved 75% proficiency. 79% of 7th grade students in similar districts met the proficient level, 64% achieved proficiency at Northmor; 83% of 8th grade students in similar districts were proficient and 74% were proficient at Northmor. Also of note is the stark contrast of student achievement in mathematics and reading. Across grades 3-8, Northmor students typically outperform similar districts in the area of Reading. The problems to be addressed are two-fold: 1) Teacher Mathematical Content and Pedagogical Knowledge: Teachers currently lack the necessary mathematical content and pedagogical knowledge to successfully address the rigor and challenge associated with Ohio's New Learning Standards in Mathematics. In addition, teacher resources are lacking due to the lack of funding for new materials that would increase likelihood of innovative and current instructional strategies for excellence in teaching and learning. 2) Formative Instructional Practices to Increase Student Achievement: The district does not have systematic expectations for student achievement in terms of assessment and consequent daily instruction. Formative assessment is a means of informing teachers about the continually variable achievement and performance of today's students. While having formative assessment procedures are helpful, teachers need professional development on measures and activities to use to connect results of those assessments to instruction and provide needed interventions for success for all students.

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

Goal 1: Increase teacher effectiveness in the area of mathematics by providing professional development on teacher content knowledge and content pedagogical knowledge. - strengthen mathematical content knowledge; - strengthen & broaden instructional practice; - implement experiential-based lessons developed by the Algebra Project (AP); - foster the development of Math Teacher Leaders through participation in Math Specialist Endorsement courses Goal 2: Develop and utilize Formative Instructional Practices to Increase Student Achievement: - utilize formative assessments (developed by ETS), providing feedback on design to ETS; - further develop math pacing guides aligned with Ohio's New Learning Standards, ETS formative assessments & AP principles; - work with ETS to design a system of remediation or enrichment for teacher use following formative assessment implementation OSU-M and Northmor Schools will promote math literacy for all, & in particular for underserved populations (such as those from very small, rural districts), by (1) increase teacher effectiveness in the area of mathematics by providing professional development designed to increase teacher content knowledge and content pedagogical knowledge using an integrated, job-embedded approach; & (2) develop teacher leaders in the Northmor School District to continue the professional development needs of the teachers in their district with in-house expertise, directly leading to a sustainable structure. Northmor Schools will replicate & expand the work OSU-M has been doing with Mansfield City Schools, and adjust for the different demographics. Mansfield Schools is Typology 7, Urban-High Student Poverty, average student population while Northmor is Typology 2 Rural, average poverty, very small student population. Successfully implementing this transfer could have wide, positive effects on the way universities work with districts and the way teachers engage with their students through a "players of mathematics" structure as opposed to the more traditional, lecture or directive teacher-student roles in many of Ohio's K-8 classrooms. Ohio's New Learning Standards requires students to go beyond merely procedural knowledge in mathematics & deeper into the areas of understanding. Although, historically AP has focused their middle & high school work on the lowest quartile, the K-8 work for Northmor will be inclusive. We posit that the AP 5-step process integrates visual, experiential, verbal, and conceptual aspects of mathematics to provide opportunities for students to justify their understanding of mathematical ideas with words, pictures, & vocabulary that is meaningful for students and is then bridged to standard mathematical representation. The AP 5-step process maps directly onto the ONLS Mathematical Practices by providing opportunities for students to demonstrate their understanding of mathematical ideas using representations that are meaningful to their lives & experiences. Using this method, teachers will develop shared experiences in mathematics classrooms that would make it easier for students to transfer learning from their personal lives to mathematics & then from arithmetic to algebra. ETS has been working on the development of K-8 Mathematical Challenges aligned with CCSS for the past 3 years. Tasks, scoring rubrics, & procedures for analyzing student responses have been pilotted with teachers in Tennessee & NYC as part of professional learning communities in their district. The structure & format of the math challenges will be revised to correlate with the 5-step process, but used as an interim formative assessment for quarterly key concept development within the year. This first year of implementation will focus on fourth grade core concepts. In addition to revising the formative assessments style, we will develop of a tool for teachers to use to understand & best meet the needs of individual students, based on results of the formative assessment.

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.
As identified in the problem statement above, district report card information indicates critical concern is warranted for Northmor students in the area of mathematics. Upon closer evaluation of data used for the district report card, the 3-year average NCE gain at the fifth grade level is -1.7 R; the 3-year average NCE gain for grade seven is -1.4 R. This information equates to a NCE gain that is below the growth standard by more than 2 standard errors. Additionally, only 35% of students within the subgroup "Students with Disabilities" met the "Proficient" level in the area of Mathematics in 2013. Teachers' lack of critical mathematical content and pedagogical knowledge necessary to successfully address the rigor and challenge associated with Ohio's New Learning Standards in Mathematics was noted in the problem statement above. Consequently, students currently lack mathematical experiences, numeracy concepts, and the necessary problem-solving behaviors and skills as evidenced by past OAA achievement levels and presumably in preparation for the rigor and stamina requirements of the new standards in Mathematics. The emphasis on reading and literacy over the past few years has elevated teacher capacity and student achievement in reading and related content areas. Northmor students at all OAA-tested grade levels met the indicator as reported on the district report card. It is of particular significance to also note that Northmor K-3 teachers have responded very positively to the need for professional development and course work in reading as seen through the percentage of teachers (75%) currently pursuing or holding Ohio's Reading Endorsement or equivalent. This proposed Straight A project is focused on the professional development and growth of teachers with the intent to increase student achievement in mathematics. The following changes in student achievement are anticipated: 1. Students will develop competencies relating to the CCSS Mathematical Practices; 2. Students will demonstrate active engagement working independently and cooperatively; 3. Students will be appropriately challenged with supports, extensions and interventions leading to increased mathematical confidence and competence. The district anticipates a significant improvement in the percentage of students achieving Proficient, Accelerated, Advanced and Advanced Plus levels on Next Generation Assessments in the area of Mathematics. Evidence of each student's "growth" will be monitored and teachers will show improvement in "Value-Added" designations over the course of the project. Additionally, because there are strong interdisciplinary connections between Mathematics and Science, it is reasonable to expect gains on state and local Science assessments. At both the 5th grade and 8th grade levels, student achievement has been lower than similar districts. With high levels of direct instruction focused on CCSS Mathematical Practices i.e. "Make sense of problems and persevere in solving them" and "Construct valid arguments and critique the reasoning of others", students will likely develop and readily transfer these associated thinking and reasoning skills.

