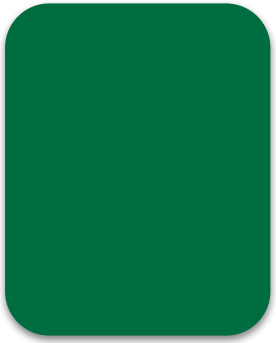
Foundations for Implementation - Session 8

Welcome!

CPM Virtual Learning Series

Session Facilitators



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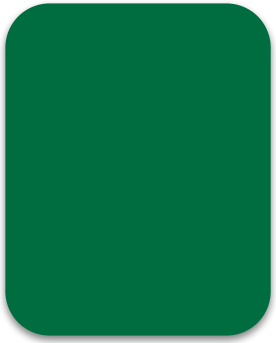
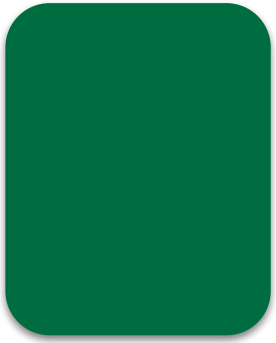


Name

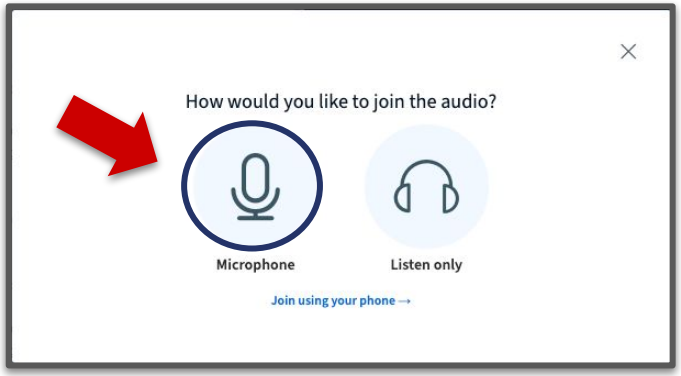
Support



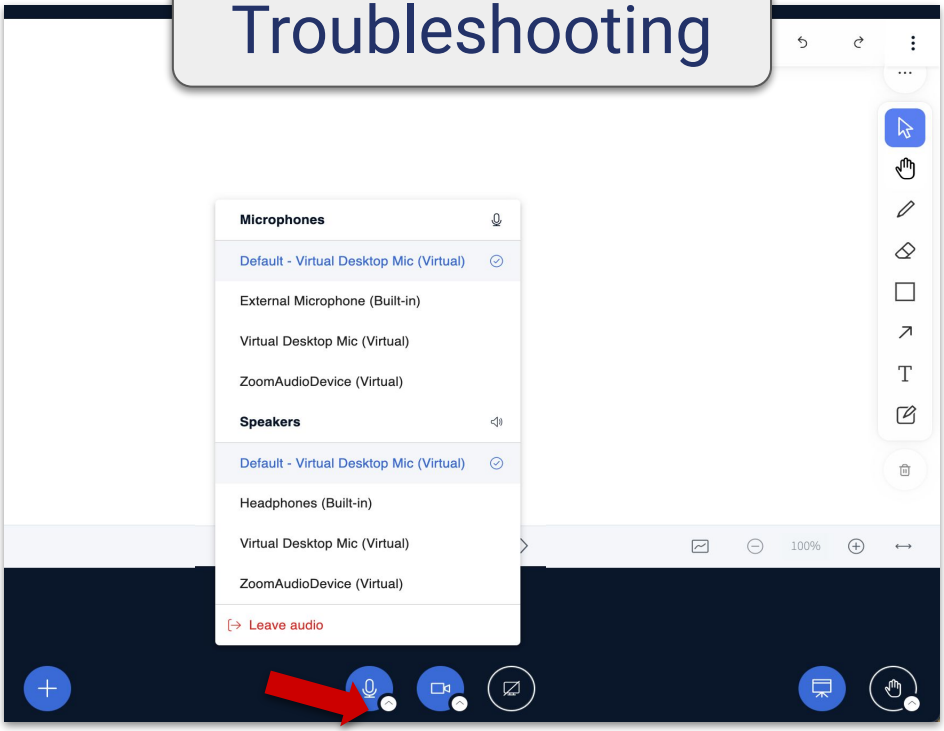
Regional Professional Learning Coordinator

