

# Creating a Seat at the Table: Using Teacher Identity and Beliefs to Transform Student Learning

*Sarah DiMaria*

*Session 311*

*October 27th, 2023*

*9:30 am*

# Welcome!

## Creating a Seat at the Table: Using Teacher Identity and Beliefs to Transform Student Learning

### Sarah DiMaria

Cedars Next Generation High School  
Austin, TX  
@MsDiMaria  
sarah.dimaria@knowlesteachers.org

**As you arrive make a friend and share one of the following:**

- A funny moment you had with students this month
- A proud moment you had with students this year
- The best thing you've eaten in DC so far
- What drew you to this session

# Warm Up: Beliefs

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**Quick Write:** What are a few beliefs you hold about teaching and mathematics?

**Share:** Share your top two with someone near you.

# Warm Up: Beliefs

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**All students belong at the mathematics table.**

**All students have the ability to do rigorous mathematics.**

# Returning from the Pandemic



# Returning from the Pandemic



# Returning from the Pandemic

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**“The pandemic broke my ability to find joy in math”**

**“I was scared to take Calculus so I took Statistics instead.”**

**“I remember researching what calculus was and I was scared.”**

# Returning from the Pandemic

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*If I can get us to 5 can we  
host Calculus?*



# Returning from the Pandemic

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**Joe**



**Camilla**



**Antonia**



**Aris**



**Melani**



**Diana**

# Returning from the Pandemic

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# AP Calculus 2021-2022



But this had  
to be  
different...



# Class Structures

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**“The pandemic broke my ability to find joy in math”**

**“I was scared to take Calculus so I took Statistics instead.”**

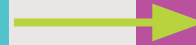
**“I remember researching what calculus was and I was scared.”**



# Class Structures

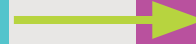
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**“The pandemic broke my ability to find joy in math”**



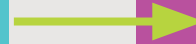
**Loss of Joy**

**“I was scared to take Calculus so I took Statistics instead.”**



**Fear of Math**

**“I remember researching what calculus was and I was scared.”**



**Loss of Confidence**

# Class Structures

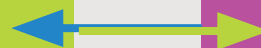
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**Community Openers**



**Loss of Joy**

**Task Based Approach**



**Fear of Math**

**Group Tasks and Roles**



**Loss of Confidence**

# Class Structures

**Community Openers**



**Task Based Approach**



**Group Tasks and Roles**





## **And by the end of the year...**

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**“Being in [calculus] class has changed my view on myself and mathematics. You are capable of doing anything you focus yourself on. It could be dance, singing or math, you can learn anything with practice and positivity.”**

**“This is the hardest class I have ever taken, but the support from Ms. DiMaria and my classmates has also made this my favorite class, not only in senior year, but of all my high school classes. This class is the type of experience I want to have at college.”**

# Student Impacts



**Melani** - Austin Community College - Interior Design  
**Marguerite** - Austin Community College - Welding



# Student Impacts

**Antonia:**

University of Texas at Austin  
Government & Business

**Camilla:**

Agnes Scott  
Economics

**“While I attended a project-based high school, this was the most collaborative math class I'd ever taken. It was the smallest class I'd been in and we all deeply cared for each other and therefore wanted to see ourselves and each other succeed. I felt so safe in that class and wished I could have the same atmosphere in all my classes. I was scared to go to a huge college and one day I came across Agnes Scott in a book, a tiny women's college that exuded the energy of my calculus class. Agnes was the closest thing I could find to my calculus class.”**

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# Teacher Impact

**Shift in Pedagogy**

**Learning from  
Students**

**Opened Space for  
Reflection**



# Reflection

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**How did these beliefs about show up in the structure or impact of the course?**