This innovative Straight A project, "Reconceptualizing Mathematics in the Northmor School District", is purposeful in its design to increase teacher knowledge of mathematics and mathematics pedagogy aligned with the Algebra Project and Ohio's New Learning Standards in Mathematics and Mathematical Practices while addressing student misconceptions through innovative use of ETS-created formative assessments with associated tool for teachers to guide responses to interventions highlighted by formative assessment data. Over the course of the project period, the district anticipates decreases in spending for paper costs and printing fees as teachers develop and expand new instructional approaches focused on engaged student learning through activities. Currently in grades K-2, a math workbook is purchased for each student. The district's General Fund supports approximately 50% of the costs associated with these materials resulting from the state-required waiver of Student Supply Fees for students receiving meal benefits. ($4690 for the 2014-2015 school year with annual savings through FY 2020.) There are also anticipated reductions in textbook expenditures, however, these costs will not be represented on the district's Financial Impact Table since textbooks are historically charged to the Permanent Improvement account. With the successful award of the Straight A Grant, the district will be positioned to re-focus existing professional development allocations from Title I, Title II-A, and RTT to other content areas. Again, this reallocation of funds will not be evident on the Financial Impact Table as state and federal funds are budgeted separately from General Fund accounting. As teachers and administrators leave or retire, the district carefully evaluates the open position to assure fiscal responsibility. By July 2015, there are six anticipated teacher retirements and two anticipated administrator retirements. If filled, these positions will show substantial cost savings as new hires will be employed at the lowest end of the pay scale. To ensure consistency of innovative instructional methods, OSU-M prepares their preservice teachers to use AP methods. By possible hiring of OSU-M graduates, there will be less need for retraining new teachers in the practices of innovative strategies, thus reducing induction costs. Finally, there are at least two positions that will not be filled if student numbers are constant.

The teacher is the greatest classroom resource, particularly when professionally advanced with high levels of content and pedagogical knowledge and equipped with instructional resources and technologies proven to positively impact student learning. Students thrive in schools where there is widespread implementation of high-quality instructional practices that are purposeful, data-driven and closely monitored to assure appropriate scaffolding and challenge. This project provides an immersion in best-practice training for K-8 teachers of mathematics. Most planned professional development activities are on-site, job-embedded experiences that encourage full participation of all educators. Partnerships at OSU-Mansfield, AP, and ETS will assure Northmor teachers are optimally prepared while collaboration among teachers throughout the project will promote sustained networks for continued professional growth. With the development of the Mathematics Center at OSU-Mansfield and extended partnerships with other Ohio school districts, the conceivable network resulting from this project has lasting and substantial promise. Resources, including technology, will be effectively incorporated to enhance student learning. The current over-reliance on textbooks and traditional lecture will be replaced with balanced and appropriate practices involving the selection and creation of instructional resources from varied sources to engage students and meet their learning needs. The utilization of greater resources in the classroom - highly trained teachers with innovative strategies and resources - will be enhanced as a result of this innovative program.

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.)

The project lead, Diane Ervin, is an educational consultant employed with Mid-Ohio Educational Service Center (MOESC) and directly assigned to the Northmor Local School District. With the successful award of the Straight A grant, a shared services delivery model will promote increased efficiency and effectiveness of the project at Northmor while allowing for sustainability and scalability for other ESC client districts. Following the first year of the grant program, "exchange days" will be established with other MOESC consultants, enabling all
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)
* 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.

332,274.00 State the total project cost.
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 significant advancement in sustainability costs relative to the project budget.**

If yes, provide a narrative explanation of your sustainability costs as detailed in the Financial Impact Table in the box below. Costs incurred by the district as a result of maintaining and sustaining the project through FY 2020 include the following potential expenses:

- Maintenance and repair of iPads for FY 2016 at $49/incident (2-year AppleCare included in Straight A Budget); estimate of 6 incidents for a total of $294 (Purchased Service) Maintenance, repair and replacement of iPads FY 2017 through FY 2020; estimate of 4 replacements per year, $12,800 (Capital Outlay) Maintenance, repair and replacement of ELMO Bundles: a 5-year warranty is included in the purchase price, leaving one year (FY 2020) with the potential need for replacement bundles estimated at $7500.00 (Capital Outlay) Ongoing but limited replacement of Instructional Supplies each year through FY 2020 at approximately $1500 per year, $7500 (Instructional Supplies)

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

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<th>Yes</th>
<th>If yes, provide a narrative explanation of your sustainability costs as detailed in the Financial Impact Table in the box below.</th>
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</thead>
<tbody>
<tr>
<td>No</td>
<td>If no, please explain why (i.e. maintenance plan included in purchase price of equipment) in the box below.</td>
</tr>
</tbody>
</table>

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

**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.

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<th>28,094.00 If yes, specify the amount of annual expected savings.</th>
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<tr>
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<td>Through savings associated with workbooks purchased (estimated at $23,450 Instructional Supplies over the five-year project and through FY 2020) and attrition (estimated at $4644), the district will reallocate a total of $28,094 to meet the sustainability requirements of the project. The district also anticipates a reduction in spending associated with the cost of textbooks in grades 3-6 and printing and paper expenses.</td>
</tr>
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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.