Tech Tip

Audio

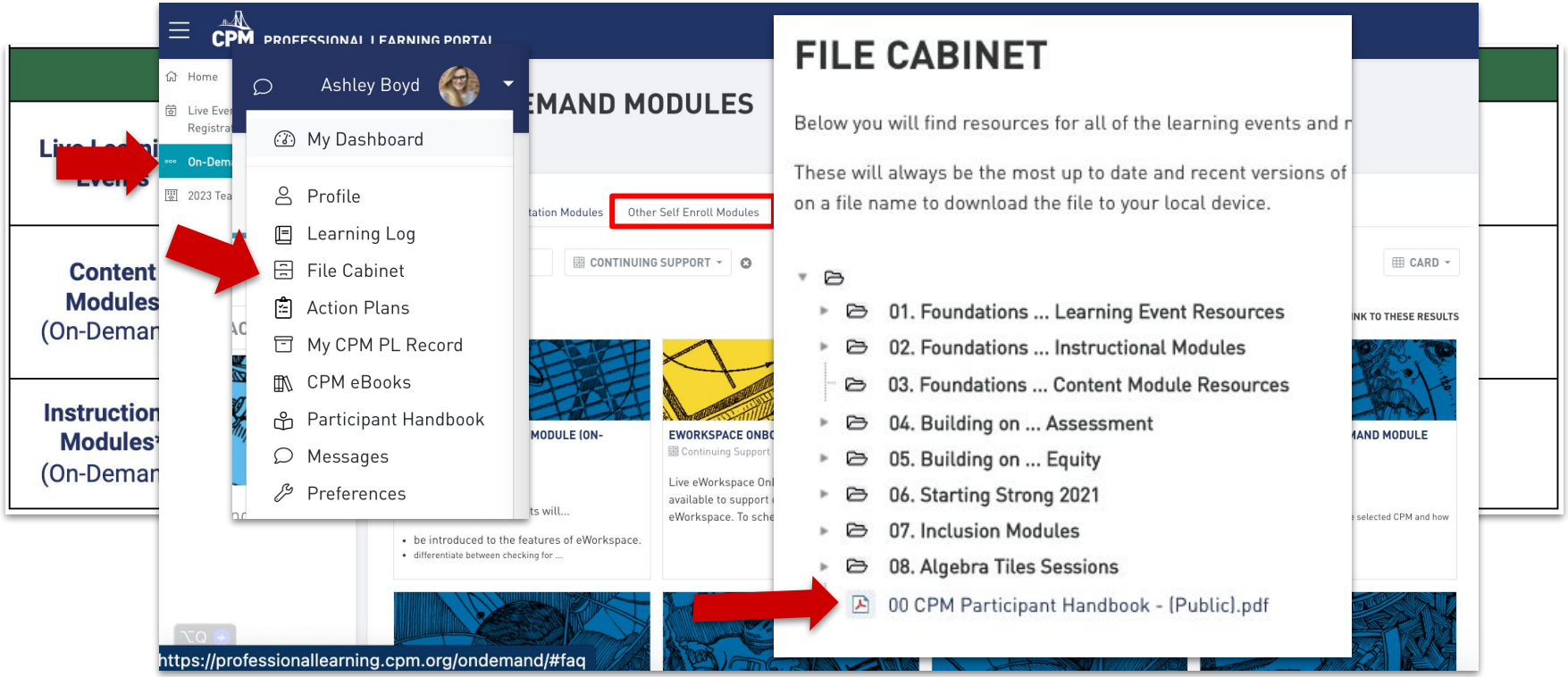


Troubleshooting



Opening

Foundations for Implementation Series



Opening

Outcomes

Participants will:

Define status and how it impacts collaborative learning.

Explore ways to support learners who sometimes struggle.

Collaborate with and learn from other teachers.

Opening

Agenda

Focus: Questioning and Formative Assessment

- ❑ Icebreaker
- ❑ Status and Equity
- ❑ Learners Who Sometimes Struggle
- ❑ Closure

Opening

Working Agreements

- Be willing to take **risks**.
- Have a **visionary** mindset.
- Stay **engaged**.
- Explore and reflect on our **beliefs**.
- Give **grace** to others and ourselves.

Change takes time, effort, and support!

