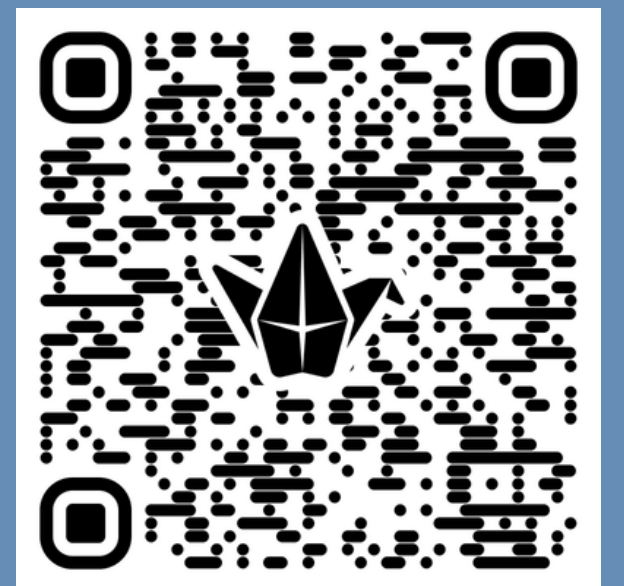


Teachers Leading the Work

A Districtwide Approach to Building Thinking
Classrooms



Parking Lot



Meet The Presenters



Carson Dunn

Math Teacher

University High School
Hartford Public Schools
CT Noyce Fellow



Jackie Rankin

Math Teacher

Wethersfield High School
Wethersfield Public Schools
Former CT Noyce Fellow

1

2

Meet The Room

4 Corners

3

4

1

Classroom Teacher

District Leader

2

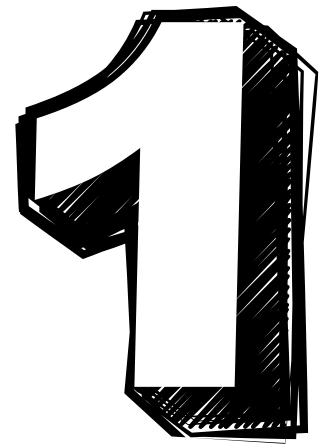
**What is your
Role?**

3

Math Coach

School

4



I know very little about it

I've read about BTC, or attended training, but haven't implemented much.



Where Are You in Your BTC Journey?



I've implemented (or supported implementation) some BTC Practices occasionally

BTC Practices are a regular part of my classroom/coaching work.



1

Time and planning
demands (logistics)

Teacher buy in and
on going support

2

**What concerns you
most about
implementing BTC in
your schools or
districts?**

3

Curriculum pacing and
coverage

Other

4

CT Noyce Math Teachers Leaders Program



What: A 5-year professional learning and service program

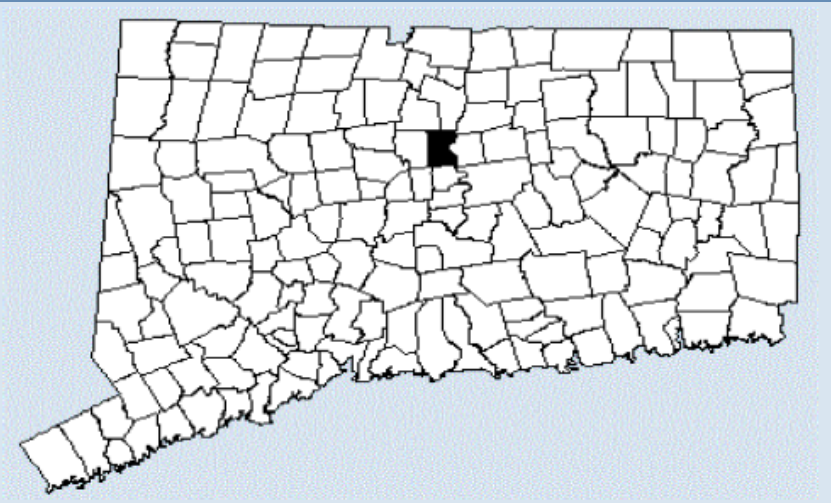
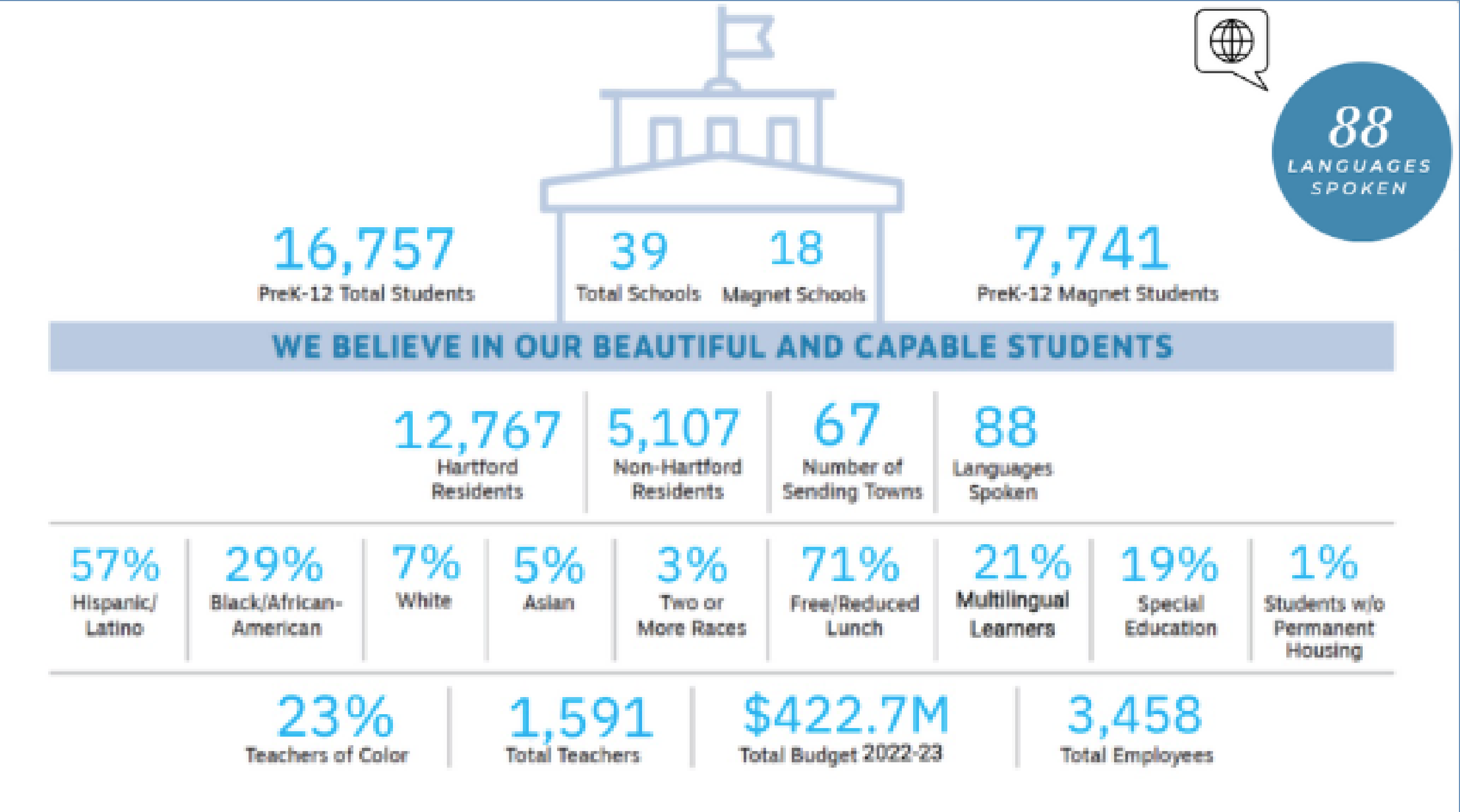
Purpose: To advance equity and excellence in mathematics education