**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 July 20 - 31, 2014

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

1. Plan, organize and prepare for initial parent meeting with project partners, with the intention to promote lines of communication and increased understanding of anticipated achievement gains for students in the area of mathematics. 2. Plan, organize and prepare for initial teacher meeting with project partners. 3. Organize schedule with building principals, seeking input on additional scheduling and training needs. 4. Schedule and plan meeting to be held with Grade 4 teachers. Include information regarding ETS revision of Mathematical Challenges and use of formative assessments. 5. OSU faculty meets with teachers and administration, sharing specifics of the Mathematical Literacy project and anticipated outcomes. 6. Hold parent meeting, addressing the intentions identified in #1 above. 7. Obtain updated quotes for instructional materials, PD materials and technology; submit purchase orders. 8. Work with ETS representative on the planning, revision, implementation, and revision of the fourth grade ETS formative assessments. 9. Meet with project evaluator to assure access to needed data for evaluation of programming and related outcomes.
**18. Implementation - Process to achieve project goals**

* Date Range August 1, 2014 - June 30, 2015

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

By August 15th, the initial teacher training with partners will be held. This session will provide an overview of the project and targets/outcomes for the yearlong professional development. The parent informational meeting will be held prior to the start of the school year. Lesson development sessions for teachers, consistent with CCSSM and Mathematical Practices, will be initiated early in the month of September with consequent monthly PD provided and opportunities for teacher reflection and collaboration. Instructional supplies and technology will be utilized throughout Northmor classrooms. The Family Math Celebration Night will be organized and held by March 2015, showcasing new instructional strategies and increased student engagement and understanding. Goal 1: Increase teacher effectiveness in the area of mathematics by providing professional development on teacher content knowledge and content pedagogical knowledge. 1. Monthly 2-day PD sessions, 1-day on-site with each (Dr. Bucci and Dr. McEwan) to assist with transfer of PD content. 2. Winter Conference with other teachers in the area using AP methods. 3. Intensive work with participating teachers on development of vertically aligned and CCSS-based pacing guide. 4. Participation in Math Specialist Endorsement courses. Goal 2: Increase the Use of Formative Instructional Practices to Increase Student Achievement: 1. Utilize formative assessments (developed by ETS), providing feedback on design to ETS. 2. Further develop math pacing guides aligned with Ohio’s New Learning Standards. ETS formative assessments & AP principles; 3. Work with ETS to design a system of remediation or enrichment for teacher use following formative assessment implementation.

**Anticipated barriers to successful completion of the implementation phase.**

Anticipated barriers: Availability of substitute teachers. Resistance to change. Parental fear of change. Time and schedule conflicts across involved districts. Challenges associated with establishing interdistrict network connections among teachers. Teacher confusion with early changes on the Math Curriculum Maps/Pacing Guides as drafts were required by the district in preparation for the 2014-2015 school year. Teacher concern with introduction of additional assessments (ETS). Solution strategies: To reduce the number of substitute teachers needed, teachers could be scheduled to attend in two subgroups (A Group and B Group). Ongoing support and constructive feedback will be provided to and with teachers. Teacher Based Teams (TBT’s) will meet on a weekly basis with building principal to share data relating to student achievement and implementation of new instructional approaches. Teachers and administration will have regular access to project partners to readily intervene and respond to concerns. At the August Parent Meeting, a written pamphlet will be provided with steps identified for support and questions. Information will also be posted to the website. Periodic home and school communications will be provided. An emphasis with parents about improved instruction and increased student achievement to help substantiate the need for the change. Videotape sessions and provide alternate follow-up activities. Provide introductory opportunities for involved teachers from involved districts to connect through email and Skype. Encourage and support teachers in ongoing networking with area teachers using AP methods.

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

* Date Range August 2014 - June 2015

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

Initial teacher training with partners providing an overview of the project & targets/outcomes for the yearlong PD. Parent informational meeting held prior to the start of the school year. Quantitative: Number of teachers and parents in attendance for respective meetings. Qualitative: Survey developed with survey Monkey using data analysis for revision of subsequent teacher meetings to use to inform PD. Initial on-site meeting between ETS representative & teachers, administration, & in-state collaborators to assure cultural & demographic attention for revision of formative Math Challenges. Quantitative: Number of hours for teacher training and number of teachers in attendance. Qualitative: Survey using Monkey for places for teachers to share their concerns so they can be addressed in year-long implementation to use to inform work. Family Math Celebration Night held by March 2015, showcasing new instructional strategies & increased student engagement & understanding. Quantitative: Number of teachers, parents and families in attendance. Qualitative: Half-page comment sheet provided to allow for parent questions that can be addressed through school communications venues. Goal 1: Increase teacher effectiveness in mathematics by providing PD on teacher content knowledge & content pedagogical knowledge. Qualitative: Number of teachers attending professional development, lesson study, and conference. Attaining the 5 math teacher leaders. Qualitative: Survey monkey sent after every PD event, lesson study, and conference to use for revision. Goal 2: Increase use of Formative Instructional Practices to Increase Student Achievement. Quantitative: Number of participating teachers in bi-monthly session with ETS specialist, increased scores for pre and post tests for student achievement. Qualitative: Quarterly focus group meetings with fourth grade teachers to provide evaluation and revision information to use in further administration and development of assessments.