Returner

First time

Agenda

Session Eight

Focus: Questioning and Formative Assessment

- ☐ Icebreaker
- ☐ Status and Equity
- ☐ Learners who Sometimes Struggle
- ☐ Closure

Icebreaker

Study Team and Teaching Strategy

Pick Three

- Teacher posts a list of strengths.
- Each student selects and writes down three strengths they can contribute to their team.
- Students take turns sharing their strengths with their team.
- Students use their strengths as they work on the lesson.

Icebreaker

Study Team and Teaching Strategy

Teacher

Pick Three

1. **Open** the Desmos Activity
2. **Complete** the Pick Three using screens 1- 3 of the activity.

Agenda

Session Eight

Focus: Questioning and Formative Assessment

- [x] Icebreaker
- [ ] Status and Equity
- [ ] Learners who Sometimes Struggle
- [ ] Closure

Status and Equity

CPM Guiding Principles

Students deepen their mathematical understanding when they are engaged with concepts over time.

Students have significantly better retention of mathematics when concepts are grounded in context.

Student's involvement in effective study teams increases their ability to learn mathematics.

Effective study teams are guided, supported and summarized by a reflective knowledgeable teacher.

Assessing what students understand requires more that one method and more than one opportunity.

When students and stakeholders embrace a growth mindset, they understand that mastery takes time, effort and support.

Status and Equity

CPM Implementation Progress Tool

SECTION TWO: Features of desired student learning when the pillars are in place.

SECTION ONE: The pillars that represent necessary first steps in any implementation.

Collaborative Learning	Problem-Based Learning	Mixed, Spaced Practice
Students and teachers are aware of the purpose for and value of working in teams, and are familiar with team norms and roles.	Students and teachers share math authority as they value and engage in productive struggle. Teachers guide without taking over the thinking.	Both individual lessons and chapters are followed, using suggested pacing. Review & Preview problems are assigned and valued as an essential part of learning.

justifying answers, creating viable arguments, and critiquing the reasoning of others.

learning and are willing to share and investigate their thinking.

sets daily as intended.

Status and Equity

Unproductive Struggle

What are the causes of unproductive struggle?

- Lack of Mathematical Confidence
- Fixed mindset
- Lack of Motivation
- Gaps in Understanding/ Learning

One underlying social dynamic that may impact productive collaborative learning is **STATUS.**

Status and Equity

Study Team and Teaching Strategy

Proximity Partner

- Team Member (1) writes while Team Member (2) explains the first problem.
- Team Member (1) asks clarifying questions to Team Member (2).
- The pair checks with the other pair from their team, if they agree they put a ✅, if they disagree, they figure out what went wrong.
- Team Member (1) rotates the paper to Team Member (2), and roles are reversed.

Status and Equity

Defining Status - Debrief

Teacher

Proximity Partner

What is status?

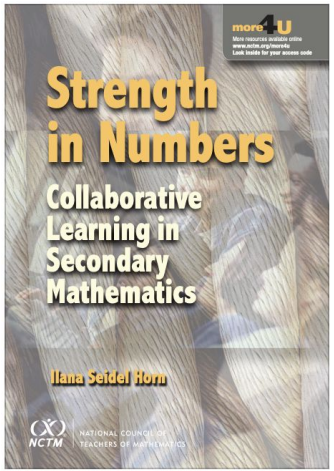
Share your definition in the Public Chat

Status and Equity

Status in the Classroom

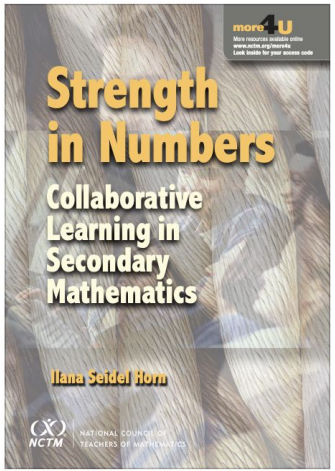
*Status plays out in classroom interactions. Students with **high status** have their ideas heard, have their questions answered, and are endowed with the social latitude to dominate a discussion. On the other side, students with **low status** often have their ideas ignored, have their questions disregarded, and often fall into patterns of nonparticipation or, worse, marginalization.*

Strength in Numbers, Ilana Horn, p.21



Status and Equity

Status in the Classroom



Status *is the <u>perception</u> of students' academic capability and social desirability.*

Strength in Numbers, p.21

Status and Equity

Connections

What connection do you see between **status** and **student actions**?

use the link in the Public Chat

Teacher

Collaborative Learning
Students read and make sense of problems together.
Students are able to listen to the ideas of others and communicate their own ideas both in teams and during whole class discussions.
Students listen carefully to the thinking of others and respond with clarifying questions or extensions of their own.
Students engage in productive mathematical discourse, justifying answers, creating viable arguments, and critiquing the reasoning of others.