Goals: Develop a cadre of 20 math teachers leaders in Alliance districts

**Advance infrastructure in CT to support ongoing development of math
teacher leadership**

District Overview

How we support **32 teachers** implementing Peter Liljedahl’s Building Thinking Classrooms practices across **16 different schools**.

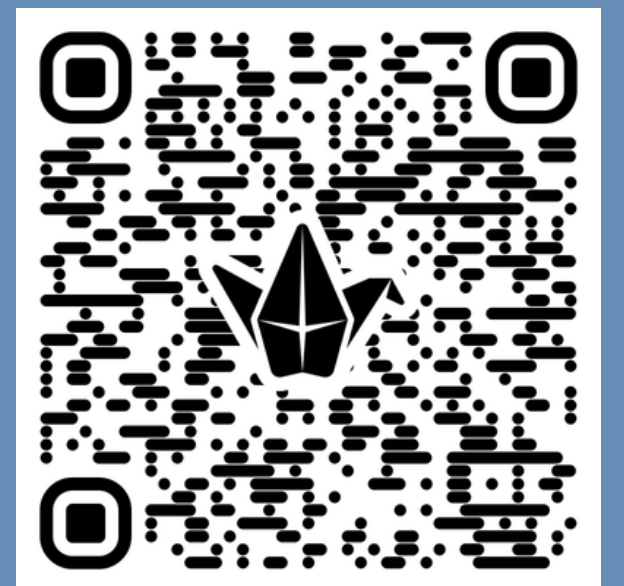


- 105 6 - 12 Teachers of Mathematics

What will you learn in today's session?



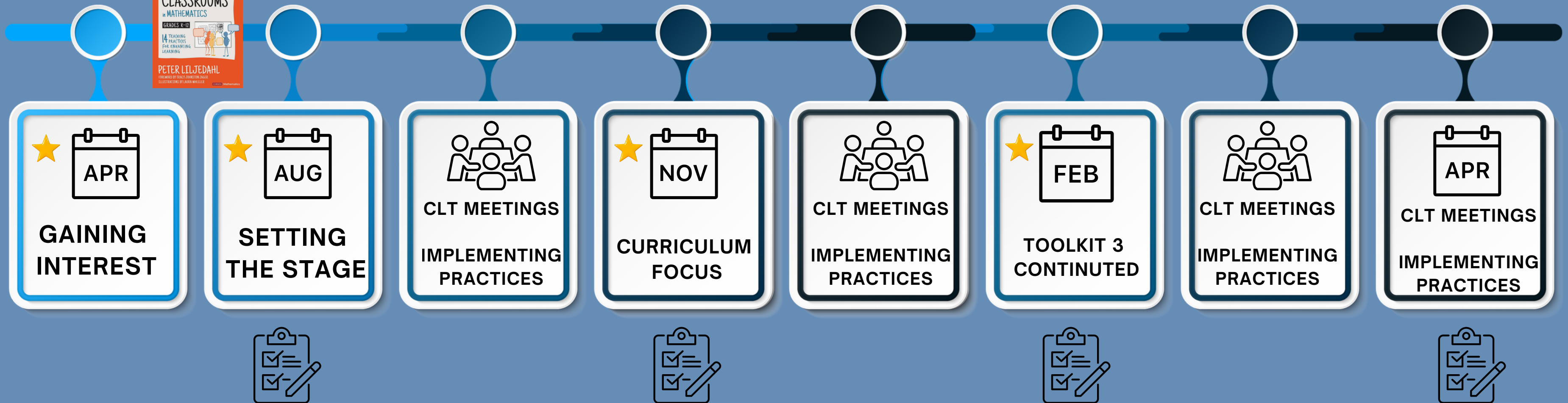
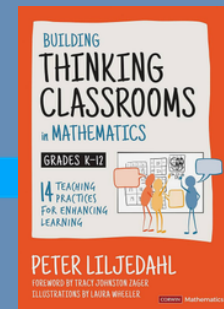
Parking Lot