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

Anticipated barriers: Primary tools and instruments for collection of data. For initial meetings, and both goals 1 and 2 will be Survey Monkey. If teachers are unfamiliar with or not technologically inclined, low numbers of completed survey will yield skewed results and will not provide proper information for revision or attention for the professional development. In addition, low return rate on parent and family half-sheet comment documents will provide less than useful information for project revision of program which will not provide enough information regarding proper communications with parents throughout the year. Solution strategies: It is essential to have trusted relationships with people when conducting focus groups. Members need to feel comfortable sharing opposition to ideas or struggles with implementation or directions. It will be necessary for the lead, Gail Baxter, to develop trusting relationships with these teachers so they can provide honest assessments in form revisions and structures for the formative assessment delivery, data analysis, and associated activities determined by assessment results.

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:

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. 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:

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

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:

Teachers will strengthen their mathematical content knowledge and instruction practices. They will know and understand the content for which they have instructional responsibility. Lessons will be developed that engage students in the CCSS Standards for Mathematical Practice including: 1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct valid arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning. Students will participate in student-centered discussions in their classrooms, actively engaged and able to work both independently and cooperatively. They will develop skills in evaluating their own progress and achievements as a learner of mathematics. Because teachers have personally grown in their math competencies and better understand students as learners of mathematics, students are appropriately challenged with supports, extensions and interventions that are readily available and effectively utilized. Varied assessments are used to inform instruction, evaluate and ensure student learning. Resources, including technology, will be effectively used to enhance student learning. The current practice of over-reliance on textbooks will be replaced with balanced and appropriate practices involving the selection and creation of instructional resources from varied sources to engage students and meet their learning needs. Taking the place of the traditional lecture, teacher-in-front-of-the-class model, teachers will embrace the importance of their role as a facilitator. The classroom environment will be content-rich where a shared enthusiasm for mathematical learning is evident. A combination of independent, collaborative and whole-class learning situations will be intentional and purposeful in optimizing student learning. Teachers will also perceive themselves as learners of mathematics and evaluate their professional growth in meaningful ways that lead to higher learning. Some will serve as Mathematics Teacher Leaders, completing the Math Specialist Endorsement courses and then advancing their collaborative role within the district and area districts. The curriculum will be vertically aligned and clearly articulated among students, educators and families. In partnership with Northmor teachers and OSU-M faculty, ETS will lead revisions to the math challenges to: (a) incorporate the Algebra Project 5 step curricular process, (b) evaluate results of small scale pilot testing with students, (c) draft strategies for interpreting and responding to different levels of student understanding, and (d) prepare documentation for wider distribution and use of math challenges. The assessment team comprised of 4th grade teachers, a math educator and a mathematician will meet twice monthly to engage in an iterative design process. The process begins with selecting a math challenge, completing the challenge, discussing what it measures and where it fits within the curricular sequence. Then, the team will work to integrate the math challenge into the 5 step curricular process. Teachers will try the assessment with their students, score the assessments and discuss the results. The process concludes with a review of the data across teachers and documentation of a set of strategies for addressing student needs. The goal is to revise 4 math challenges as described above; one corresponding to each quarter of the school year.

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.

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:

The Algebra Project's founder & participants have worked in classrooms for two decades to develop classroom teaching methods, teacher professional development, & community development that will enable students to succeed in a typical Algebra I course in late middle school or early high school. While the project initially focused on supporting students as they transition from arithmetic to algebraic thinking, it has now developed materials for elementary, middle, and high school in collaboration with a cadre of university mathematicians. These materials are designed to enable students to graduate from high school on time & succeed in credit-bearing college mathematics courses. In 2009, The Algebra Project won its sixth National Science Foundation award ($4 million for 5 years) to study a test of these materials within a "cohort model" that keeps students together in a group throughout high school, with daily instruction in extended periods. Four sites around the country were chosen for the study, including one in Ohio, in collaboration with OSU-Mansfield and Mansfield Senior High School. A first cohort of students graduated from Mansfield Senior in Spring 2013. The successes of that implementation were great enough that Mansfield City Schools decided in 2012 to attempt an ambitious scale up of the project, offering all K-8 teachers in the district an opportunity to work with local and national Algebra Project researchers & professional development facilitators in monthly workshops. So far more than 40 teachers in grades K-6 are actively involved in adopting AP pedagogy and curriculum units, which are being mapped to Common Core State Standards. The Mansfield implementation of the project which this current proposal is based upon dovetails with reports of implementations elsewhere: In 1994, teachers in the Mississippi Delta noted: (1) teachers and students begin to express themselves --the project develops a "comfort zone" for this expression; (2) teachers are drawn into the project when they see students expressing themselves; (3) teachers learn and accept the facilitator's role because summer trainings, workshops, and community meetings provide continual modeling and practice; (4) "we can continue this hard work because we are not alone". At St. Helena Elementary School near Beaufort, SC, where nearly all students % African American and qualify for free or reduced-cost lunch, under the leadership of the principal and several Algebra Project teachers, Grade 5 state math test scores rose from 20 percentile points below state average in 1999 to 25 points above in 2004. 80% of 5th graders performed at or above proficiency, higher than nearby affluent Hilton Head. Math Challenges are formative assessments designed by ETS & aligned to Common Core State Standards (CCSS). ETS developed Math Challenges to provide opportunities for students to develop &
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.