Status and Equity

Mathematical Competence and Status -
What “Being Smart” Means

Strength in Numbers
Collaborative Learning in Secondary Mathematics

use the link in the Public Chat

Status and Equity

Reading Study Team and Teaching Strategy

Jigsaw

- Each team member is assigned a different part of a topic or concept.
- Team member learns about the topic or concept.
- Team member presents the information to the team.

RM **Status vs Ability** (Pages 21-22)

F **Seeing Status in the Classroom through Listening** (Pages 22-23)

T **Body Language, Organization of Materials and Resources, and Inflated Talk about Self or Others** (Pages 23-24)

R/R **The Opposite of Status** (Page 24)

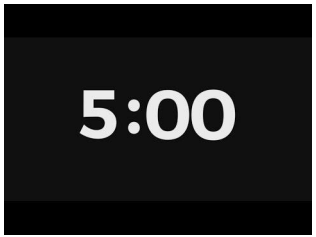
Status and Equity

Jigsaw & Reading Protocol

Teacher

Six Word Synthesis

1. **Read** your assigned reading.
2. **Summarize** your reading using SIX words.
3. **Record** your synthesis to share with your team.



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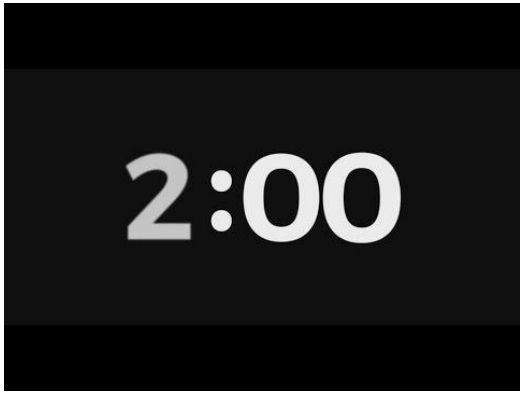
Status and Equity

Debrief Study Team and Teaching Strategy

Gallery Walk

- Teams display posters or presentations.
- Students explain and/or critique displayed work.



What connection do you see between **status** and **student actions**?

Status and Equity

CPM's Equity Principles

The goal of teaching is to help all students transition from dependent to independent learners.

Relationships are of vital importance.

Student uniqueness is an asset, not a deficit.

Reflection is a crucial part of growth.

Agenda

Session Eight

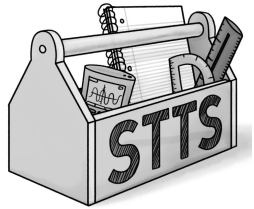
Focus: Questioning and Formative Assessment

- [x] Icebreaker
- [x] Status and Equity
- [ ] Learners who Sometimes Struggle
- [ ] Closure

Learners Who Sometimes Struggle

Supporting Students

Which **Study Team and Teaching Strategies** best support the following?