Year 0
End of School Year
Spring 2023

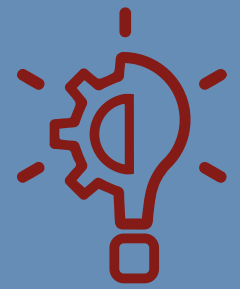


Timeline of Cohort Implementation & Data Collection



Denotes when surveys were taken ★ Denotes whole cohort professional learning day

April



GAINING
INTEREST



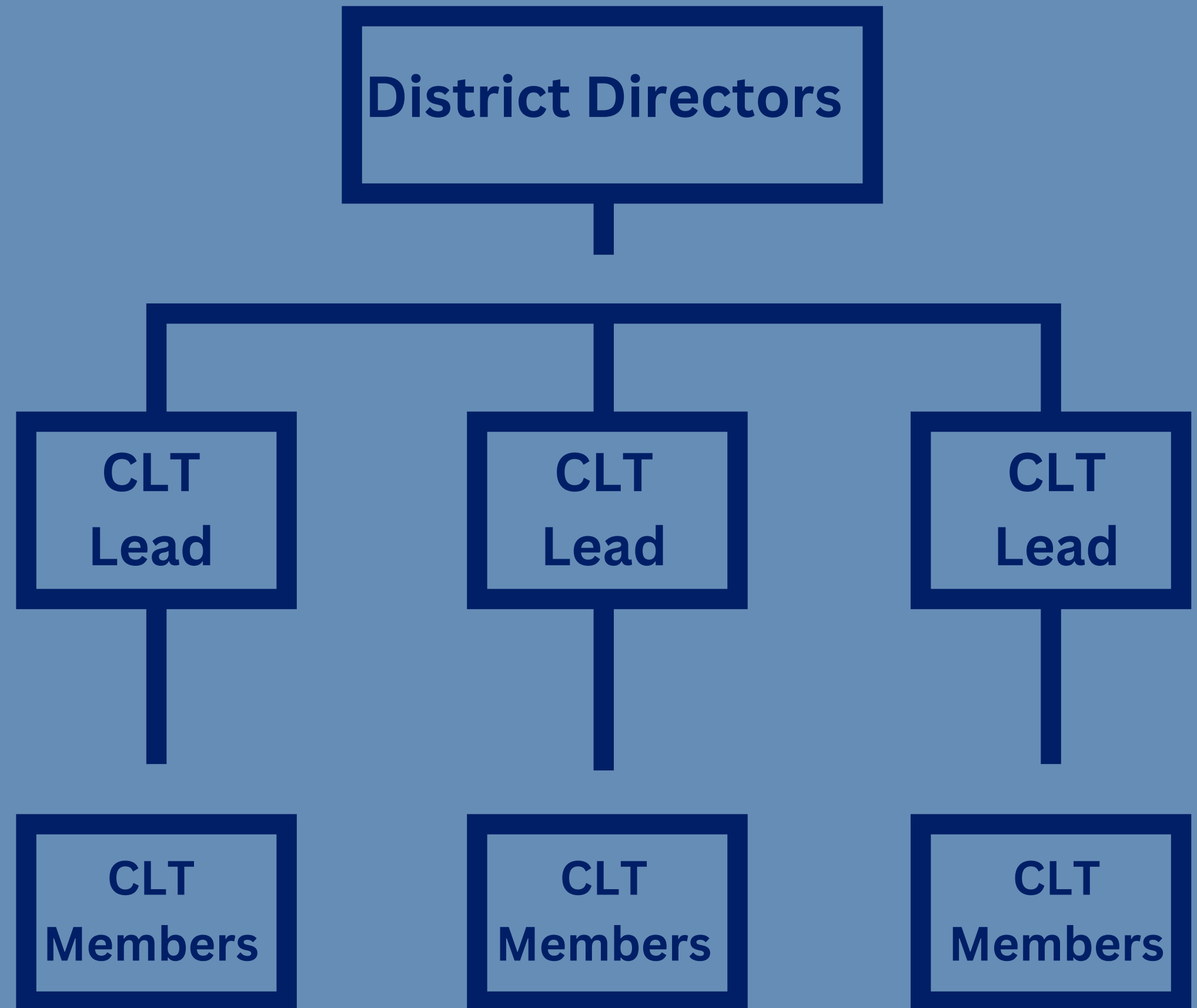
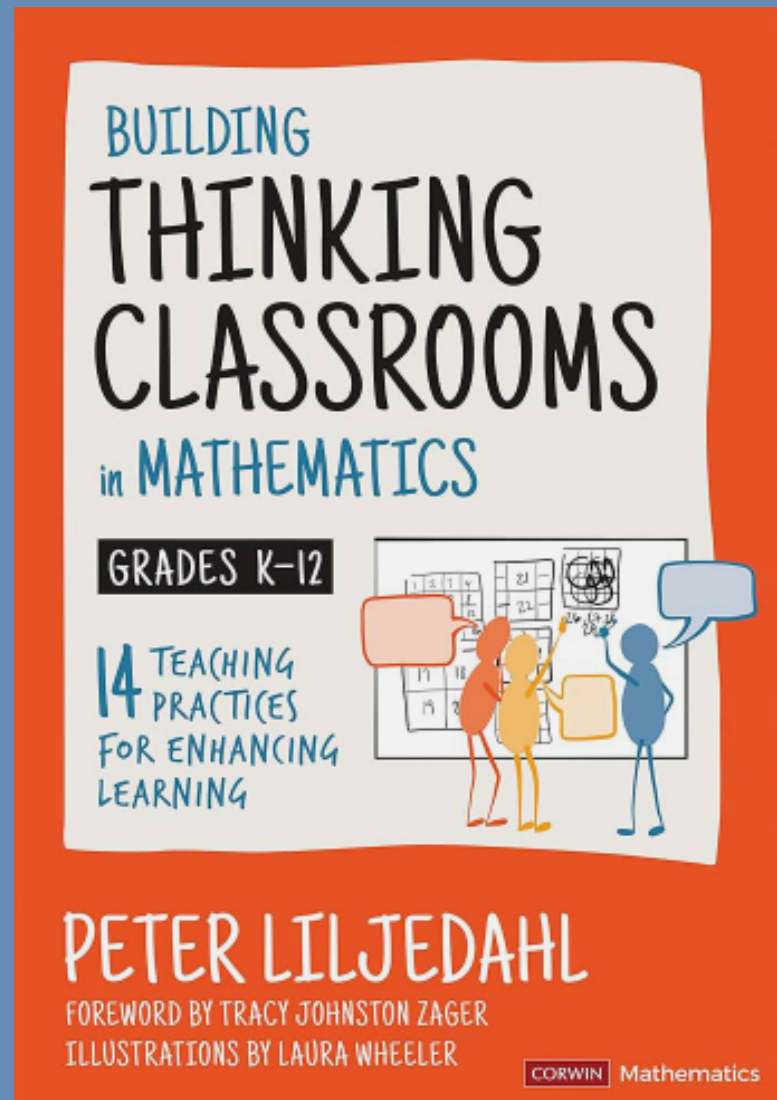
**TEACHER
TESTIMONIALS**