Goal 1: Increase teacher effectiveness in the area of mathematics by providing professional development on teacher content knowledge and content pedagogical knowledge. Evaluation: Tests, data, and analysis LMT - Pre and Post tests; Paired T-Test will determine change in mathematical content knowledge for teaching mathematics. Video tape analysis of classroom lessons - Coded video-tapes will be compared over time to determine knowledge of and implementation of Algebra Project Pedagogy. Goal 2: To develop teacher leaders in the Northmor School District to continue the professional development needs of the teachers in their district with in-house expertise, directly leading to a sustainable structure. Evaluation: Tests, data, and analysis Structured interviews of sample of teachers identified by district and grant PI as potential leaders. These interviews will provide knowledge of content, knowledge of content necessary for teaching mathematics, and pedagogy. The Nature of Mathematics Survey for Teachers will be administered to the whole group to determine how the grant activities will affect the attitudes of teachers participants.

* 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 associated with the following goals will be measured: 1. Increase teacher effectiveness in the area of mathematics content knowledge & content pedagogical knowledge and 2. Develop teacher leaders in the Northmor School District. Teacher learning approach and examination of student outcomes as it reflects fidelity of implementation in the classroom will be incorporated. Program efficacy will also be tracked through document and records review. Data collection methods will be qualitative and quantitative inclusive of in-service teacher focus groups and written reflections, university faculty interviews, in-service teacher interviews, and classroom observations. Student achievement will be tracked through the PARCC and Ohio Diagnostic Assessments, student outcomes will be observed, documented and compared with implementation in the classroom to identify the fidelity of the implementation in the field. Field observations will be made by the evaluator with emphasis on the principles of The Algebra Project and Common Core Mathematical Practices. The evaluator and research assistant will monitor classroom discourse, classroom culture, and student engagement. The field observers will further receive observation guidance through use of the OSU-M developed quick sheets for AP practices and the Algebra Project Model of Excellence. Teachers will be observed, video tape lessons, and meet monthly with other teacher participants and grant staff for the purposes of lesson study. This process will give teacher participants an opportunity to demonstrate they can plan, implement, and evaluate the quality of Algebra Project lessons being implemented in their classrooms. Additionally, classroom use of the ETS assessments will also serve as a system to track the project's progress.

* 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.

The district was notified in December 2013 of the ODE requirement to initiate the Ohio Improvement Process (OIP), participating as a "Low Support" district. During District Leadership Team (DLT) meetings and recent OIP activities, the completion of the Decision Framework has been initiated. It is through the Decision Framework that team members identify 2-3 top priorities that will be developed into associated SMART Goals. It is important to note that even prior to the writing of this grant proposal, the DLT has identified Grades 4-8 Mathematics as "High Priority". From the SMART goals, the DLT formulate "Strategies" and "Action Steps" which are implemented with fidelity throughout all classrooms across the district. Building Leadership Teams (BLT’s) will provide the leadership, organizational structures and accountability systems to monitor implementation at the building level, routinely meeting on a monthly basis. Additionally, Teacher Based Teams (TBT’s) will be established and will be responsible for ongoing data collection around the classroom work, meeting on a weekly basis. The DLT will regularly complete the OIP Implementation Management Monitoring Tool, reporting the percentage of Adult Implementation and Student Performance objectives met. Principals are responsive to the data compiled by the BLT’s, and will provide appropriate supports to teachers with the goal of 100% implementation. Should an Action Plan be identified as ineffective or substandard in achieving student achievement goals, steps will be taken to make the necessary adjustments based on research-based practices. The partnerships established in the Straight A Project will provide the necessary guidance and collaboration in making these potential adjustments.

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.