**All students belong at the mathematics table.**

**All students have the ability to do rigorous mathematics.**

# Reflection

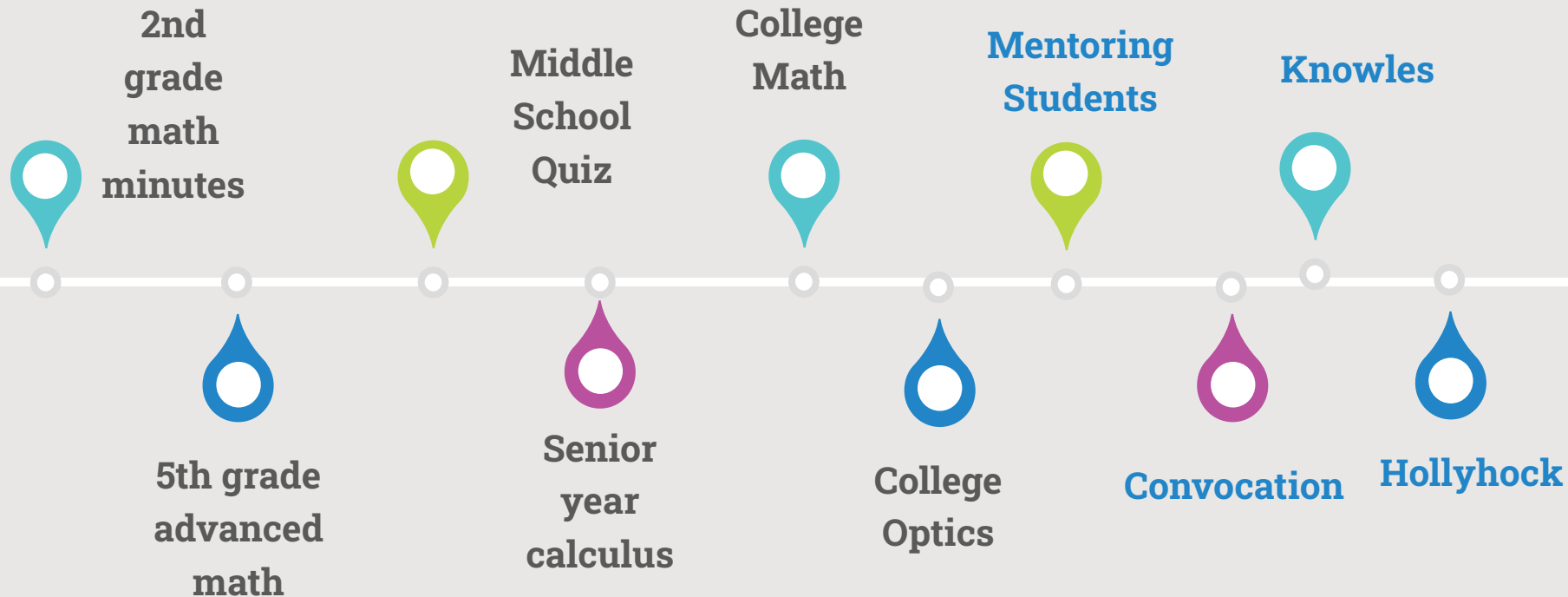
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**Our beliefs are born out of our experiences**