**STUDENT
DATA**

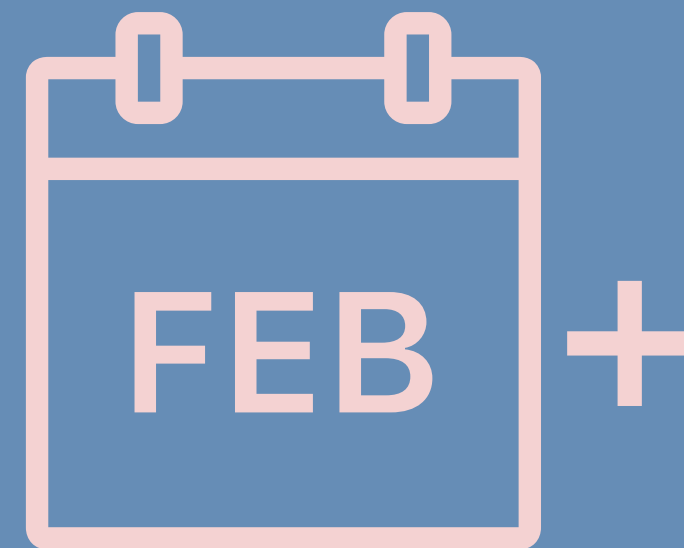
**NO PRESSURE
OPT IN**

**CLEAR
EXPECTATIONS**

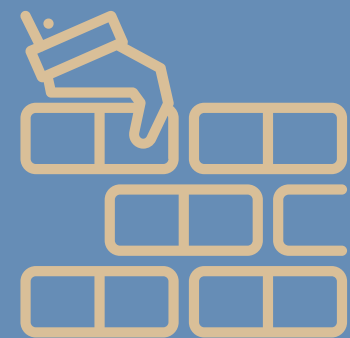
Organizing the Cohort



Year 1 2023–2024 School Year



August



Setting
the Stage



**EARLY AUGUST:
UNPACKING TOOLKIT 1**

**BEFORE SCHOOL:
UNPACKING TOOLKIT 2**

**HANDS ON LEARNING
OF THE PRACTICES**

**COLLECTION OF
RESOURCES**

November



Curriculum
Focus



**TEACHER LED
PROFESSIONAL LEARNING
ON TOOLKIT 3**

**CREATE THIN SLICING TASKS
CONNECTED TO CURRICULUM**

**CONSOLIDATING FROM
THE BOTTOM**

**HOW WE TAKE
NOTES**

Implementation Timeline CONT. (2024)



**What existing professional learning structures
are already in place in your district that could
support leveraging this model?**