Teamwork and Collaboration

Student Status

Productive Struggle

Mathematical Understanding

Learners Who Sometimes Struggle

Resources

STTS Slideshow and Desmos

Teamwork and Collaboration

Student Status

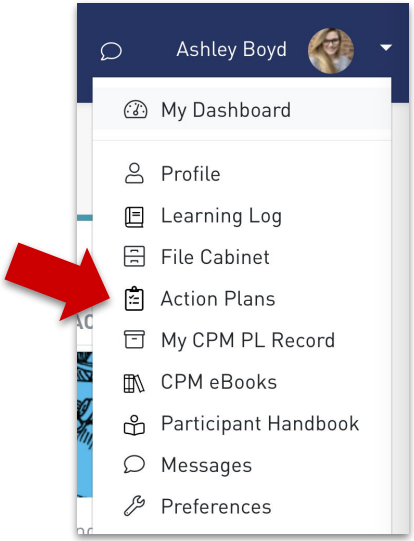
Productive Struggle

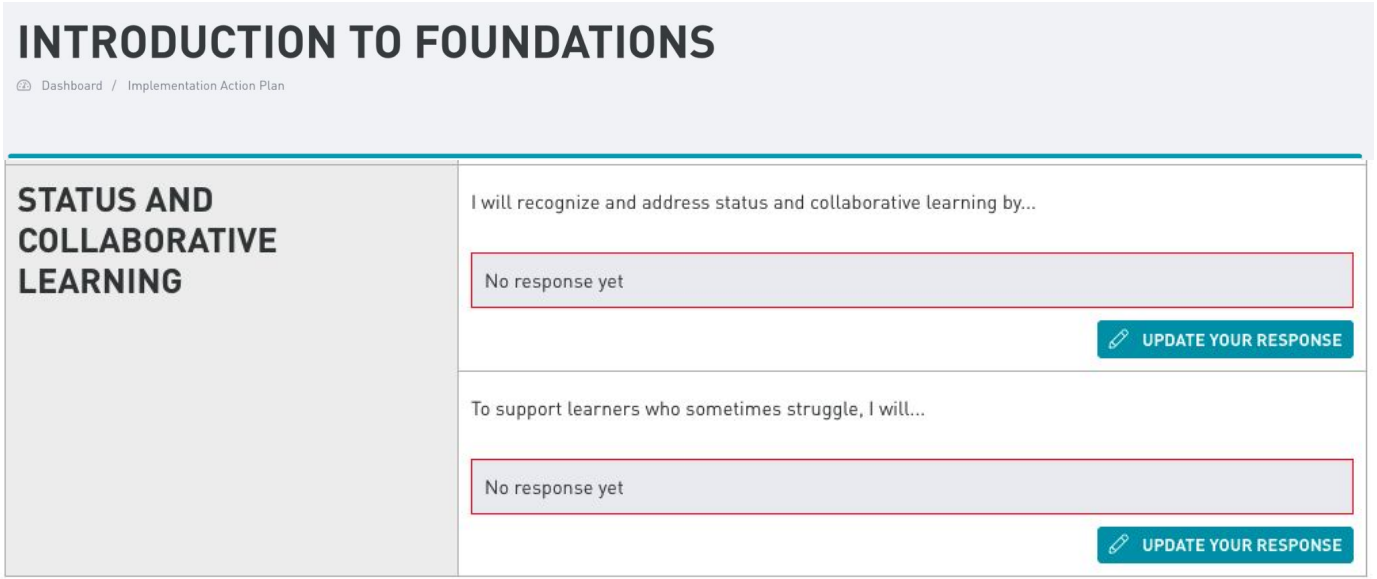
Mathematical Understanding

use the links in the Public Chat

Closure

Implementation Action Plan





Agenda

Session Eight

Focus: Questioning and Formative Assessment

- [x] Icebreaker
- [x] Status and Equity
- [x] Learners who Sometimes Struggle
- [ ] Closure

Closure

Foundations for Implementation Series

	Summer Session	Fall Semester	Spring Semester
Live Learning Events	☑ Register and attend: In-Person Days 1-3 **or** Virtual Sessions 1-6	☑ Register and attend: In-Person Day 4 **or** Virtual Sessions 7-8	☐ Register and attend: In-Person Day 5 **or** Virtual Sessions 9-10
Content Modules (On-Demand)	☐ Chapter 1 ☐ Chapter 2	☐ Chapter 3 ☐ Chapter _____	☐ Chapter _____ ☐ Chapter _____
Instructional Modules* (On-Demand)	☐ 1 - Closure and Team Assessments ☐ 2 - Review & Preview ☐ 3 - Intentional Planning	☐ 4 - Supporting Productive Struggle	☐ 5 - Assessment Practices

* Instructional Modules 1-5 will be opened and available upon completion of the Introduction to Foundations Module.
If you support special education or intervention, Inclusion Modules may be completed in place of the Instructional Modules.

