Foundations for *Inspiring Connections* Learning Event – Day 2

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Welcome

CPM Foundations for *Inspiring Connections* – Day 2

Door Question:

What is the best sound?

Sign in and share in the door question.

Sit at your home base.

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Foundations for *Inspiring Connections* – Day 2

Collaborative Learning

Name
email@cpm.org

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Lesson & Opening

Agenda and Learning Target

- **Lesson & Opening**
- Research Connections
- Break
- Effective Study Teams
- Walkthrough
- Lunch
- Lesson
- Break
- Walkthrough
- Closure

Learning Target: I can identify how collaboration supports learning.

Lesson & Opening

Student Logins

Team Task:

1. Only one device is needed per team.
    a. Enter bit.ly/CPMlogin into an incognito window.
2. Click on “Inspiring Connections.”
3. Click on the green pop-up in the top right corner.

Lesson & Opening

Learning Agreements: IC1 Lesson 0.1.7

Insert co-created learning agreements from Day 1 IC1 Lesson 0.1.7

Lesson & Opening

IC1 Lesson 1.1.2 – Where do these numbers go on this line?

Student

Door Question: What is something that helps make any day better?
Reflection & Practice: 1-13 to 1-18

I can compare whole numbers, mixed numbers, fractions greater than one, and decimal numbers.

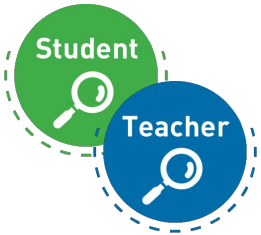
I can [insert something related to their co-created agreements].

Red Light, Green Light

p. 20/21

Lesson & Opening

IC1 Lesson 1.1.2 Debrief



How does *Inspiring Connections* support a collaborative classroom?

How did collaboration support your learning?

To support collaboration, I _____ and my peers _____.
To support collaboration, my teacher _____.

What did the teacher do to support collaborative learning during the different parts of the lesson?

The teacher _____.

Learning Target: I can identify how collaboration supports learning.

Lesson & Opening

Working Agreements

Be willing to take **risks**.

Have a **visionary** mindset.

Stay **engaged**.

Explore and reflect on your **beliefs**.

Give **grace** to others and yourself.

Change takes time, effort, and support!

Lesson & Opening

Feedback – Day 1

Add feedback here.

Add questions, comments, good ideas to share, and burning issues to the Parking Lot!

Opening

Housekeeping

- 8:00 AM – 4:00 PM
- Breaks scheduled and as needed
- Lunch at ~ XX:XX
- Parking Lot poster
- Supply/resource table

Opening

Outcomes

Participants will…

+ Become familiar with the CPM Collaborative Learning research pillar.
+ Learn how the design of *Inspiring Connections* supports and develops collaborative learning.
+ Explore and experience *Inspiring Connections*.
+ Reflect on current practices and beliefs to develop a plan for implementing *Inspiring Connections*.

Research Connections

Agenda and Learning Target

- Lesson & Opening
- **Research Connections**
- Break
- Effective Study Teams
- Walkthrough
- Lunch
- Lesson
- Break
- Walkthrough
- Closure

Learning Target: I can reflect on how collaboration impacts students.

Research Connections

Dyad

When you hear the word “collaboration,” what do you think?

What are your beliefs about collaboration?

Research Connections

Dyad
Collaborative Talk (Intra-Team Talk)

Student

When you hear the word “collaboration,” what do you think?