Collaborative Learning Teams

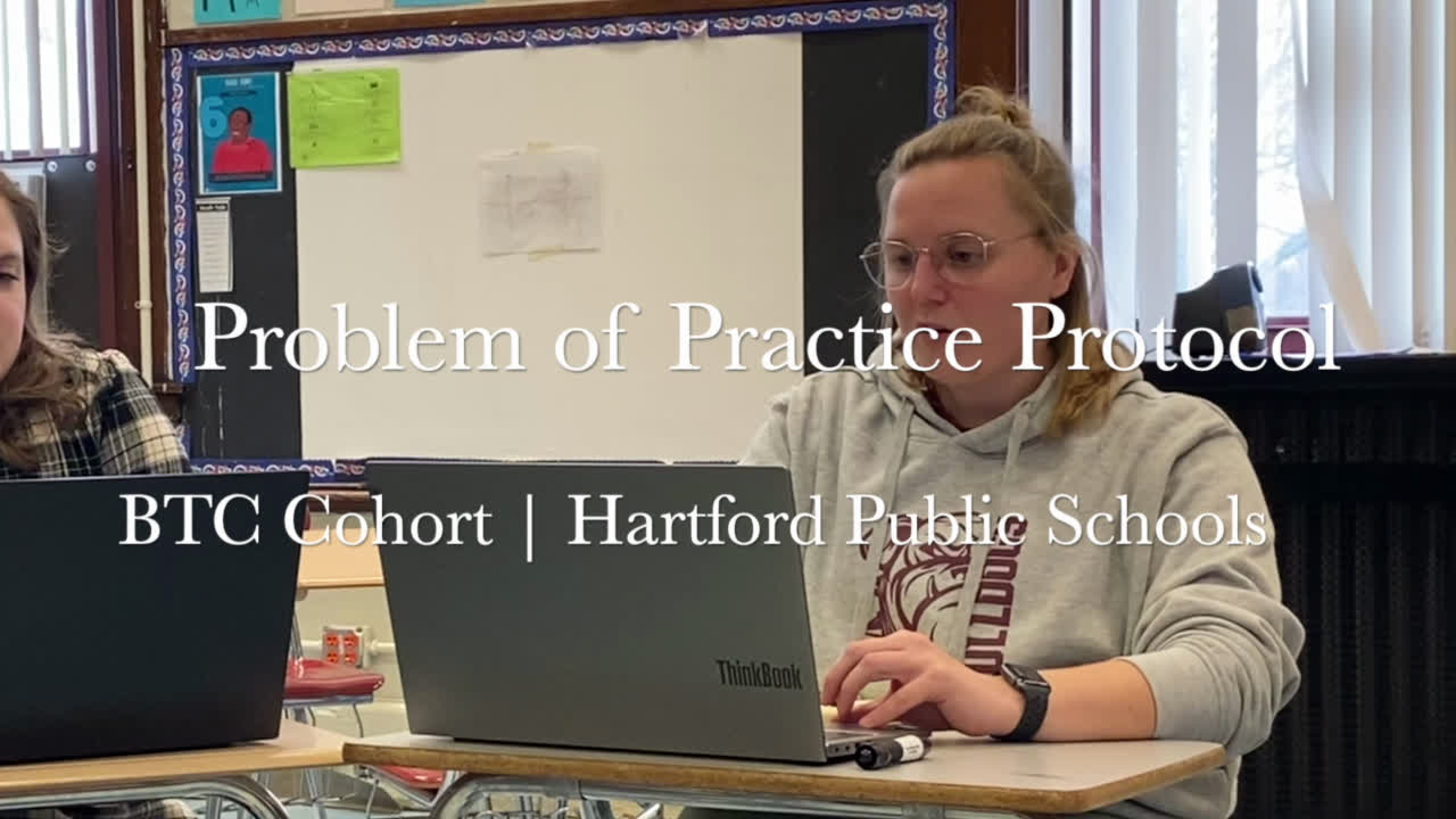
What: Groups of four/five teachers and one CLT Team Lead.

When: Once or twice a month, virtually or in person.

How: A Problem of Practice Protocol to support teachers with implementing BTC strategies and to discuss problems they are facing.



Thursday September 14, 2023 3:00 PM Bulkeley South Room 211		
TOPIC: Building Thinking Classrooms in Mathematics Collaborative Learning Team Meeting #1 Toolkit #1 & 2		Attendees: Facilitator:
MEETING OBJECTIVES: - The BTC Cohort will share their experiences from implementing the practices from Toolkit #1 during the first two weeks of school. - The BTC Cohort will review the Problems of Practice protocol and schedule future meeting dates for cohort members to present a problem of practice. - The BTC Cohort will plan the meeting dates for the rest of the first Semester		
TO PREPARE FOR THIS MEETING, PLEASE: Reflect upon your implementation of Toolkit #1 during the first two weeks of school and be ready to share.		
Schedule		
TIME	MINUTES	ACTIVITY
3:00-3:10	10	Welcome Meeting norms and tour of agenda/resources

A woman with blonde hair tied back, wearing glasses and a grey hoodie, is seated at a wooden desk in a classroom. She is focused on a black laptop with the 'ThinkBook' logo on the lid, with her hands on the keyboard. To her left, another person is partially visible, also working on a laptop. The background features a whiteboard with a decorative blue border, a green sticky note, and a small portrait of a man. A window with vertical blinds is visible on the right side of the frame.

Problem of Practice Protocol

BTC Cohort | Hartford Public Schools

What stood out to you while watching the problem of practice protocol take place?



What potential challenges may arise in your particular context?

Year 2 2024–2025

After large scale districts cuts than decreased the number of coaches, district support personell, and material funding, we made a pivot to meet the needs of teachers.