-The mission of The Algebra Project (AP) is to ensure every child in America receives a quality public school education, using mathematics as an organizing tool. They believe every child has a right to education, develop the skills necessary to succeed in a technology-based society & to exercise full citizenship. The Algebra Project works to achieve this by using the best educational research and practices, & building coalitions to create systemic changes. We will reach the goals of The Algebra Project. The AP's 5 Step Curricular Process allows students to discover & master the common core standards by making sense of their own learning. -One of the results of the work between OSU-M & Mansfield City Schools was the development of a Mathematical Literacy Framework based on the principles of The Algebra Project. That framework, if implemented in a wider span of Ohio schools, has the potential of changing the way teachers & students engage with mathematics daily. Using the mathematics literacy framework, students increase & enrich their mathematical understandings through
hands-on, culturally relevant activities. While exploring new mathematical concepts students use problem solving & inquiry strategies as they take ownership of their learning. These explorations take place in various settings. They are composed of trips, experiments, & grounding metaphors, which are vertically aligned to provide repeated occurrences with similar activities where it is the only concept that changes as students travel through the years. Within these concrete experiences, the teacher serves as a facilitator, respecting all ways of thinking with justification. -AP processes, language, tools, & shared experiences are repeated K-8. Through this repetition, automation & connections are increased. By increasing their fluency & efficiency when solving math problems, students will be able to explore new mathematical concepts with success. -The AP mathematical classroom is a community of learners. It isn’t just mathematics that is addressed, but the culture of the mathematics classroom. Students “own” their learning by being "players" in the mathematics classroom. Teachers use effective questioning techniques to stimulate independent thinking & encourage students to justify their reasoning to others. The teacher encourages students to solve problems using various strategies while respecting multiple solutions with valid justification & require justification from their classmates in a respectful way. A culture of risk-taking & collaborative mathematics provides the setting for the AP Mathematics Literacy classroom. This is a deviation from traditional classroom practice & invites students to be mathematicians. OSU-M & AP have had substantial success implementing the Mathematics Literacy Framework. AP theory, practice, & vertically aligned shared experiences with the Mansfield City School District over the past four years. A result of this work is the establishment of a wide-band partnership between the university and the school district. With the addition of more districts, this work will provide a solid base for professional learning communities a & interdistrict partnerships. The common language and practice between geographically close districts can lead to a lasting impact throughout Central Ohio. -The ETS Math Challenges have undergone initial pilot testing & revisions. In addition, feedback on the quality of the tasks & links to benchmarks was collected via a series of focus groups with mathematicians & math educators. Currently the assessments are under review by various groups across the country & plans are in place to conduct a series of cognitive interviews with students to provide some evidence for the validity of the assessments. ETS has agreed to share products from this study with other teachers/districts in Ohio. That means, all Ohio schools can benefit from the results of this proposal & continued collaborations with ETS.

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

Significant achievement gains are anticipated in the area of ONLS in Math for Northmor students, grades K-8. Through the implementation of the project, the district anticipates a transformation of teaching and learning; teachers will display high levels of confidence in mathematical content and pedagogy while students will demonstrate increased levels of achievement and growth. By 2020, the following benchmarks will be met: 1. Learning targets in the area of mathematics will be established, providing clear expectations for student learning. 2. Formative classroom assessments will be used to monitor student progress. 3. Grade level expectations will be defined at each grade level, K-8. 4. Student readiness for successful completion of high school math courses will be evident through high school pre-assessments and data. 5. In math, students will perform above the state average on Next Generation assessments. In addition, extensive formative assessment data for grade four will be used to collect individual student success. That data will be analyzed at a high magnitude of the cooperation of our ETS partners. Not only will ETS and OSU faculty provide support for teachers with respect to analyzing individual student performance data from the formative assessment, but teachers will be provided response to data activities to increase student achievement. ETS will be collecting and analyzing student data and success through their office. This is in addition to the within year data analysis conducted by teachers in fourth grade, guided by ETS expert and OSU faculty. The impact of this project is expected to extend beyond the content area of mathematics as students engage and develop problem-solving and higher level thinking skills. Additionally, heightened experiences and focus on oral and written language in the mathematics classroom will positively impact ELA standards inclusive of “Speaking and Listening” and “Writing.”

* Spending Reduction in the five-year fiscal forecast

The benchmarks focused on spending reductions in the five-year forecast include: Decreases in spending for paper costs and printing fees Elimination of purchase of K-2 math workbook with an annual projected savings of $4690 Reductions in textbook expenditures (These savings are not represented on district’s Financial Impact Table as textbooks are historically charged to the Permanent Improvement account.) Reallocations of existing professional development funds from Title I, Title II-A, and RttI to other content areas. (Again, this reallocation of funds will not be evident on the Financial Impact Table as state and federal funds are budgeted separately from General Fund accounting.)

* Utilization of a greater share of resources in the classroom

Benchmarks signaling progress toward utilization of a greater share of resources in the classroom include the following: Completion and teacher buy-in following Initial summer training for K-8 teachers of mathematics Purchase of instructional resources and technology tools for teacher and classroom use Training of teachers for full participation of all K-8 math educators in project-related on-site, job-embedded professional development. Established teacher networks for sustained professional growth A observable and significant reduction in the use of textbooks and increased utilization of manipulatives, student work stations, student-to-student communication and technology

* Implementation of a shared services delivery model

"Exchange days" will be established with other MOESC consultants, enabling all involved districts to benefit from particular specialty areas held by individual consultants. OSU-M preservice teacher placements in classrooms bringing innovative ideas and lessons designed with the assistance of Dr.’s Bucci and McEwan Greater access to OSU-M fee waivers to use for completion of mathematics endorsement courses. Selection of five high-functioning and motivated teachers to participate in the mathematics endorsement completion program. The above five teachers provide on-site professional development for their colleagues, sustaining the project beyond funding period MOESC offers teacher-to-teacher trainings Teacher exchange program model implemented through OSU-M Mathematics Literacy Center

* Other Anticipated Outcomes

An Implementation Team of experienced K-12 Algebra Project teachers is identified, trained, and deployed. A sabbatical program with school districts is negotiated and implemented through proposed OSU Mathematics Teacher Center. School districts enter a network of support, with cross-fertilization between teachers within district and between neighboring districts, and with pre-service teachers and faculty at OSU-M.
K-16 pipeline is constructed, in which area students have increased opportunity to enter OSU-M with pre-established connections resulting in better support, and math courses attuned to their backgrounds.

