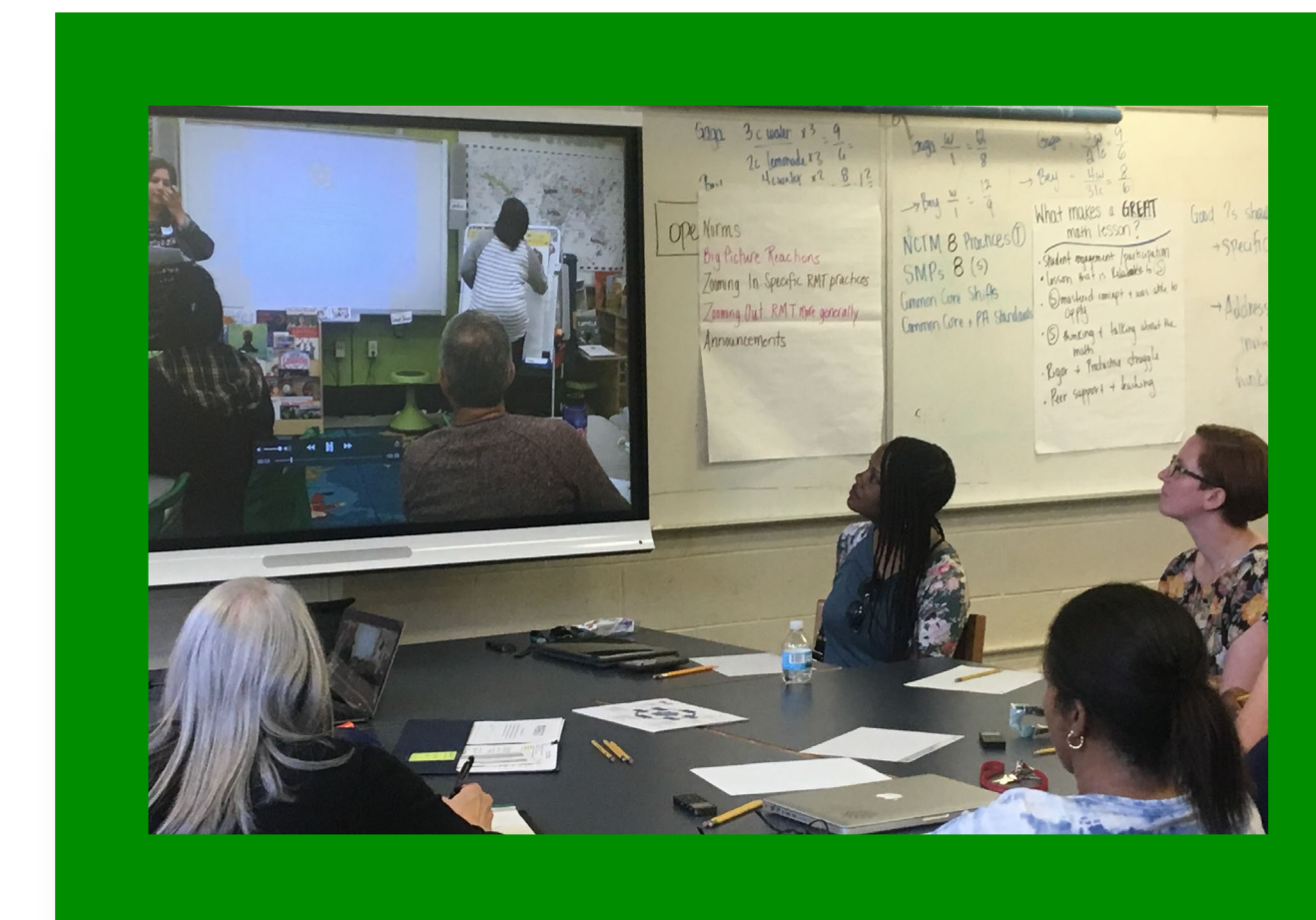