Organizing the Cohort

Year 2 BTC Cohort

Focus on First 2 Toolkits from a Teacher Lens

Algebra 1 Cohort

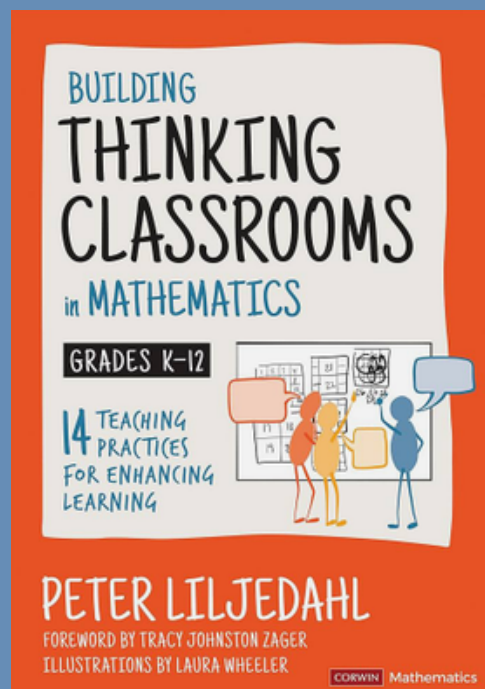
**Lead by:
Carson**

First Year Implementation

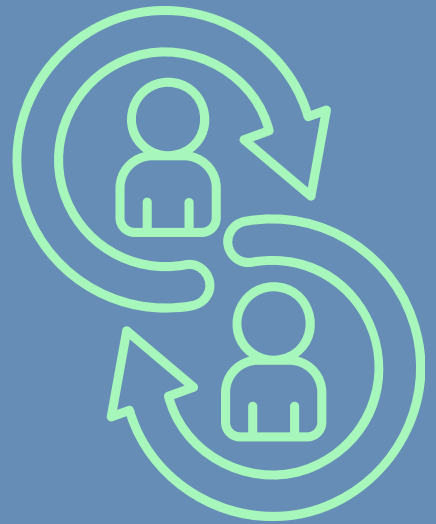
BTC Cohort

2nd Year Implementation

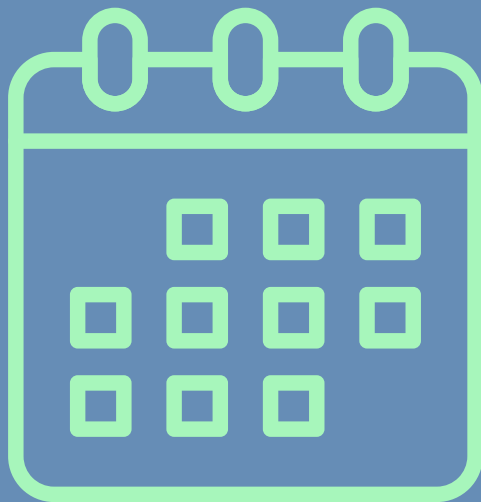
Continue to build on strategies for toolkits 3 and 4



Year 2



A shift but
still an
impact!



**MOTIVATE TEACHERS
AND GET THEM TO START!**

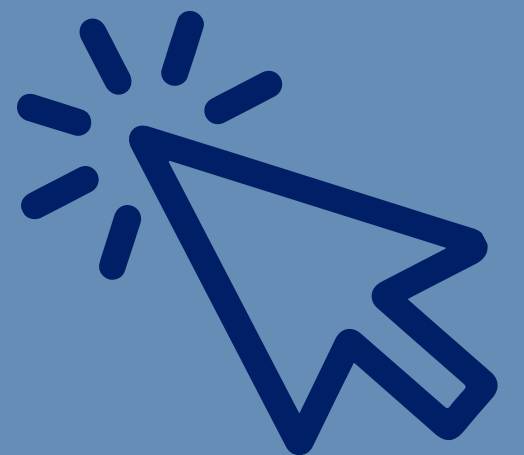
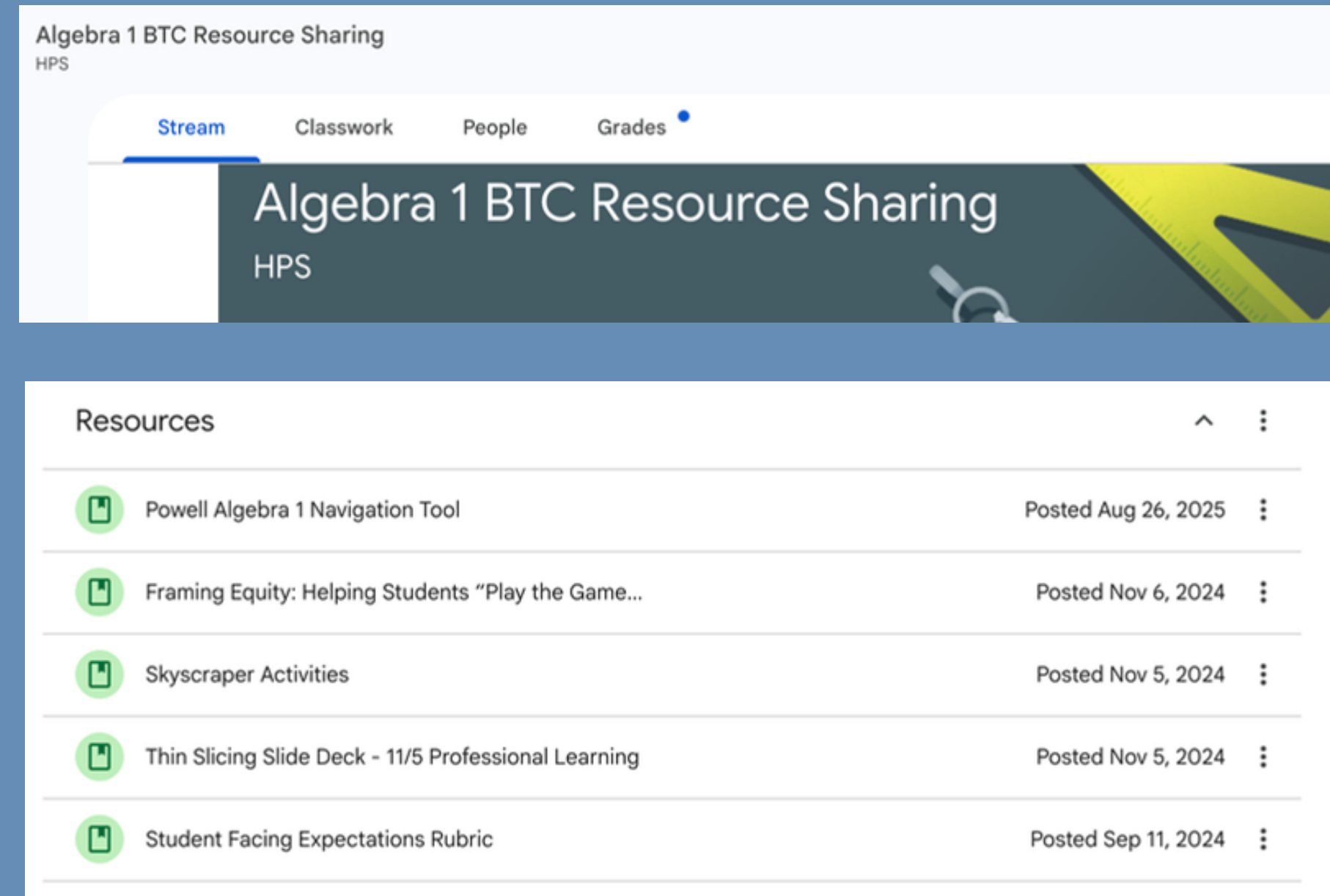
**CONTINUE TO SUPPORT AND
PUSH BEYOND THE BASICS**

