Year 2: Building Math Thinkers: Empowering Students to Reason, Remember, Reflect (BMT)

2026 EIG Application

Akron Public Schools (APS)

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Application Form

Contact Information

Please note that the application uses **CHARACTER COUNTS** for each question, *not word counts!*

For more information about EIG grants, please visit our website: https://www.garfoundation.org/eig

School Name*

Akron Public Schools

Team Members*

Please list the names, titles, and email addresses for each member of your core team.

Sarah Mizak	Math Instructional Coach	smizak@apslearns.org
Kristin Kittle	Instructional Coach (Seiberling)	kkittle@apslearns.org
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Erin Corneliussen Mason	HS Math Teacher (North)	ecorneli@apslearns.org
Anthony Brown	High School Math Teacher (Buchtel)	abrown6@apslearns.org

Principal Name*

Please enter the name of your school's principal here.

Nicole Vitale

Principal Email*

Please enter your principal's email address here.

nvitale2@apslearns.org

Treasurer Name*

Todd Adkins

Treasurer Email*

tadkins@apslearns.org

Request Information

Project Name*

Year 2: Building Math Thinkers: Empowering Students to Reason, Remember, Reflect (BMT)

Is this a new project, or Year 2 or 3 of a previously funded EIG project?*

Year 2

Amount Requested*

This number should match the total on your EIG Budget spreadsheet.

$10,000.00

Grade Levels to be served by your project*

K-12

Project Overview*

Please write a brief, two-sentence description of your project and desired outcome.

Building Math Thinkers will grow and sustain confident math students and teachers through thinking-centered experiences that increase engagement and discourse. Students reason, collaborate, and persevere in making their math thinking visible.

Compelling Story*

Why do you believe in this project? What are you seeing in your students that you want to address?

Our beliefs about math teaching and learning have not changed. Students deserve to see themselves as confident, curious, resilient, and creative math thinkers. We want students to know that they can use what they know to make sense of problems, adapt their thinking, and take risks without fear of failure. We want students talking about math with one another: explaining their reasoning, listening to different approaches, and learning that struggle is a valuable part of learning. Many students enter math hesitant to engage and overly focus on answer getting. Traditional math classes, programs, pacing expectations, and materials often reinforce these patterns and unintentionally limit thinking, elevate speed and compliance over understanding, and contribute to long-lasting math anxiety and feelings of failure that grow year after year.BMT was created to address this challenge and transform how students experience math. Grounded in Peter Lilijdahl's Building Thinking Classrooms and the Effective Math Teaching Practices, BMT focuses on building classrooms where thinking is visible and all students are expected and supported to engage deeply in math. Our shared purpose: get students thinking more about math, about their own thinking, and about the others' thinking. In year 1, our impact has grown significantly. BMT has expanded from 11 to 41 educators, 6 schools to 15. Student evidence shows they are connecting these experiences to math concepts and skills, retain more, and feel more confident using thinking to problem solve. We believe in BMT because we see students begin to shift from memorizers and mimickers to thinkers and collaborators; explain their reasoning, build on one another's ideas, and get unstuck together. Teachers grow more confident in

facilitating thinking tasks and are eager to continue learning together. Year 2 allows us to deepen and sustain our work, ensuring that more students experience math as a space where their ideas matter and they can succeed.

Project Description*

Please write a brief description of your project.

- What need are you seeking to address?
- What do you plan to do?
- What do you want your students to achieve?

mathingMathematics faces unique challenges nationally and locally in Akron Public Schools. Test anxiety, plateauing achievement, limited growth, and widening gaps among groups of learners at all levels persist despite years of reform efforts. Our students need and deserve math experiences that prioritize thinking, sense-making, and collaboration. Our teachers need sustained guidance and support grounded in research and proven practices, including the framework of Building Thinking Classrooms (BTC), which has shown promise for improving how students learn math over the past decade.