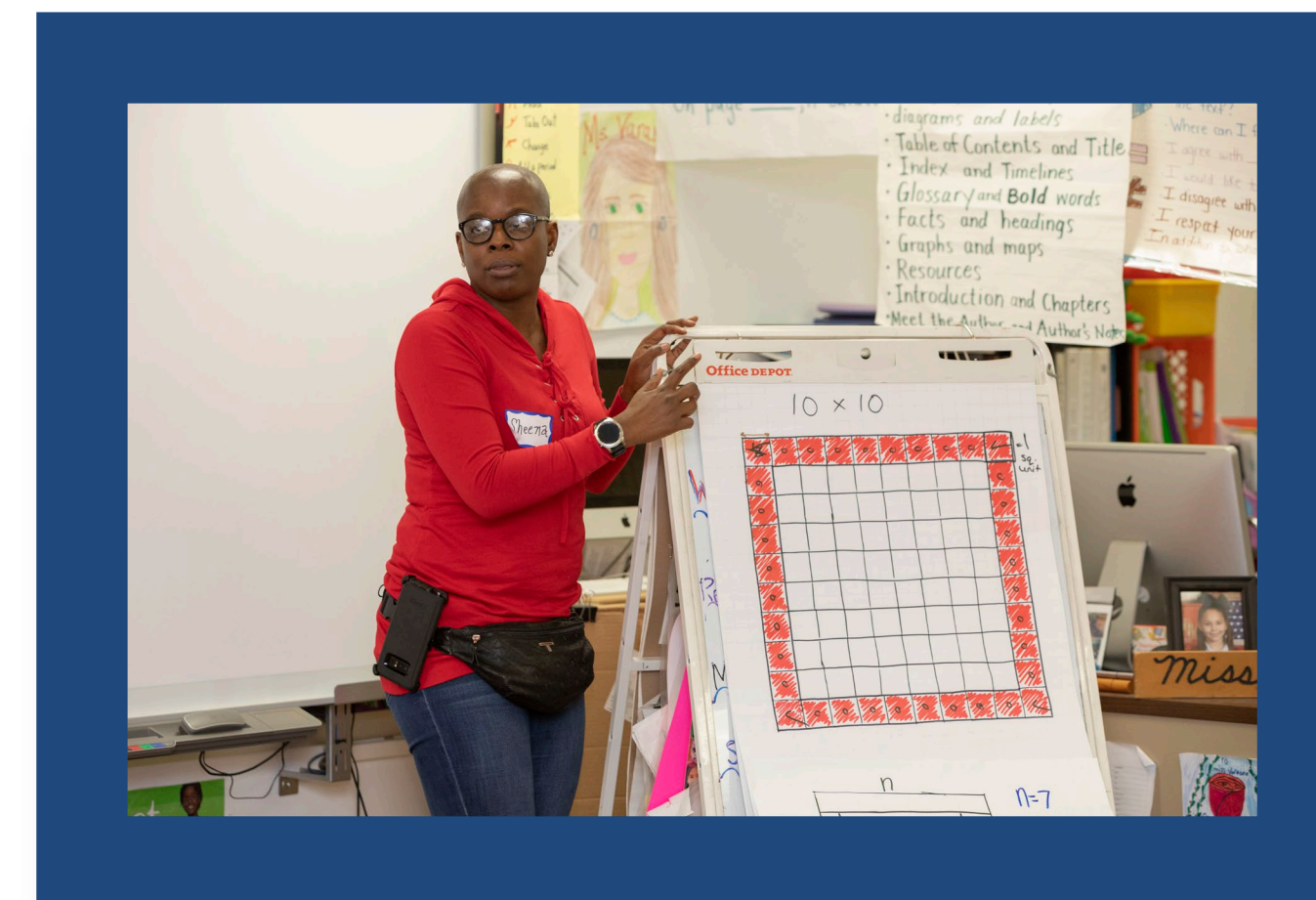