**MONTHLY CHALLENGE
SHARING AND GROUP
COLLABORATION**

**PROMOTE EQUITY BASED
PRACTICES THROUGH A BTC
FRAMEWORK**

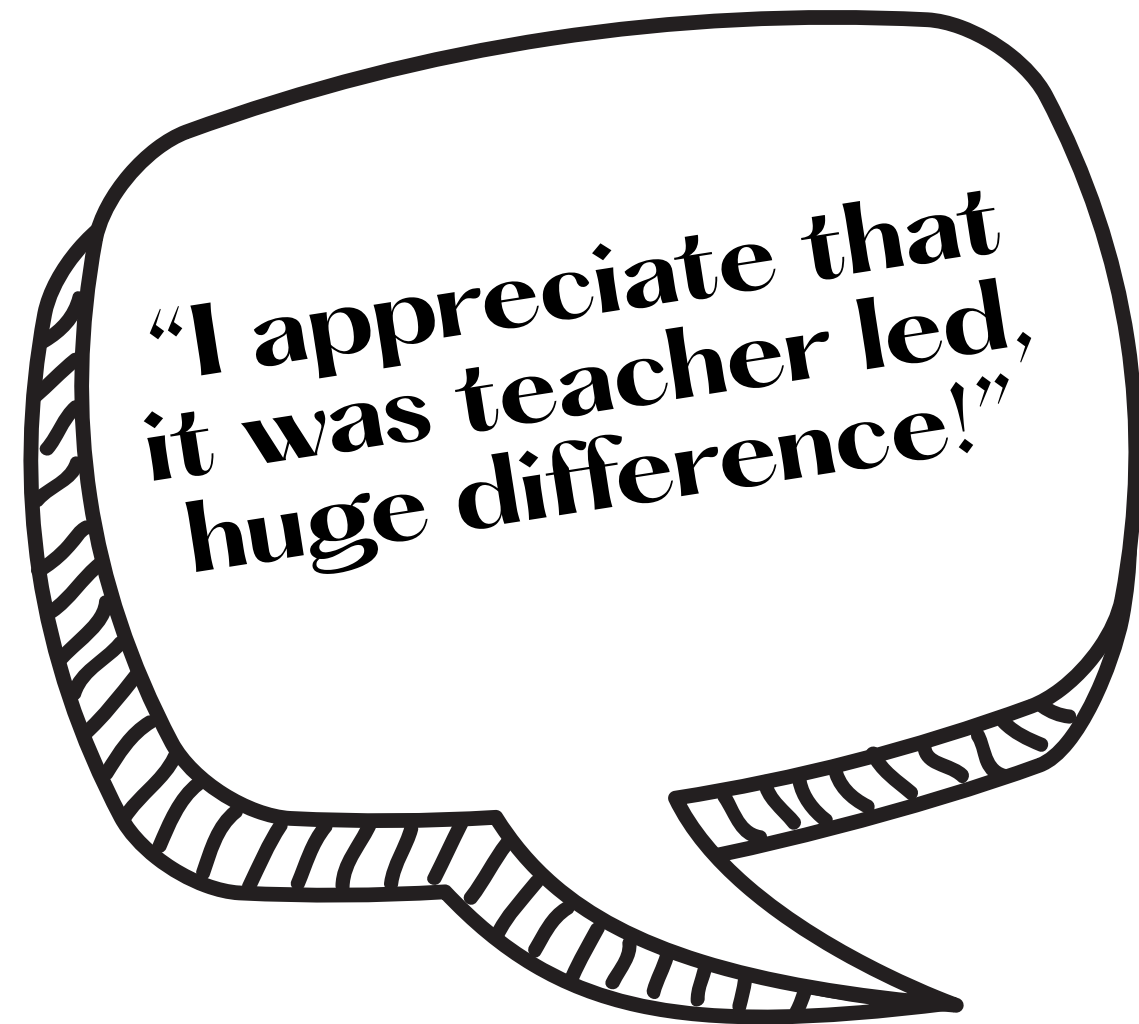
Online Sharing

- Use of google classroom to share resources
- Stay connected between professional learning sessions



The Power in Teachers

Why the use of Teacher Leaders in this work is so powerful?



