

A series of thin, black, overlapping geometric lines forming various polygons and shapes, primarily located in the upper left quadrant of the slide.

PROJECTS TO
ALLEVIATE MATH
ANXIETY

MY LIFE AS AN
AMATYC ACCESS
FELLOW

MELVIN CACAYORIN
RED ROCKS COMMUNITY COLLEGE
MELVIN.CACAYORIN@RRCC.EDU



WHAT ARE WE COVERING?

What is ACCESS?

What is my project?

What was my big takeaway from Atlanta?

WHAT IS ACCESS?

Project ACCESS (Advancing Community College Careers: Education, Scholarship, and Service) is a program for early-career faculty interested in advancing the teaching and learning of mathematics traditionally covered in the first two years of college. Its goal is to develop a cadre of college mathematics faculty who are effective members of their profession. The four objectives of the project are: to assist the selected faculty to gain knowledge of the culture and mission of their institution and its students, acquire familiarity with the scholarship of teaching, commit to continued growth in mathematics, and participate in professional communities.

WHAT IS ACCCESS?



WHAT IS ACCCESS?



WHAT IS ACCCESS?



WHAT IS ACCCESS?



WHAT IS ACCESS?



WHAT IS MY PROJECT?

How have you battled math anxiety?

WHAT IS MY PROJECT?

Battling Math Anxiety With Projects

By: Katey, Marki, & Marcus

WHAT IS MY PROJECT?

Motivation

- Testing is anxiety inducing.
- Projects give students freedom of expressing their knowledge.
- Allowing students to be the expert and have agency in the room.
- Giving the students choice over how they show us what they know.

It's me, Hi, I'm
the problem it's
me!



WHAT IS MY PROJECT?

Ways to Implement These in Your Classroom

Unit Projects

- Cumulative
- A week to complete after the end of the unit
- Allowed to work in pairs
- Optional Presentation
- No Final

Weekly Projects

- Bite-Size
- Completed in a few hours
- Individual
- Mix of sharing out to the class and only submitting to the instructor
- Final Reflection

Choice Projects

- Bite-Size
- Completed the one they were more interested in
- Mix of individual and groups
- Choice of topics
- Personalized Final Project

WHAT IS MY PROJECT?

Outcomes

- Increased pass rates.
- Better student buy-in.
- Learned more about students.
- Learned about topics from our students that were unexpected.



WHAT IS MY PROJECT?

Everyone knows that traditional assessments in math cause anxiety in our students. We will be discussing our results of how we tried alternative methods to decrease our students' math anxiety by replacing traditional quizzes with projects.

WHAT IS MY PROJECT?

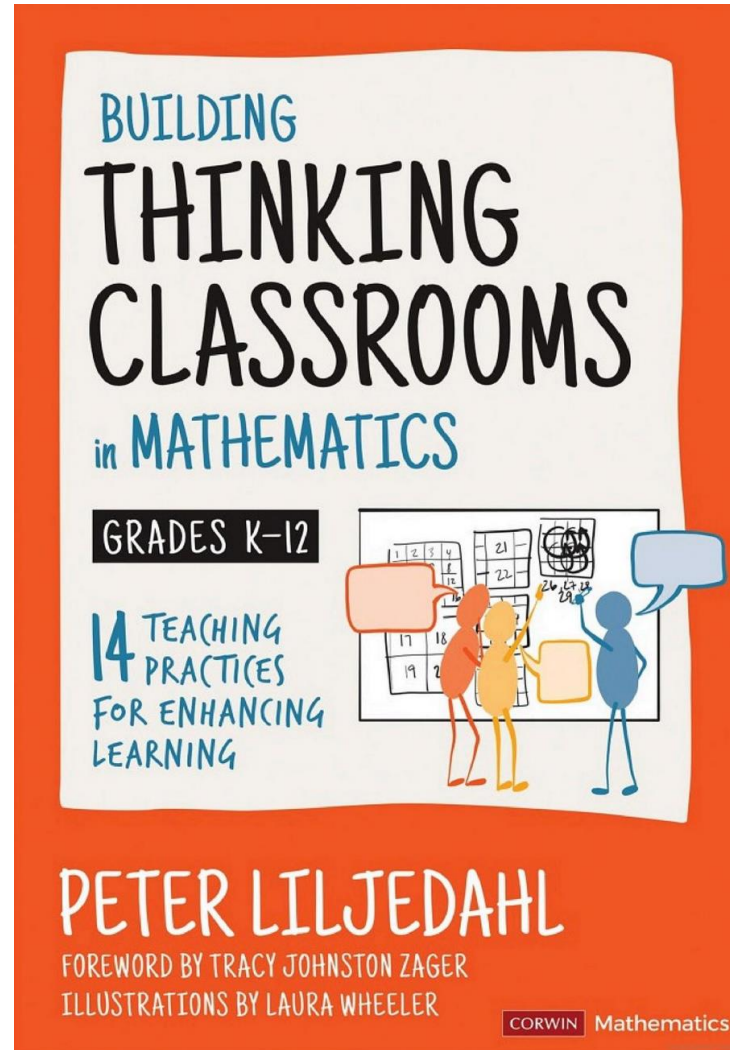
For two semesters, we gave a pre-assessment at the beginning of the semester, asking students about their experiences with math anxiety in general to get a baseline and then alternated quizzes and projects throughout the semester and conducted short assessments. Finally, we had the students fill out a longer post-assessment to see how they felt about math anxiety at the end of the semester.

WHAT IS MY PROJECT?

Quick take aways . . .

- Less time pressure
- Less intimidating
- Some say it is fun!
- Some are introverted, would rather work by themselves

WHAT WAS MY BIG TAKEAWAY FROM ATLANTA?



WHAT WAS MY BIG TAKEAWAY FROM ATLANTA?

- 1 What types of tasks we use in thinking classroom
- 2 How we form collaborative groups in a thinking classroom
- 3 Where students work in a thinking classroom
- 4 How we arrange the furniture in a thinking classroom

WHAT WAS MY BIG TAKEAWAY FROM ATLANTA?

5 How we answer questions in a thinking classroom

6 When, where, and how tasks are given in a thinking classroom

7 What homework looks like in a thinking classroom

8 How we foster student autonomy in a thinking classroom

9 How we use hints and extensions in a thinking classroom

WHAT WAS MY BIG TAKEAWAY FROM ATLANTA?

10 How we consolidate a lesson in a thinking classroom

11 How students take notes in a thinking classroom

12 How we choose to evaluate in a thinking classroom

13 How we use formative assessment in a thinking classroom

14 How we grade in a thinking classroom

WHAT WAS MY BIG TAKEAWAY FROM ATLANTA?

Have you used any of Liljehdahl's tips?