We are intentionally working to strengthen the thinking and "mathing" of all students. What began as a cohort of 11 educators has grown to include 30 additional teachers and instructional coaches. Many participants have already begun engaging students in rich, collaborative math tasks where students reason together, test strategies, and develop deeper mathematical understanding. This growth reflects both the need to continue this work and the enthusiasm educators feel when they see students actively thinking and learning. Students are sharing more strategies, participating productively in random small groups, and growing in confidence as math learners. A defining feature of BMT is the sharing of practice across classrooms and schools. Teachers and coaches have invited colleagues, administrators, and district leaders into their classrooms to observe thinking tasks through coaching labs. These experiences create a shared understanding of what high-quality, thinking-centered mathematics instruction looks like with APS students. Coaches are critical for modeling tasks, supporting teachers during instruction, analyzing evidence, and engaging students in math conversations as they work collaboratively. They advocate for expanding thinking-centered practices and encourage teachers to deepen their implementation. In Year 2, we will continue and deepen this work by intentionally teaching more math content through math tasks grounded in 4 core practices:

- Design tasks for students to think, reason, and problem-solve
- Use random groups for collaboration, equity, and social development
- Leverage vertical whiteboards to increase engagement and make thinking visible
- Incorporate self-evaluation tools to build confidence, persistence, and communication

We will also refine practices that further maximize student thinking, including effective task launches, supporting small-group problem solving, and consolidating learning through reflection and note-taking strategies. As a result of this work teachers report increased student engagement, richer math discourse, and greater perseverance through challenging tasks. Educators value the opportunity to collaborate and reflect with peers, and receive ongoing support from coaches who are consistently present in classrooms. BMT will strengthen both teaching and student learning, build momentum toward more equitable and meaningful math experiences across APS.

Cradle to Career Continuum*

At which transition point/indicator on the Cradle to Career Continuum does your project fall? If you're not sure, click here for more information on the transition points.

College & Career Readiness

Student / Teacher Impact*

- How will this project impact your students and/or other teachers?
- What will you do to ensure your project supports various student needs?
- Please include any practices or impact that focus on social emotional learning.
- Have you included professional development in your project design, and, if so, how will it support your project goals?

The student impact of BMT will have an even greater reach since our group has more than tripled in size going into next year. Some schools started with 1 grade level or teacher, and now other colleagues are joining and students will have multiple years to grow their thinking and problem solving skills in math. Students who regularly experience thinking tasks in small random groups at vertical whiteboards consistently and overwhelmingly ask for more and more opportunities to learn this way. They are the best recruitment tools we have for expanding into more classrooms! We are seeing improvement not only in students' skills and conceptual understanding, but in participation, active listening, self-esteem, and confidence. Our classrooms are very diverse academically, socially, and culturally. With BMT practices, students are working with all of their classmates, learning with one another, sharing, adapting, and developing connections that would not be as strong in a more traditional classroom setting.

The educator impact of BMT will continue to advance and strengthen students' abilities to represent their thinking and use strategies to problem solve. In year 2, we will also set our sights collectively on vertical alignment and coordinating math tasks across all grade levels. This work started this year in our early meetings. Our group would always spend some time sharing what math tasks our students experienced, how the task was launched, any resources or materials that were used, and recommendations for changes or improvements. Later, we started connecting these tasks to topics, when the task could be used, and with what grade level(s). The process of selecting, sequencing, and scripting math thinking tasks can be very time consuming for teachers, which is why we want to share resources across our district so all teachers can begin to use thinking tasks and benefit from those who have made adjustments and improvements. We will continue to need consistent and timely opportunities to come together to learn, plan and reflect.

As with Year 1, we will continue to work with other teachers in our buildings to spread knowledge and resources with anyone who is interested in creating thinking classrooms. Professional development like our 6 hour options in the fall, instructional improvement days, and coaching labs will support teachers who want to do more with BTC. The math department has prioritized these practices as focus areas for all teachers and has set aside funds for math PD and conferences (attending and presenting). New schools will have teachers begin to transform their classrooms and be a model for others. Experienced teachers and coaches will offer a deep dive into new practices like launching and sequencing tasks, consolidating lessons, and effective ways for students to take notes and use purposeful practice to strengthen skills and concepts.

