

APPLICATION INFORMATION

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Building Thinking Classrooms Grant

25 students per school year
Peakview Elementary School
4th grade

Dean (20 years), Anast (8 years)

GRANT APPLICATION QUESTIONS

Provide a brief description of your Grant project that can be used for publication.*

We will create alternate workspaces in our classrooms by purchasing standing magnetic whiteboards and magnetic math manipulatives. The standing magnetic whiteboards will encourage more thinking, engagement, and collaboration in the classroom.

Purpose: (Explain what you hope to achieve. What will be different or better if successful? Why is it needed? What inspired you to apply?)*

The purpose of implementing a thinking classroom with standing whiteboards is to foster a more interactive, dynamic, and engaging learning environment for students. This innovative approach aims to enhance critical thinking, problem-solving skills, active participation, and collaboration among students. The utilization of standing whiteboards provides a tangible and versatile tool that allows students to visualize their thoughts, engage in real-time discussions, and actively contribute to classroom activities.

If successful, several positive outcomes can be expected:

Improved Engagement: Standing whiteboards provide an opportunity for students to physically move around and actively participate in discussions and

activities. This can help prevent passive learning and maintain higher levels of engagement throughout the class.

Enhanced Critical Thinking: The interactive nature of whiteboards encourages students to think on their feet, articulate their ideas, and engage in spontaneous brainstorming sessions. This can lead to improved critical thinking and problem-solving skills.

Collaborative Learning: Whiteboards facilitate collaborative learning by enabling students to work together on projects, solve problems as a team, and share their insights with classmates. This promotes a sense of community and mutual support in the classroom.

Visual Representation: Visualizing concepts and ideas on whiteboards can make abstract concepts more concrete, helping students better understand complex topics. Visual aids can also make explanations more memorable.

Classroom Dynamics: The dynamic nature of whiteboards encourages a more fluid class structure, allowing for seamless transitions between lectures, group discussions, and activities. This can help break the monotony of traditional teaching methods.

Confidence Building: Standing whiteboards provide a platform for students to present their ideas to the class. This can help build their confidence in public speaking and sharing their thoughts with others.

The need for such an approach arises from the evolving nature of education. Traditional classrooms often struggle to keep up with the demands of modern pedagogy, which emphasizes active learning, critical thinking, and collaboration. Additionally, students today are accustomed to interactive and visual experiences outside the classroom, making it important to incorporate similar elements within the learning environment.

The inspiration to apply this approach comes from Peter Liljedahl's Building Thinking Classroom in Math. He conducted a 15 year study observing 14 specific mathematical practices for thinking. He was looking for the practices that generated the most thinking. While reading Building Thinking Classrooms in Math, our EL Specialist co-teacher theorized how useful standing white boards would be in the classroom.

Measurable Objectives: (Specific, Measurable, Attainable, Relevant, Time- Based (SMART) Goals. How will you know it is successful?)*

To measure the success of using standing whiteboards in the classroom, you can establish SMART goals that are Specific, Measurable, Achievable, Relevant, and Time-based. Here's an example of how we might structure these objectives:

Specific: Increase student engagement, active thinking and participation through the use of standing whiteboards.

Measurable: By the end of the academic year, increase the frequency of opportunities given to students actively using standing whiteboards during class discussions and activities compared to the baseline measurement taken at the beginning of the year. Our goal is to use them at least 2-3 times per week.

Achievable: Each student will have the opportunity to work in a small group sharing their ideas 3 or more times per week.

Relevant: The goal aligns with the larger objective of creating an interactive and engaging learning environment that promotes critical thinking, collaboration, and active participation.

Time-Based: Measurement will occur at the end of the academic year.

To assess the success of using standing whiteboards, we can employ several methods:

Assessment Performance: Compare student performance on assessments and assignments before and after the implementation of standing whiteboards. Look for improvements in critical thinking skills, problem-solving abilities, and overall participation.

Anecdotal Evidence: Document anecdotal evidence of successful instances where standing whiteboards led to in-depth discussions, effective group work, and innovative problem-solving.

Quantitative Data: Keep track of metrics such as the number of times whiteboards are used per class, the variety of ideas generated, and the depth of discussions. Compare these metrics over time to measure progress.

How will your grant embrace the Core Values of Growth Mindset, Relationships, Equity, Engagement, Whole-Well Being?*

The proposal to implement a thinking classroom with standing whiteboards aligns closely with the core values of the Cherry Creek School District, encompassing Growth Mindset, Relationships, Equity, Engagement, and Whole-Well Being:

Growth Mindset: Embracing a growth mindset involves fostering the belief that abilities and intelligence can be developed through dedication and hard work. The thinking classroom approach encourages students to actively participate, share their ideas, and engage in collaborative problem-solving. By utilizing standing whiteboards, students are encouraged to take risks, make mistakes, and learn from them, fostering a growth mindset by promoting resilience, curiosity, and a willingness to learn and improve.

Relationships: Building positive relationships within the classroom is crucial for effective learning. The interactive and collaborative nature of the thinking classroom with standing whiteboards promotes communication and teamwork among students. They can work together, exchange ideas, and provide feedback to one another, thus strengthening interpersonal relationships and creating a supportive learning community.