**All students belong at the mathematics table.**

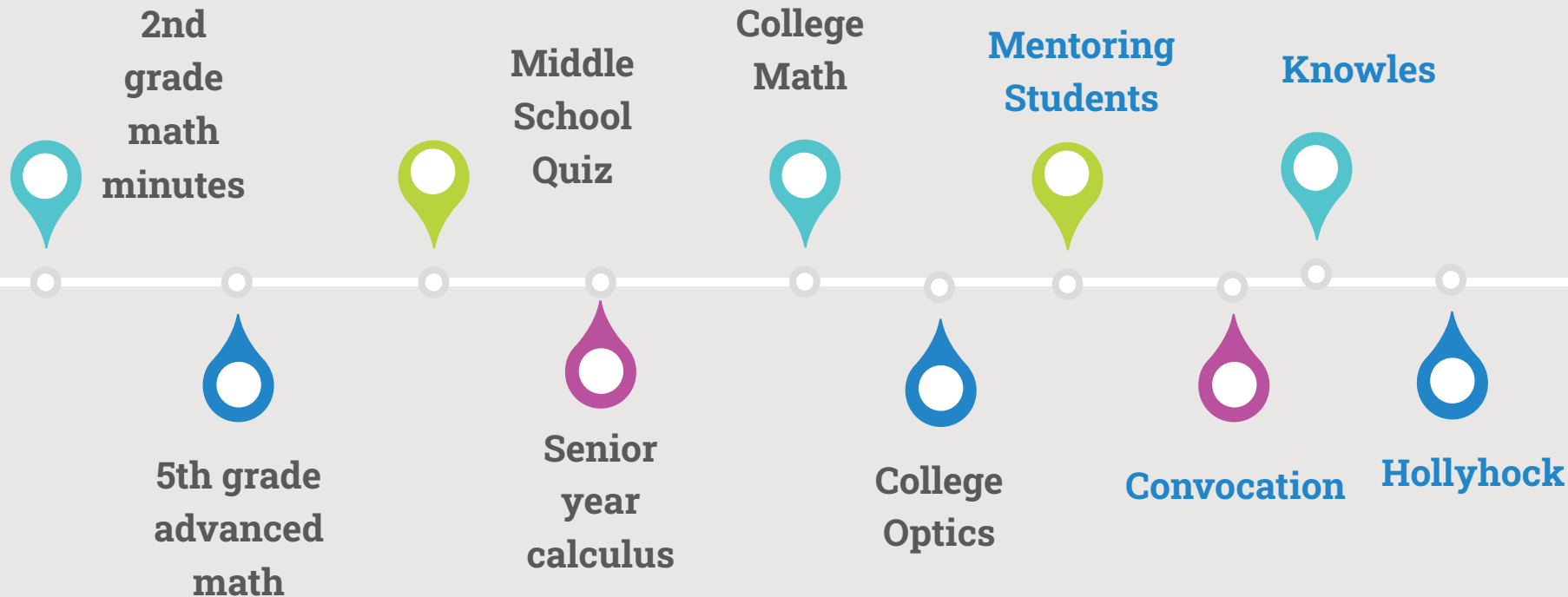
**All students have the ability to do rigorous mathematics.**