Closure

Study Team and Teaching Strategy

Fortune Cookie

+ Team Member (1) draws a sentence starter from the envelope, reads it aloud, and shares a brief—30 second—explanation.
+ Team Member (2) receives the same sentence starter, makes one comment about Team Member (1)'s explanation, and rotates to continue the process for each member.
+ Team member (2) draws a sentence starter from the envelope, reads it aloud, and shares.
+ Team member (3) receives the same sentence starter, makes one comment about Team Member (2)'s explanation. Continue this rotation for each of the sentence starters in the envelope.

Closure

Outcomes

Participants will:

Define status and how it impacts collaborative learning.

Explore ways to support learners who sometimes struggle.

Collaborate with and learn from other teachers.

Closure

Study Team and Teaching Strategies

Ambassador	Fishbowl	Hot Seat	**Notice and Wonder**	**Proximity Partner**	**Think-Pair-Share**
Board Report	**Fortune Cookie**	**Huddle**	Numbered Heads	**Reciprocal Teach**	Traveling Salesperson
Carousel: **Around the world**	**Gallery Walk**	I have… Who has…	Pairs Check	**Red Light, Green Light**	Tuning Protocol
Carousel: Index Card	**Give One-Get One**	**I Spy**	**Participation Quiz**	**Silent Debate**	Turn and Talk
Carousel: Station Rotation	Glow and Grow	**Jigsaw**	Peer Edit	**Swapmeet**	**Two Stars and A Wish**
Dyad	GPS	Listening Post	**Pick Three**	**Teammates Consult**	**Walk and Talk**
Elevator Talk	Hot Potato	Math Chat	Players-Coach	**Think-Ink-Pair-Share** **(T.I.P.S)**	**Whiparound**

Closure

Implementation Progress Tool

SECTION TWO: Features of desired student learning when the pillars are in place.

Collaborative Learning	Problem-Based Learning	Mixed, Spaced Practice
Students read and make sense of problems together.	Student thinking at varied depths of conceptual understanding are openly shared and valued.	Students work through lessons at an appropriate pace.
Students are able to listen to the ideas of others and communicate their own ideas both in teams and during whole class discussions.	Students demonstrate and value both conceptual and procedural knowledge.	Students understand that mastery takes time, effort, and support.
Students listen carefully to the thinking of others and respond with clarifying questions or extensions of their own.	Students look for, compare, and connect multiple models and solution strategies.	Students are aware of learning targets and periodically self-assess their progress towards those targets.
Students engage in productive mathematical discourse, justifying answers, creating viable arguments, and critiquing the reasoning of others.	Students recognize that incorrect work can be a stepping stone to learning and are willing to share and investigate their thinking.	Students solidify learning as they work on Review & Preview problem sets daily as intended.

Closure

Teacher Tips

Teacher Actions That Support Implementation

Use Teacher Notes as intended.

◇

Revisit and Reinforce Team Roles and Classroom Agreements.

Create purposeful lesson plans.

◇

Utilize the Launch- Explore- Closure (LEC) lesson structure.

Work all the problems in the lesson.

◇

Honor Mixed, Spaced Practice in your assessments.

Closure

Ignite Your Classroom

Start promptly.

Peer support expected within each team.

Active learning.

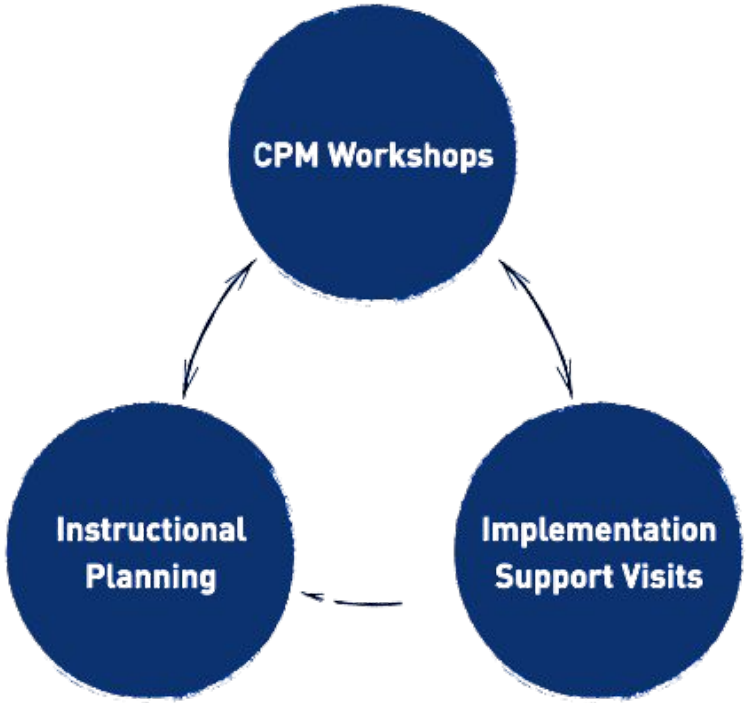
Respond to the team rather than individuals.