Equity: Equity in education involves ensuring that all students have access to resources, opportunities, and support regardless of their background or abilities. The implementation of standing whiteboards creates an inclusive learning environment where every student has the chance to actively participate, express their thoughts, and contribute to discussions. This approach minimizes barriers to participation and ensures that each student's voice is heard and valued.

Engagement: Engagement is a fundamental aspect of effective learning. The interactive nature of the thinking classroom, facilitated by standing whiteboards, encourages students to be actively engaged in the learning process. Students are more likely to be attentive, contribute their ideas, and participate in activities that require critical thinking and problem-solving. This active engagement enhances the overall quality of learning experiences.

Whole-Well Being: The well-being of students goes beyond academic achievement; it encompasses their mental, emotional, and social health. The thinking classroom promotes a positive and dynamic learning environment that can have a positive impact on students' overall well-being. The opportunity to move around, collaborate, and engage in discussions can contribute to a more positive and energizing classroom atmosphere, promoting mental and emotional well-being.

Incorporating standing whiteboards in the classroom is a concrete way to embody these core values. The interactive, collaborative, and inclusive nature of this approach directly addresses Growth Mindset, Relationships, Equity, Engagement, and Whole-Well Being by creating an environment that encourages growth, fosters positive relationships, ensures equity of participation, enhances engagement, and contributes to students' overall well-being.

Implementation of Strategy: (e.g., instructional procedures, steps of implementation)*

We are using some of the practices mentioned in Building Thinking Classrooms in Math as we are able to, based on our current resources. We are planning to use these whiteboards during curricular and non-curricular tasks. Some of our non-curricular tasks will be used for math warm-ups, while the curricular tasks will be used during our workshop model endorsed by the Cherry Creek School District math coordinator. Once we receive the whiteboards, using the boards will be integrated into our planning to maximize our productivity.

Timeline: (Provide outline of your grant from beginning to end. Sustainability plan: will additional resources be needed in the future?)*

We may need additional manipulatives and expo markers, but we shouldn't need any more boards.

Evaluation Procedures: (Explain how you will measure the success of your program. Will you conduct a survey, interview, or request feedback from participants?)*

We will measure the success of the program by:

Assessment Performance: Compare student performance on assessments and assignments before and after the implementation of standing whiteboards. Look for improvements in critical thinking skills, problem-solving abilities, and overall participation.

Anecdotal Evidence: Document anecdotal evidence of successful instances where standing whiteboards led to in-depth discussions, effective group work, and innovative problem-solving.

Quantitative Data: Keep track of metrics such as the number of times whiteboards are used per class, the variety of ideas generated, and the depth of discussions. Compare these metrics over time to measure progress.

BUDGET QUESTIONS

Budget Narrative: (Explain what is being purchased and how it relates to the goals of the project.)*

Purchase 6 Standing whiteboards and magnetic manipulatives to implement the strategy of using vertical non-permanent surfaces that promote critical thinking, perseverance, and collaboration.

How many budget items would you like to list such as Equipment/Supplies and other items?*

- 6 Standing White Boards 89.99X6
- 7 sets of magnetic base ten blocks 22.00 each
- 7 sets fraction circles and strips 21.00 each
- 2 sets of magnetic strips 10.00 each

Total: $539.94+154.00+147.00+20.00=$ **860.94 (plus shipping and handling)**

INSTRUCTIONS:

When entering your budget amounts please refrain from using dollar signs

<https://a.co/d/iR1gsAT>

MaxGear Large White Board with Stands,
36" x 24" Big Double Sided Easel Dry
Erase Board for School and Classroom,
Home & Office Stand Flip Chart, Height
Adjustable & 360 Degree Rotating
Whiteboard

Visit the MaxGear Store

5.0 ★★★★★ 1 rating

50+ bought in past month

\$89⁹⁹

Or \$16.62 /mo (6 mo). Select from 1 plan

prime

FREE Returns

Coupon: Apply \$10 coupon [Shop items >](#) | [Terms](#)

Redeem **Buy any 2, Save 5%**. Enter code 7KF3AIEX at checkout.

Order Summary

Items (6):	\$539.94
Shipping & handling:	\$0.00
Promotion Applied:	-\$27.00
Your Coupon Savings:	-\$10.00
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Total before tax:	\$502.94
Estimated tax to be collected:	\$33.96
Estimated Regulatory Fees:	\$0.28

Order total: \$537.18

22.00 X 7

Magnetic Base Ten blocks

[Amazon.com: 131 PCS Jumbo Magnetic Base Ten Blocks for Math - Place Value Blocks, Base 10 Math Manipulatives K-3, Number Blocks, Math Counters for Kids, Math Cubes, Counting Blocks, Kindergarten 1st 2nd 3rd Grade](#)

21.00 X 7

Fraction circles and strips 21 (maybe 3-4 per classroom)

[Amazon.com: Simply magic 166 PCS Magnetic Fractions Activities Class Set - Magnetic Fraction Strips & Tiles, Perfect Fraction Manipulatives, Fraction Circles, Bars, Fraction Tools for Kids, Math Manipulatives : Toys & Games](#)

10.00 X 2

Magnetic dots

https://www.amazon.com/dp/B08M48RSRF/ref=sspa_dk_detail_6?pd_rd_i=B08M48RSRF&pd_rd_w=K3dkb&content-id=amzn1.sym.f734d1a2-0bf9-4a26-ad34-2e1b969a5a75&pf_rd_p=f734d

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