# Mathematics Timeline

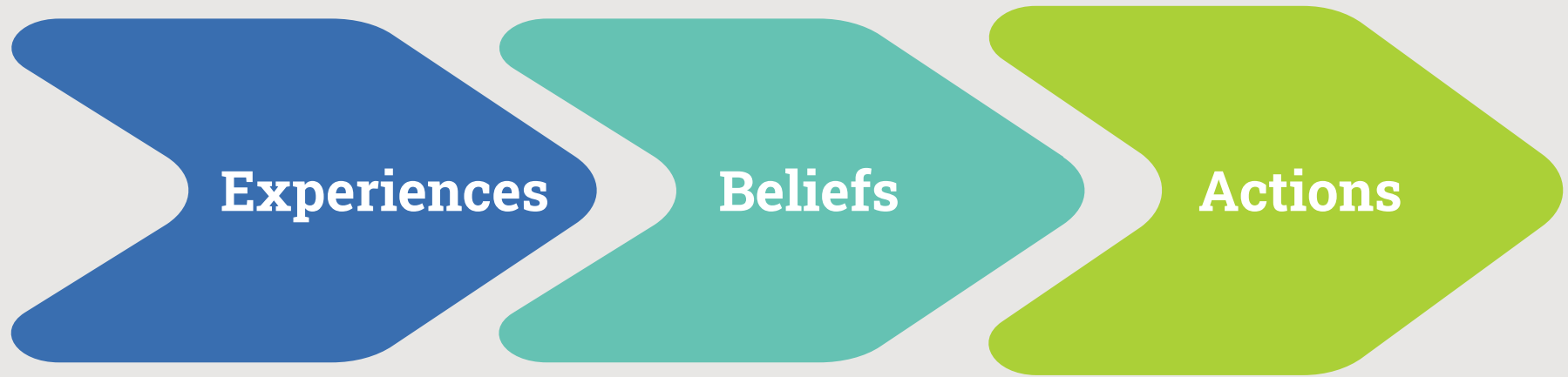




# Mathematics Timeline



**My math identity was grown out of moments of belonging**



**How does your identity influence  
your practice?**

# Mathematics Timeline

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**Your Turn:** Create your mathematics timeline

What are a few pivotal moments in your experience with mathematics?

# Mathematics Timeline

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**Return to your beliefs.**

How do you see those show up in  
your timeline?

# Mathematics Timeline

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**Share with a partner.**

How do your timeline and beliefs  
show up in your current work?

# Thank You

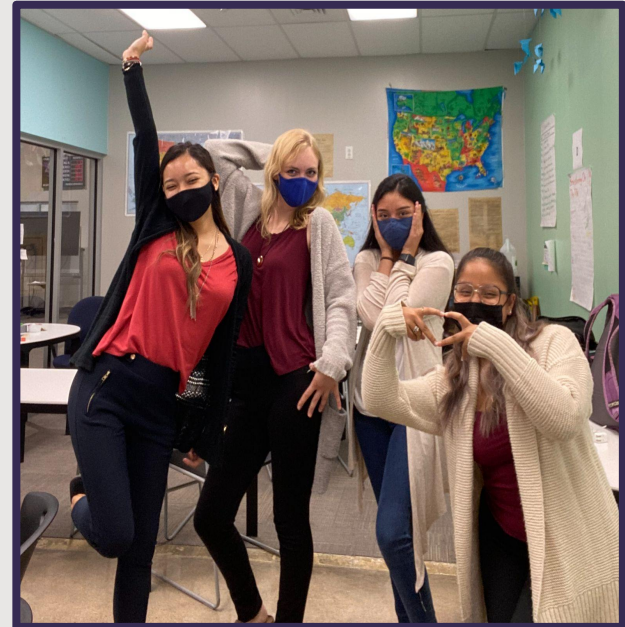
**Your journey  
impacts your  
students.**

**Where are your  
leverage points in  
your context to  
advocate for your  
students?**

**Sarah DiMaria**

@MsDiMaria

sarah.dimaria@knowlesteachers.org



# Knowles Academy Courses

## **PBL Basics**

**Tuesday, 11/14, 7:30-9:00 pm EST**

Come learn with us about some of the basics of PBL, such as entry events, end products, checkpoints, and other core components. Walk away with the next steps to begin implementing PBL in your class.

## **6 Week Virtual Course on PBL Planning Framework**

**Tuesday, January 30th - March 5th 7:00-9:00 pm EST**

We will do a more in-depth dive into PBL and our framework. Walk away with a project you can try in your classroom. Sign Up Coming Soon

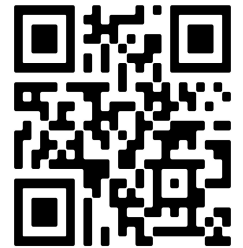


# Knowles Teacher Fellowship

New high school math and science teachers who are striving to provide equitable instruction are encouraged to apply for a 2024 Knowles Teaching Fellowship.

QUESTIONS  
EMAIL

[apply@knowlesteachers.org](mailto:apply@knowlesteachers.org)





# Knowles Brand Guidelines: Knowles Logos

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Knowles  
TEACHER INITIATIVE

# Additional Slide Resources

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[Knowles Marketing Slides Fall FY24 Conferences](#)

[Knowles Meeting Photos](#)

[Knowles Classroom Photos](#)

[Knowles Fellow Headshots](#)

[Duarte Diagrammer](#) – *Free downloadable data visualization templates for use in slides and documents*