Circulate. **C**irculate. **C**irculate.

Closure. **C**losure

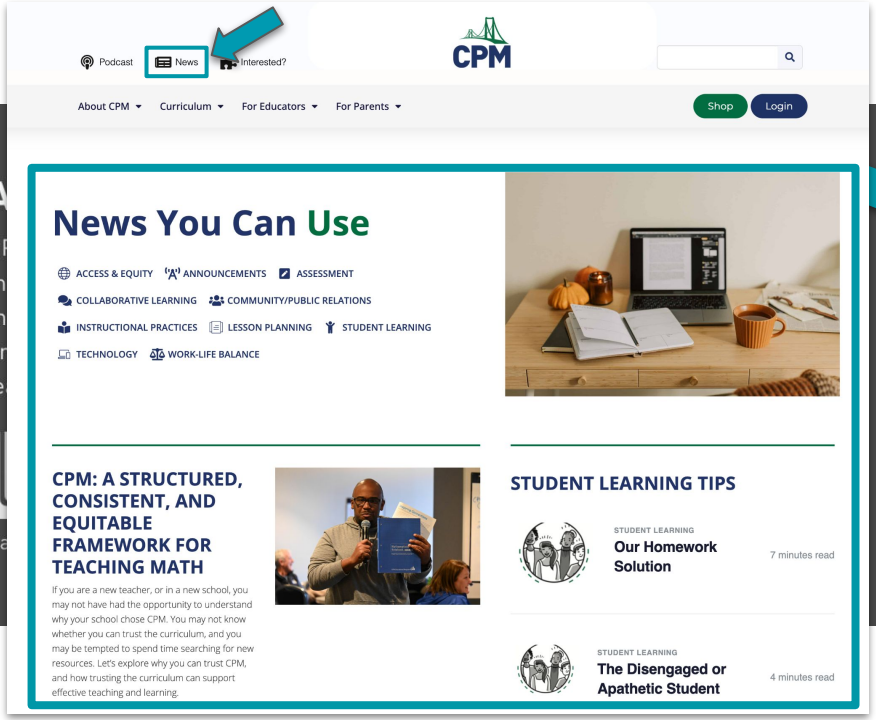
Closure

Triangle of Teacher Support



Closure

Support



Closure

+ **Parking Lot**
+ **Attendance & Feedback**

  Either scan the QR code

  OR

  Enter passcode in the portal

  XXXXXX

PUT QR Code HERE

+ **Homework:**
  - Register for Sessions 9 & 10
  - Finish Instructional Module 4 - Supporting Productive Struggle
  - Continue working through at least four more Content Modules (Chapters 3+)

@CPMeducationalprogram @CPMmath

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Title Font Size: 24

Subtitle Font Size: 18

Color coding:

- **Teacher Lens**: 006DAB
- **Learning Log**: 006DAB
- **Student Lens**: 41AD49
- **Housekeeping**: 233368
- **Content Module**: 006D41
- **Thread**: 006D41

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HOUSEKEEPING

ANCHOR PAGE

WELCOME

PUZZLE

TEAM GOAL

TEACHER LENS

LEARNING LOG

THREAD

CONTENT MODULE

MATH GOAL

STUDENT LENS

EQUITY LENS

ASSESSMENT

PRODUCTIVE STRUGGLE

RESEARCH PILLARS

MSP

COLLABORATIVE LEARNING

PBL

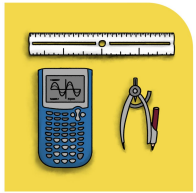
STUDY TEAMS

LEARNING TARGET

TASK CARD

TEAM ROLES ALL

RESOURCE MANAGER



TASK MANAGER

REPORTER RECORDER

FACILITATOR

IMPLEMENTATION ACTION PLAN

TEAM ROOMS

IMPLEMENTATION PROGRESS TOOL

STTS