A NETWORKED APPROACH TO BUILDING LEADERSHIP

6 Cohorts
15 Leaders
152 Trained Educators
300+ Participants



Engaging in collaborative, responsive, and inclusive math teaching and reflecting on that experience in relation to facilitation

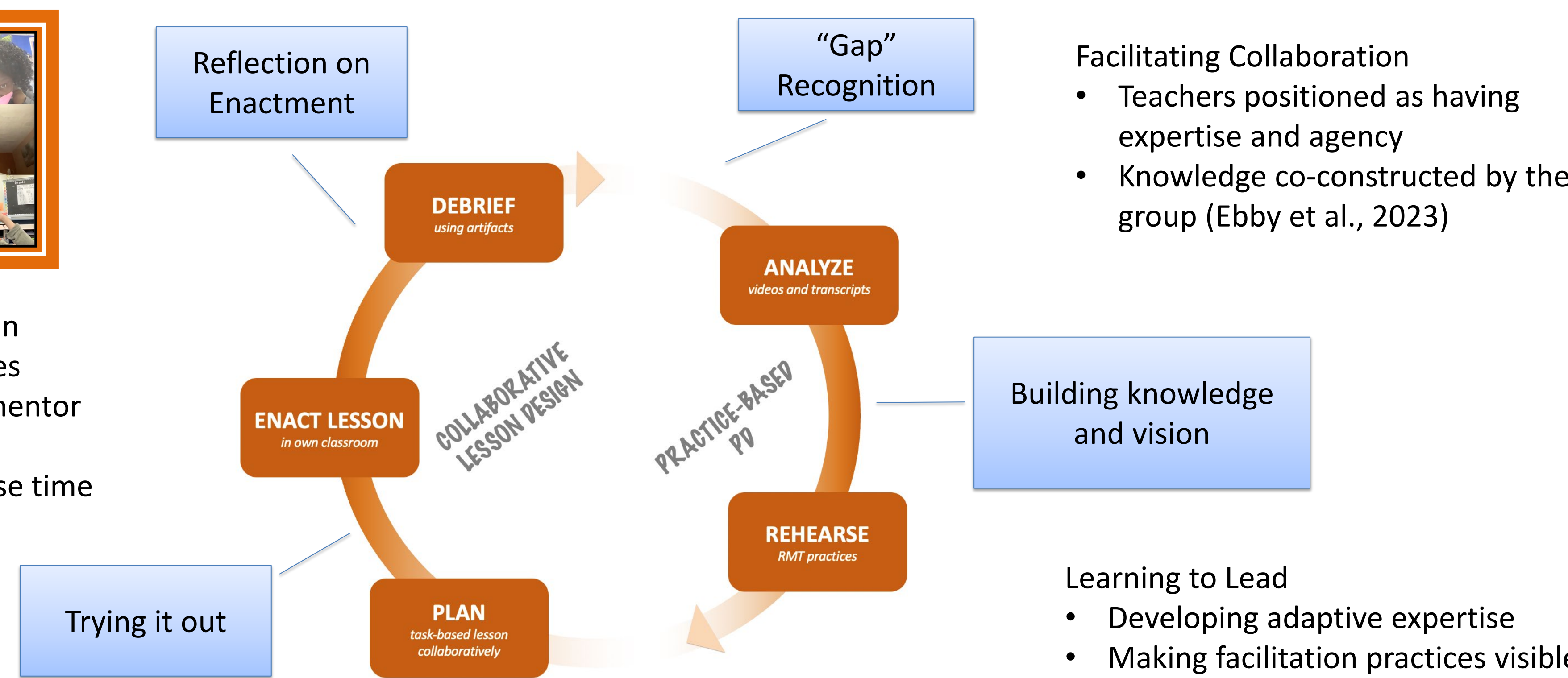
Trying out new teaching practices while working in cross-school grade level groups to plan and reflect on lessons

Co-planning, practicing, facilitating, and reflecting on Experience, Teach, and/or Collaborative Lesson Design groups



Online format developed in response to school closures

- More efficient use of mentor time and expertise
- Does not require release time
- Fosters cross-school collaboration