From the Teachers

**I FEEL AS THOUGH WE
ALL ARE ABLE TO
SHARE FREELY AND
TRULY BRAINSTORM
REASONABLE
SOLUTIONS.**

**I APPRECIATE HEARING
ABOUT OTHER TEACHER'S
CHALLENGES AROUND
IMPLEMENTATION
BECAUSE THEY TEND TO
BRING UP SIMILAR
STRUGGLES THAT I
EXPERIENCE.**

**I ENJOY THE SUPPORT OF
COLLEAGUES WHO UNDERSTAND
THE BTC TEACHING PRACTICES
AND THE STUDENTS WE HAVE
BECAUSE THEY CAN UNDERSTAND
AND EMPATHIZE, PROVIDING GOOD
FEEDBACK AND USABLE
SUGGESTIONS.**



- Having the responsibility of a Teacher Leader in this role has made me a stronger teacher in my own practice.
- It has taught me how to collaborate and work with all types of teachers on implementing new strategies.
- I have taken what I've learned in Hartford and have been able to carry it over into my new district and role.

Beyond BTC



- For the past 3 years has had in place a Teacher Leader system to support fellow teachers in implementation of BTC strategies.
- Teacher leaders continue to play a huge role in professional development and supporting other teachers.
- Continues to grow and improve despite multiple shifts in leadership and resources.



- Leading the cohort of algebra 1 teachers has taught me the value of teacher leadership and I advocate for teacher leadership within my school, district, CCLM, and ATOMIC.
- Has taken on the role of Department Chair and continues to promote and support teachers with BTC at University High School and Hartford Public Schools.

*What were your
biggest takeaways
from today?*



1

Build teacher
capacity (find those
leaders!)

Get a plan started! (think about
current systems and what is still
needed)

2

**What are your next
steps to creating,
improving or furthering
your BTC adoption in
your school/district?**

3

Identify and contact
stakeholders (District and School
Administrators/Coaches)

Other

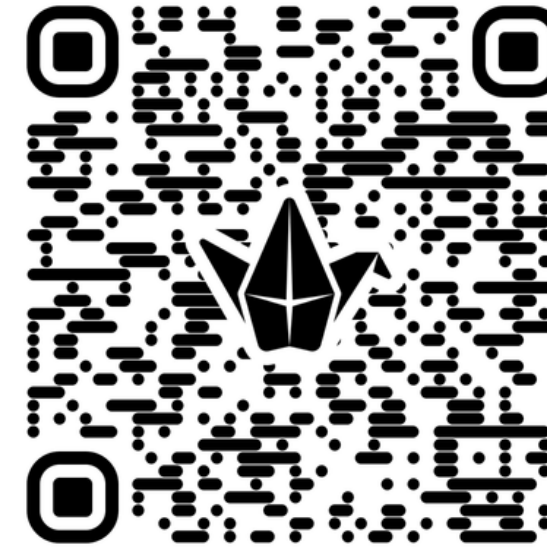
4

Q&A / PRESENTATION RESOURCES

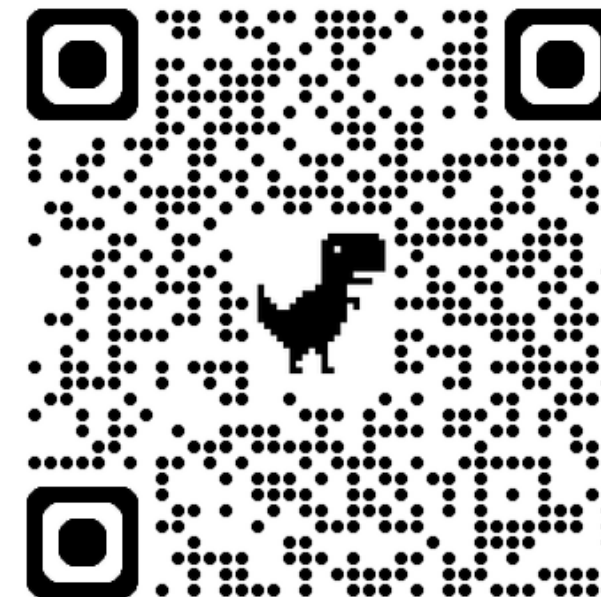


**WHAT IS
SOMETHING
YOU ARE
EXCITED TO
TRY?**

Parking Lot



Resources



**WHAT ELEMENTS
OF THIS
STRUCTURE DO
YOU THINK WOULD
WORK IN YOUR
CONTEXT?**

Carson Dunn: carson.dunn@hartfordschools.org

Jackie Rankin: jrankin@wethersfield.me

From the Teachers

Students have expressed that they appreciate the BTC experience, in that they are able to move around the room, represent their work visually, and discuss what they notice about the work of others. I have seen great collaboration and increased buy-in from students.

I have definitely noticed an increase in student confidence and ability to share thinking!

My students are much more independent and responsible for their learning. On tests, there are FAR FEWER hands raised with questions for me than in past years!

My students this year are much more independent and are less prone to giving up on questions they percive as challenging!

Student attitudes about math are improving!

Student participation is much better than in the traditional setting!