IMPROVING ALGEBRA 1 FOR BLACK AND LATINO STUDENTS

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Akilah Allen, Program Officer, K-12 Education
Karen Johnson, Senior Program Officer, K-12 Education
Rachel Leifer, Senior Program Officer, K-12 Education
BALANCE THE EQUATION: AGENDA

- Re-inventing Algebra 1 (30 min)
- Questions (30 min)
HOW TO SUBMIT A QUESTION

ASKING
— Open the Q&A window, allowing you to ask questions to the host and panelists. *They can either reply back to you via text in the Q&A window or answer your question live.*

To ask a question:
1. Type your question into the Q&A box. Click Send.
   
   Note: Check Send Anonymously if you do not want your name attached to your question in the Q&A.
2. If the host replies via the Q&A, you will see a reply in the Q&A window.

ANSWERING
— The host can also answer your question live (out loud). You will see a notification in the Q&A window if the host plans to do this.

LIKING AND COMMENTING
— As an attendee you can also like or comment on other attendee’s questions. This helps the host or participant identify popular questions, especially in a webinar with many attendees.

1. Click the thumbs up icon to like a comment.
   
   Tip: The number beside the icon is the total number of likes the question has received so far.
We asked 8th, 9th, and 10th grade students:

When you hear the word **mathematics**, what comes to mind?

- **8th grade student**: “Difficult.”
- **9th grade student**: “Challenging.”
- **8th grade student**: “A lot of work.”
- **10th grade student**: “Sometimes fun.”
Building Their Own Support Teams

"My uncle! He's one of the best people I know who's good at math... My friends. Usually if we all have a problem with the same math problem, we'll call each other."

8th grader, when describing her important relationships for math

Being Goal-Oriented

"If you do well in math you'll do well in your career."

10th grade English Learner, who wants to be an accountant

Having a Strong Sense of Self

"Math is my best and favorite subject because of my 3rd and 6th grade teachers... My mom was living on the streets with my little sister. And my plan since I was 11, once I get a job/place, is to take care of her."

9th grader, with a strong sense of self and clear future ambitions
Algebra 1 serves as a pivotal inflection point in students' overall mathematics pathway, as well as being a powerful on-track indicator of college readiness, it is important we realign the social and political narrative shaping mathematical education at this critical juncture.
Balance the Equation
A Grand Challenge for Algebra 1
We have identified five **Areas of Focus** that have the highest potential to alter the experience and success of priority students. Our team will seek applicants that address one or more of these areas.

**Areas of Focus**

- Builds Out Support Systems
- Improves Relevance of Algebra 1 Content
- Elevates Understanding of Math Language
- Empowers and Strengthens Teacher Practices
- Develops New or Better Feedback Mechanisms
Key **Student** Outcomes

- Increased positive experience in mathematics classrooms
- Increased positive identity as mathematicians
- Increased mathematics growth and proficiency

Key **Teacher** Outcomes

- Increased positive mindsets and beliefs about priority student mathematics learning
- Increased skills in adapting curricula and instruction to meet student needs
- Increased use of effective mathematics instructional practices
## Important Application Considerations

### The Organization:
- Deep understanding of the assets of priority students and the barriers they face in today’s education system
- Experience serving one or more of our priority students
- MLOs - We believe they are well positioned to meet the needs of our priority students
- Partnerships: We highly encourage organizations to partner

### The Solution:
- Align with Focus Area(s)
- Align/Cohere with High-quality Core Curriculum
- Building both mathematical identities and increasing knowledge
- Supporting English Learners

### Pilot Study (Phase 2)
- Solution could be ready to implement in US schools by Fall 2021
— Expanding daily practices for productive mathematical discussions to build their mathematics identity and reiterate mathematics’ real-life connection

— Incorporating tasks and/or lessons that empower them and/or reflect students’ culture and community, or serve to explore issues of humanity and social justice

— Altering the focus of mathematical aptitude from “easily, quickly, and independently arriving at a correct answer” oriented around the individual to more thoughtful, iterative approaches that promote multi-person processes and interactions

— Adding assessment approaches that empower and humanize students and leverage more nuanced forms of data

— Enhancing teacher professional development so educators are set up to meet the unique needs of each student

Solutions Might Look Like...
BALANCE THE EQUATION: IDEAL APPLICANT PROFILES

Who should apply?
Role or organization types may include...

- Collegiate Educators and Researchers
- Community Leaders, Coaches, and Classroom-Based Educators
- Content Developers and Publishers
- EdTech Developers
- Professional Learning Communities
- School and District Administrators
Applications will be reviewed by internal Gates Foundation staff as well as external subject matter experts and thought leaders within the realm of mathematics relevance, content, language, assessment, professional learning, instructional practices, and the deep expertise centered around the needs of our priority students.
13. Briefly describe your solution and its mission by answering the questions below. Keep in mind that reviewers may not be from within your field. We recommend using simple language and providing definitions for any field-specific terminology. [open field; 450 words max]

- What is the problem you are trying to solve? How does your solution address it?
- How does your solution benefit priority students? What is new?
- Why do you think it will be successful? Are there risks?
- How would you implement it in the classroom? How would it be maintained?
- If your solution is successful, what impact will it make? What outcomes?

We define outcomes by a combination of:
1. Existing evidence that the solution and/or critical components of the solution can move one or more of these outcomes, and
2. A compelling, evidence-based articulation of the reasons why the solution has a likelihood of moving one or more of these outcomes ("why it will work").

Key Application Qs:
- **ORG**: Q 9-11
- **SOLUTION**: Q 13-18
- **PILOT**: Q28
Total Funding

Phase 1 Planning and Prototyping
10-15 initial planning grants of $100K are awarded by February 2021. All Phase 1 awardees are given one opportunity to apply for additional funding (Phase 2 funding). Phase 1 will be four months long and will be in partnership with AIR, building pilot study plans.

Phase 2 Pilot Study
8-10 successful projects have the opportunity to receive a prototyping and implementation grant of up to $1M in Summer 2021. The pilot study will be conducted in US schools as early as Fall 2021.
BALANCE THE EQUATION: APPLICATION TIPS

Things to Remember...

Be Focused on the “Why”
Why Rethinking Algebra 1 Matters (Life Trajectory & Well Established Research Base)

Be Student-Centered
Understand the Assets of Priority Students and Systemic Barriers They Face

Be Bold and Creative
Challenge and Disrupt Our Existing Systems
Questions
If you have any further questions, please email the team at balanceetheequation@gatesfoundation.org