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 is key to reflective mathematics instruction in the Central Ohio Schools. The aspiration of our efforts are to: (1) develop a learning community of math teachers to serve as demonstration teachers, coaches, & cooperative teachers for pre service students, excellent instructors, & staff developers, (2) transform the teaching/learning culture to use CCSS, & (3) support the creation of learning environments where students can thrive. To date, AP & OSU-M have adapted the AP pedagogical approach to K-8 curricula & have explored how the curricular content & pedagogy is related to Common Core content & mathematics practice standards with the Mansfield City School Schools (MCSD) teachers. MCSD has adopted an effective whole school change model that involves the use of AP across the district, K-12. OSU-M/AP/MCSD have produced new material for teacher & student use in central Ohio. Northmor & MCSD are very different districts with overlapping but unique needs. Adapting & replicating the success enjoyed in MCSD to the smaller, rural district of Northmor, is itself testament to the scalability of the project to other districts in Ohio. Further, to inform the teaching & learning process, the project will focus on integrating quarterly math challenges into the curricular process. The goal here is to provide formative feedback to teachers about student learning & to document effective strategies to address existing learning needs. ETS has successfully worked with districts across the country to adapt formative assessments to meet the needs of the teachers & students. Working with Northmor teachers & OSU-M faculty, ETS will develop a model for integrating math challenges with district curricula; a model that will facilitate development of quarterly assessments at other grade levels and in other learning contexts. In addition to changes in K-8 teaching & learning, the project has transformed the way that math education takes place on the OSU-M campus, creating an evidence-based model for all campuses (regional/Columbus) to consider for adoption. In turn, the project also will advance the academic success of students in the participating districts through the use of formative assessments (ETS math challenges) that are tied to the CCSS. Again, ETS has authorized use of these formative assessments & connected teacher activities for use in other districts in Ohio. As a regional campus of a large university, OSU-M is uniquely positioned to realize the vision of an interdisciplinary, K-16 immersion program centered on math instruction for diverse learners. In addition to having a small campus, which facilitates strong cross-departmental relationships, the K-16 continuum is easier to pilot & revise simply due to smaller numbers. Finally, because OSU-M is part of a larger structure, the possible reach of this work is extended. The innovation of this K-16 immersion of an AP worldview is primarily to create a cycle that doesn't exist. Elementary/middle childhood pre service teachers, K-8 students, & K-8 teachers will be instrumental in changing teaching/learning in the university service area. This is a mechanism for long-term change, which engages all parties in the immersion of the philosophy/pedagogy of the AP in mathematics. The existing relationships between university mathematicians & their math education colleagues and K-8 teachers & administration will be strengthened & expanded through: (1) the increased number of students & teachers impacted by the proposed project, (2) the increased exposure of the Algebra Project methods & philosophies to produce good teaching (undergraduate and K-8 instruction), (3) the value added of quarterly assessments to impact student learning and improving teaching in ways aligned with CCSS, & (4) the lasting effects on the teacher education program (pre service & in-service teachers) that will impact the future of teaching and learning in central Ohio.