Technology*

- What technology (if any) is necessary for the success of this project? Explain how it will be used and why it is important to the project.
- If technology is not needed as part of this project, then please describe why and how objectives will be achieved without added technology.

Remember: Technology cannot be more than 40% of your total budget, and if you are requesting funding for technology you are expected to allocate at least 10% of your total budget to professional development.

BMT integrates the use of iPads to consolidate thinking tasks. One critical practice of BMT is to use student work as an anchor for teaching new math concepts or skills. IPads allow teachers to quickly scan and select student work from vertical whiteboards and share with the class. Apps like Notability help teachers annotate and facilitate discussions of important math strategies. This creates more opportunities for students

to share their thinking and visually learn how others approach the tasks. IPads save teachers valuable time in the classroom and provide evidence of student thinking in an organized way that can be shared with students and in PLCs, coaching labs, and PD. No-cost training occurs in the classroom and during PD days.. Teachers can efficiently transition students from teamwork to formalizing and consolidating learning in discussion and skills practice. Year 2 educators will benefit from the expertise of Year 1 teachers and be able to work with iPads when school begins.

Communication - Year 2 or 3 Project

Communication - Year 2 or 3 project*

How will other building stakeholders (other teachers, building leadership, parents of your students, etc.) learn about the project and its outcomes?

As a Year 2 or 3 project, what opportunities have you identified for sharing your project design for possible replication in other classrooms, schools, and/or districts?

Current BMT teachers and coaches are excited to share the work and thinking their students are doing with fellow teachers, intervention specialists, building principals, and district leaders. They eagerly open their classroom doors for colleagues to observe math thinking tasks in action, allowing stakeholders to see student engagement, discourse, and problem-solving firsthand. The APS Mathematics Department has identified practices from Building Thinking Classrooms as a priority for increasing student achievement in numeracy across all grade levels. One teacher who began implementing BTC practices over a year ago saw an increase in achievement among her sixth-grade students for the first time since before the pandemic, reinforcing the impact of this work. We will set clear goals for student learning and share evidence of progress throughout the year, further supporting the replication and scaling of this work.

In Year 2, the BMT team will continue to develop organized, shareable resources for teachers who are interested in getting started with thinking-centered practices. These resources will include tasks, visibly random grouping structures, self-assessment tools, and vertical non-permanent surface (VNPS) strategies that can be used throughout the school year. All materials will align to district timelines, state standards, and effective math teaching practices. Instructional coaches will lead professional development opportunities that highlight BMT practices through classroom examples, student work, and teacher reflections. District-supported PD structures will be leveraged to refine existing practices, introduce new ones, and collaboratively plan thinking tasks that support grade-level standards.

BMT also seeks to share its work beyond individual buildings and the district. Thinking classroom practices have been a focus at local and state conferences for several years due to their strong alignment with effective mathematics teaching practices. Mathematics conferences such as OCTM and the NEOESC Math Symposium provide opportunities for BMT participants to collaborate with educators from other schools and districts. Some from our group will also plan to present sessions at the 27-28 OCTM Conference, which will be held here in Akron!

Building Math Thinkers is about restoring joy, confidence, and belonging in mathematics by putting student thinking at the center of learning. With this grant, we will continue building classrooms where all students are seen as capable, curious problem solvers and teachers are supported to grow, lead, and learn together.

Attachments

There are two required attachments to complete your application. **No other attachments will be accepted.**

Endorsement Form*

This form must be completed by the Superintendent (or Head of School) and Principal. Click here to download the Endorsement Form.

Yr. 2 Building Math Thinkers Endorsement Lt..pdf

Project Budget Form*

Use this form to provide an itemized list of all expenses that you expect to incur in connection with the project. Please use actual cost quotes that reflect the best available prices on materials. **Use only the form provided; do not create your own form.**

Click here to access the Project Budget Form in Google Sheets. Please note that you must upload the budget here as an xlsx or pdf. Google Sheets files (.gsheets) will NOT be accepted.