Facilitating Collaboration

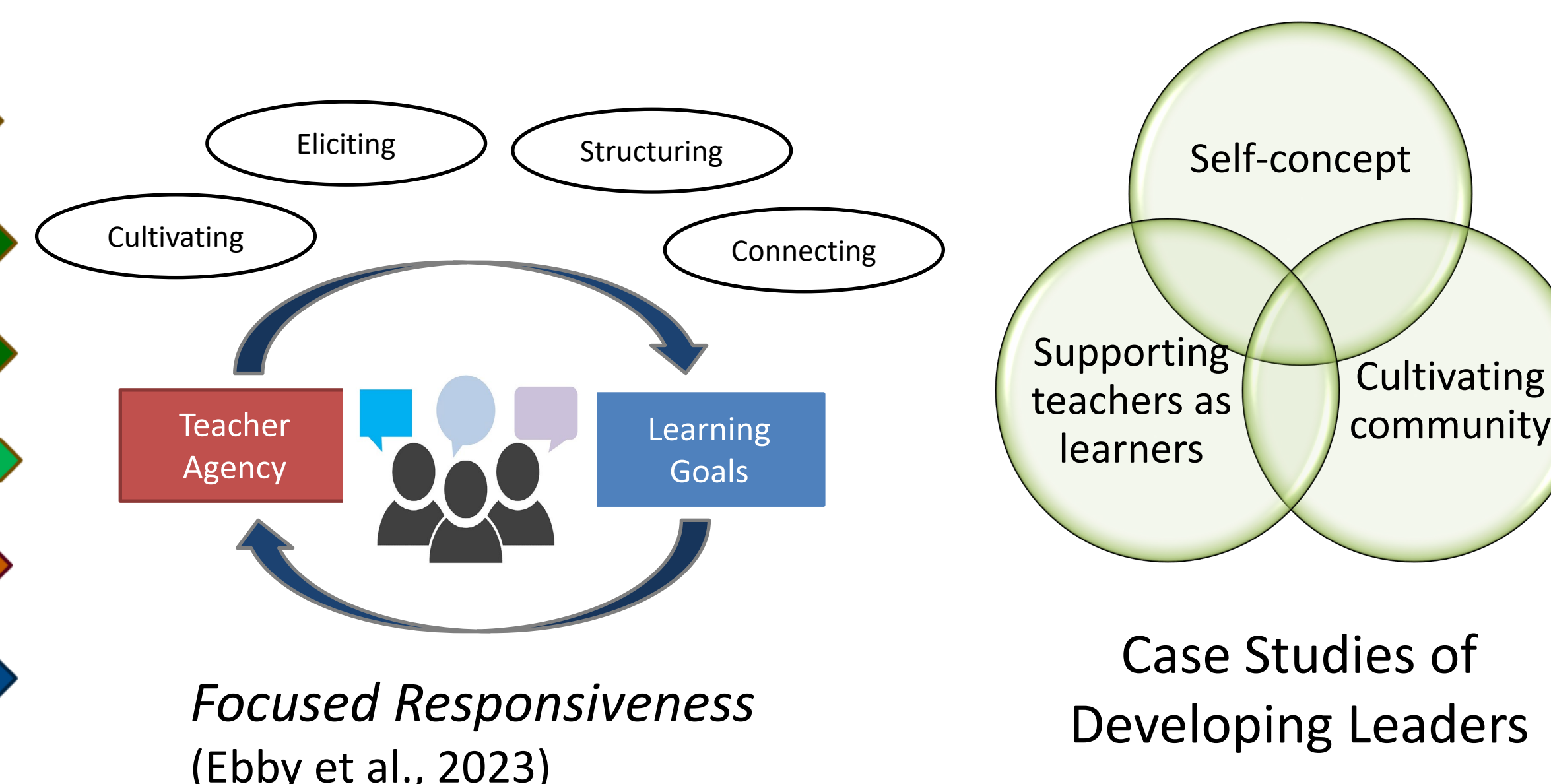
- Teachers positioned as having expertise and agency
- Knowledge co-constructed by the group (Ebby et al., 2023)