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.* Diane Ervin, Director of Curriculum and Instruction Northmor Local Schools/Mid-Ohio Educational Service Center
No consortium contacts added yet. Please add a new consortium contact using the form below.
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<tr>
<td>Terri</td>
<td>Bucci</td>
<td>419-755-4011</td>
<td><a href="mailto:bucci.5@osu.edu">bucci.5@osu.edu</a></td>
<td>The Ohio State University - Mansfield</td>
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<td>760 University Drive, , Mansfield, Ohio, 44906</td>
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<td>Gail</td>
<td>Baxter</td>
<td>609-734-5323</td>
<td><a href="mailto:gbaxter@ets.org">gbaxter@ets.org</a></td>
<td>Educational Testing Service (ETS)</td>
<td></td>
<td>660 Rosedale Road, Mail Stop 19-R, Princeton, New Jersey, 08541</td>
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<tr>
<td>Lee</td>
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<td>The Ohio State University - Mansfield</td>
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<td>760 University Drive, , Mansfield, Ohio, 44906</td>
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<td><a href="mailto:bcrombie@aol.com">bcrombie@aol.com</a></td>
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<td>99 Bishop Allen Drive, , Cambridge, MA, 02139</td>
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<td>Lee</td>
<td>McEwan</td>
<td>Full Professor</td>
<td>Coordinate coursework Design and implement professional development Serve on planning committee Implementation of parent/community pre- and post meetings Onsite lesson studies, K-3 and 4-8 Collaborate with ETS personnel to align Math Challenges with Ohio's New Learning Standards and Algebra Project pedagogy</td>
<td>Ph.D. Mathematics, Columbia University 1985 Full Professor, Department of Mathematics, The Ohio State University since 2011 5 years experience with the Algebra Project, including as Principal Investigator on a $500,000 sub-award from the National Science Foundation, 2009-2013 Graduate of PDPD (&quot;Professional Development for Professional Developers&quot;), training offered by The Algebra Project, Inc., in summer 2011</td>
<td>Started the Algebra Project program at Mansfield Senior High School in 2009 Sought and obtained an Outreach and Engagement grant through The Ohio State University ($100,000, including campus matching funds) to begin the Young People's Project at Mansfield Senior High School Co-directed the above program from 2008 - present One of four facilitators for workshops, lesson study, and classroom support for Algebra Project-based professional development for 40+ K-8 teachers in Mansfield City School District for 3 years (2012-2014)</td>
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<tr>
<td>Diane</td>
<td>Ervin</td>
<td>Director of Curriculum and Assessment, Northmor Local Schools</td>
<td>Diane Ervin will serve as district grant coordinator for the successful Straight A grant project. Responsibilities will include: 1. Ongoing communication and collaboration with teachers and district administrators 2. Coordination with OSU-Mansfield, the Algebra Project (AP) and Educational Testing Services (ETS) 3. Coordination and evaluation activities associated with professional development 4. Completion and submission of all related reporting requirements 5. Processing/ordering of grant-related instructional materials and resources 6. Communication with Ohio schools interested in the success of our project 7. Consultation with area schools, as needed</td>
<td>Diane graduated in 1978 from The Ohio State University with a BS in Elementary Education and from Bowling Green State University with a MA in Special Education. The following certifications are held 1. Elementary (K-8) 2. Intervention Specialist (K-12) 3. Elementary Principal (K-8) 4. Educational Supervisor 5. Assistant Superintendent</td>
<td>Diane Ervin has served as building principal, Director of Curriculum, and Assistant Superintendent with Shelby City Schools. While at Shelby, she coordinated CCIP/State and Federal Programs for approximately 18 years. Additionally, Diane has provided district-level and building-level leadership for strategic planning, district and school improvement initiatives, and district lead for the Ohio Improvement Process (OIP) and District Leadership Team (DLT). During this time, the district report card improved from a rating of &quot;Continuous Improvement&quot; to the &quot;Excellent&quot; rating category. She facilitated the implementation of a Comprehensive Reform Demonstration Grant (CSRD) while principal at Dowds Elementary School. This innovative program connected teachers with OSU-Mansfield, University of Georgia and the League of Professional Schools. School reform was successfully accomplished as evidenced by Developmentally Appropriate Practices (DAP), school wide Multiage groupings, curriculum mapping, a developmental progress report, development of software to track student mastery of academic benchmarks, Shared Governance, and Action Research. Mrs. Ervin currently leads Race to the Top activities at</td>
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<td>Terri Bucci, PhD</td>
<td>The Ohio State University, Associate Professor, Mathematics Education</td>
<td>Coordinate coursework Design and implement professional development Serve on planning committee Implementation of parent/community pre- and post meetings Onsite lesson studies, K-3 and 4-8 Collaborate with ETS personnel to align Math Challenges with Ohio’s New Learning Standards and Algebra Project pedagogy</td>
<td>Dr. Bucci is an Associate Professor of Mathematics Education with a Masters degree Mathematics and Math Education. She has fourteen years of teaching experience in 6-12 education teaching mathematics and has been at OSU-M for the past 15 years. Dr. Bucci has three years of experience leading professional development workshops for Mansfield City School District, setting up and facilitating lesson study, and developing and supporting a cadre of 11 Math Teacher Leaders who represent all five elementary buildings, the intermediate school, and the middle school. The development of this district-wide team of Math Teacher Leaders was begun in 2011 as part of the district's decision to introduce Algebra Project pedagogy in support of K-8 mathematics instruction. The development of this cadre of teachers was a first step in building local capacity to support math instruction at the building level within Mansfield City Schools.</td>
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<td>Gail Baxter</td>
<td>Senior Education Research Consultant, Policy Evaluation and Research Center (PERC) at ETS</td>
<td>Lead team of teachers, mathematicians and math educators to integrate 4 ETS math challenges with 5 step curricular process, review pilot data, and document how to interpret student data and what instructional practices would be most appropriate to address student learning needs.</td>
<td>Senior Education Research Consultant, Policy Evaluation and Research Center (PERC) at ETS Qualifications: PhD Educational Psychology Worked with teams of teachers, scientists, and district staff to design curriculum embedded assessments K-5 in three school districts. Served on the National Academy of Sciences Committee on Foundations of Educational and Psychological Assessment which produced the report “Knowing What Students Know. The Science and Design of Educational Assessment.” Currently leading pilot and subsequent revisions to ETS Math Challenges K-5.</td>
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<td>Michael Mikusa, PhD</td>
<td>Emeritus Professor, Kent State University</td>
<td>Dr. Michael Mikusa will be coordinating the evaluation activities and leading the analysis of the data. He will work together with the project directors to provide formative feedback for ongoing grant activities and prepare final reports of the summative reports required with this grant.</td>
<td>Mathematics educator for over 30 years, grades 7 to 16 Taught for undergraduate and graduate students mathematics education courses Served as evaluator for several state and national grants Dr. Mikusa has been a mathematics educator for over 30 years. His responsibilities include teaching mathematics courses from grades 7 to 16 as well as mathematics education courses for both undergraduate and graduate students. In addition to teaching, Dr. Mikusa has been involved with a variety of grants as PI and has been lead evaluator for several state and national grants.</td>
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<td>Bill Crombie</td>
<td>Director of Professional Development at The Algebra Project, Inc.</td>
<td>Mr. Crombie serve as primary contact for teacher development relating to The Algebra Project for this grant project. He will make one 2-day on-site visit and communicate through internet throughout the grant period.</td>
<td>Mr. Crombie holds an MS degree (and ABD) in Physics from Brown University. He has served as the Executive Director of The Chicago Algebra Project during 1994 - 1997. He has worked for the Algebra Project, Inc., since 1994. Serving in this position since 2009, he is responsible for the development and implementation of the Algebra Project’s Teacher Professional Development Program and the Project’s Professional Development for Professional Developers Program. He is also coordinator and a member of the facilitation teams for both the Algebra Project’s Summer Teacher Institutes and PDPD Institutes.</td>
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