2026 EIG Budget Building Math Thinkers (Year 2).xlsx

File Attachment Summary

Applicant File Uploads

- Yr. 2 Building Math Thinkers Endorsement Lt..pdf
- 2026 EIG Budget Building Math Thinkers (Year 2).xlsx

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FOUNDATION

Educator Initiative Grant Endorsement Form

By signing this Endorsement Form, you acknowledge that the proposal meets the focus of the School's or District's mission and supports your school improvement plan. The district also accepts fiscal responsibility for any grant resulting from this request.

I/we endorse the applicants' request for Year 2: Building Math Thinkers: Empowering Students to Reason, Remember, Reflect (BMT)
(Project Name)

in the amount of $ 10,000
(Amount Requested)

Math Department (+15 schools)
Name of School

Akron Public Schools
School District

Superintendent or Head of School

Signature

Mary B. Outley
Print name

2-11-2026
Date

Principal

Signature

Nicole Vitale
Print name

February 6, 2026
Date

GAR Foundation EIG Budget

Please round all amounts to the nearest dollar. This spreadsheet will automatically round up your TOTAL PROGRAM EXPENSE to the nearest $10. The AMOUNT REQUESTED in your

School & Project Title:

PROGRAM EXPENSES	Cost Per Unit	Units Needed	Total Cost	Explanation *This column is mandatory for all of your line items.*
Technology				*Up to 40% of budget*
iPad Air 11 in (CDW)	$ 438.00	4	$ 1,752.00	iPads are efficient for scanning and annotating student math work immediately and optimize engagement for formalizing learning from whiteboards where students record their thinking. They also allow teachers to "defront" the classroom space by moving around the room to launch tasks, debrief the learning at the end, and easily involve students in the process of sharing their thinking. Coaches will be able to model the launch and closure of tasks as well.
	$ -		$ -	
Technology Subtotal			*$ 1,752.00*	
Professional Development				*Projects with technology are expected to allocate at least 10% of their total project budget to PD*
Trainings/Workshops: NEOESC Math Symposium	$ 25.00	15	$ 375.00	Building Instructional coaches will network and build capacity to continue to lead PD and support classrooms implementing thinking tasks
Trainings/Workshops: OCTM Registration	$ 225.00	5	$ -	Participants will network and build capacity to continue to lead PD and support classrooms implementing thinking tasks. APS Math Department and OSI will provide funding for all expenses for those attending and facilitating at OCTM next year (~$3000.00)
Books/Publications: Mathmatics Tasks for the Thinking Classroom (K-5)	$ 33.49	11	$ 368.39	A supplemental text filled with BTC tasks, full lesson guides, hints/extensions and more - perfect for hosting PD and supporting new teachers investing in BTC practices
Books/Publications: Mathmatics Tasks for the Thinking Classroom (6-12)	$ 43.95	6	$ 263.70	A supplemental text filled with BTC tasks, full lesson guides, hints/extensions and more - perfect for hosting PD and supporting new teachers investing in BTC practices
Coaching	$ -		$ -	Building and department coaches will provide in-house PD, coaching labs, and district PD to recruit and train new teachers. PD for BMT members will also be provided throughout the year at least 2 times a semester to sustain and strengthen practices.
Technology Professional Development	$ -		$ -	Technology Supervisor for APS will assist with best practices integrating technology into lessons. Our current BMT members in year 1 can also assist with best practices, tips, and tricks for using the iPads and apps that have integrated well with classroom technology.
Other:	$ -		$ -	
Professional Development Subtotal			*$ 1,007.09*	
Materials/Supplies				
Apple Care	$ 79.00	4	$ 316.00	required by APS with Apple products in any grant application
Stylus	$ 71.89	4	$ 287.56	These are listed under materials because they do not function independent of the iPad and are for collaboratively annotating student work as part of consolidating a lesson and note-taking after students work on thinking tasks - also recording student work
iPad Case	$ 31.49	4	$ 125.96	dual functions as case (required by APS for Apple Products) and typing for note-taking during consolidation of learning. These are listed as materials as they do not function independent of the iPad.
Screen Protector	$ 17.99	4	$ 71.96	Helps keep the device clean, protected, and works to give paperlike feel when writing with a stylus on the screen
Wipebook (original) (10 pk)	$ 68.24	10	$ 682.40	durable vertical non-permanent surfaces for thinking tasks and collaboration
Wipebook (heavy duty) (10 pk)	$ 157.74	6	$ 946.44	durable vertical non-permanent surfaces for thinking tasks and collaboration
Wipebook (mini) (10 pk)	$ 52.49	10	$ 524.90	durable vertical non-permanent surfaces for thinking tasks and collaboration
2 sided Whiteboard Easel	$ 109.99	6	$ 659.94	for classrooms with limited wall space - stacking, moveable and shareable non-permanent surfaces promote collaboration and thinking
Whiteboard Desk Easel	$ 39.98	16	$ 639.68	for classrooms with limited wall space - moveable and shareable non-permanent surfaces promote collaboration and thinking
1 sided Whiteboard Mobile	$ 123.99	7	$ 867.93	for classrooms with limited wall space - moveable and shareable non-permanent surfaces promote collaboration and thinking
Magnetic Bars (24 pk)	$ 17.99	4	$ 71.96	organizing materials such as markers, erasers, task cards for thinking tasks at each group station