Learning to Lead

- Developing adaptive expertise
- Making facilitation practices visible (Goldsmith-Markey, in progress)

Instructional Leadership Development

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
COHORT 1	Experience	Teach	Apprentice	Lead	Lead	Lead
COHORT 2		Experience	Teach	Apprentice	Apprentice	Lead
COHORT 3			Experience	Teach	Apprentice	Lead
COHORT 4				Experience	Teach	Apprentice
COHORT 5					Experience	Teach
COHORT 6						Experience



Overview

Over the last five years, the Responsive Math Teaching (RMT) project developed, implemented, and refined a model for developing school-based elementary mathematics instructional leadership. RMT is designed to **build capacity** through:

- Developing a shared understanding of high-quality inclusive math instruction
- Ongoing professional development
- Support for classroom implementation
- Leadership development for sustainability

Context

- Partnership with a network of 14 K-8 schools in the School District of Philadelphia serving about 5000 students
- In 12 schools, over 97% of students are classified as Economically Disadvantaged
- Half of the schools have over 90% students of color and are in neighborhoods that are disproportionately affected by systemic racism and decades of disinvestment

Research Methods

Research Questions

- How do K-8 teachers learn to take on instructional leadership roles in their schools and across the network?
- How does their leadership capacity develop over time?

Situative Perspective

- Learning as a process of development (Rogoff, 1995) and change in participation in communities of practice (Lave & Wenger, 1991)

Data Sources:

- Interviews, video recordings of PD sessions, artifacts (written reflections, lesson plans), analytic memos, surveys

Analysis:

- Deductive and inductive coding of interviews for instructional vision (Munter, 2015)
- Analysis of video transcripts for *pedagogically productive* talk (Lefstein et al., 2020) and responsive facilitation practices
- Case studies of responsive teacher leadership development in 6 teacher leaders over 5 years

Additional Findings

- When teachers experience responsive math teaching as learners, they develop a more inclusive instructional vision that centers the students' learning experience.
- Practice-based PD in combination with Collaborative Lesson Design cycles addressed the "problem of enactment" (Kennedy, 1999) by supporting an iterative cycle of building new knowledge and enacting it in the classroom context.
- Tools and frameworks with common language (such as an instructional model, lesson planning template, coaching protocol) can serve as boundary objects to help transfer learning from the PD to the classroom setting
- Facilitating discussion around artifacts of teaching involves structuring, eliciting, cultivating, and connecting moves, co-constructed by leaders and participants, that support pedagogically productive talk (Lefstein et al., 2020)

Products

Tools and Frameworks

- Model for Responsive Math Teaching
- RMT Lesson Planning Template
- RMT Planning and Coaching Protocol
- Framework for Facilitating Discussion of Artifacts of Teaching
- Framework for Facilitating Productive Struggle

Selected Publications

- Ebby, C.B., Hess, B.R., Valerio, J. & Pecora, L. (2023, April). Facilitating collaborative discussions around video artifacts of mathematics teaching. Paper presentation at the Annual Meeting of the American Educational Research Association, Chicago.
- Valerio, J. (2023). Investigating synergies and take up when practice-based professional development and collaborative lesson design are used in tandem (Publication No. 30310625) [Doctoral dissertation. University of Pennsylvania]
- Ebby, C.B., Hess, B.R., & Pecora, L. (2022, April). Developing Teachers' Instructional Vision for Inclusive Math Practice: The Role of Epistemic Experience. Paper presentation at the Annual Meeting of the American Educational Research Association, San Diego, CA.
- Ebby, C. B., Hess, B., Pecora, L., & Valerio, J. (2021). "Teaching Them How to Fish": Learning to Learn and Teach Responsively. *CPRE WORKING PAPERS* Responsive Math Teaching Project (2021). A model for developing sustainable math instructional leadership. *CPRE WORKING PAPERS*.

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