Dry Erase Markers (144 pk)	$ 31.99	8	$ 255.92	students need markers to show their work, talk through problem solving and share strategies
Blue Dry Erase Markers (12 pk)	$ 9.81	8	$ 78.48	teachers use color to box in ideas for the class to review and remember- they show student work and problem solving strategies
Dry Erase Eraser Rags (24 pk)	$ 22.99	8	$ 183.92	rags are washable and more durable (won't need to be replaced) students need erasers to adjust their plans and strategies
Page Protector Pockets (dry erase) (30 pk)	$ 26.99	8	$ 215.92	pockets are also dry-erase (durable and sustainable) for inserting important charts, graphics, rubrics, or other materials needed for thinking tasks
Turtle Wax	$ 42.91	2	$ 85.82	We found out from a workshop on thinking tasks and tutle wax helps bring whiteboard surfaces back to original condition to help them not stain and last longer if applied annually
Painters Tape (4 pk)	$ 29.99	2	$ 59.98	The perfect way to hang and rehang VNPSs - holds to most walls and doesnt damage the surfaces of the boards or the walls.
Adhesive (velcro) squares	$ 16.99	8	$ 135.92	Great for teachers and coaches who can't keep VNPSs permanently on the walls. The stickers stay but the boards can be easily taken down and put back up many times to create flexibility with limited space in some classrooms.
Clear Labels	$ 8.99	8	$ 71.92	clear labels secure items like magnets to hold other materials up at the VNPSs.
Magnetic Math Manipulatives	$ 450.00	1	$ 450.00	keeping students at vertical surfaces while representing their thinking will require magnetic manipulatives like counting chips, red/yellow integer chips, blocks, fraction strips, algebra tiles, and other items. Because they are magnetic, students will be able to display and move them easily, which will help with engagement and discussion in small groups. If teachers do not have surfaces that are magnetic, they can use individual magnetic whiteboards for groups to work out and represent their thinking.
	$ -		$ -	
	$ -		$ -	
	$ -		$ -	
	$ -		$ -	
Materials/Supplies Subtotal			*$ 6,732.61*	
Refreshments				*Up to $500 per project can be used for refreshments and snacks.*
Team Meeting Refreshments	$ 500.00	1	$ 500.00	Having refreshments ready for our team means we can maximize our time together and shows appreciation for the work we are doing together.
	$ -		$ -	
Refreshments Subtotal			*$ 500.00*	
Miscellaneous				
Substitutes	$ -		$ -	*Up to 10% of budget*
Other:	$ -		$ -	
Miscellaneous Subtotal			$ -	
	TOTAL PROGRAM EXPENSE		$ 10,000.00	This amount is automatically rounded up to the nearest $10 (eg, $542.50 will round up to $550). Your AMOUNT REQUESTED on your application should match this number.