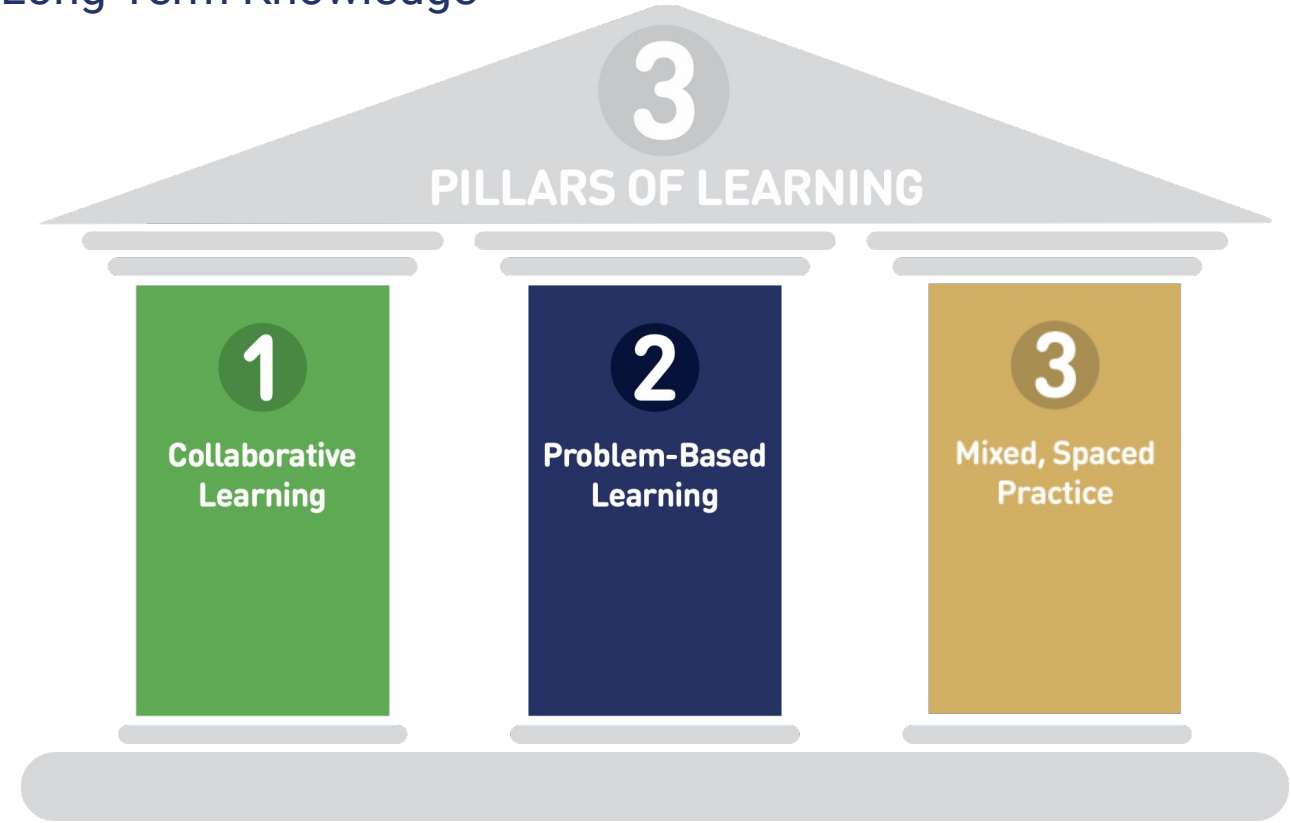
What are your beliefs about collaboration?

Use these sentence frames as needed:

+ *At first I was thinking _____, but now I think _____.*
+ *Another thought I have is _____.*
+ *I noticed _____, so I wonder _____.*

Research Connections

Attaining Long-Term Knowledge



Research Connections

Reading Protocol

Golden Line

Read the article and highlight or note parts of the research that:

- raise questions for you
- confirm what you already believe
- make you say, “Aha”
- conflict with your beliefs
- cause you to reconsider prior assumptions

Choose 1 or 2 “golden lines” to share out.

Research Connections

Collaborative Learning Research Base

Professional Learning Portal:

- Click on your name dropdown to access **File Cabinet**
- **Foundations for *Inspiring Connections***
- **In Person** and **Days 1-4 Resources**
- Select **02. Collaborative Learning Executive Summary**

Research Connections

Golden Line Reading Protocol

Focus on the **blue boxes:**
"*CPM infers from this research that…*"

And **choose** your golden line from these sections of the research:

- What is Collaborative Learning?
- Why is Collaborative Learning important for learning mathematics?
- If Collaborative Learning is important for mathematics, why is it not more widespread?
- Who is Collaborative Learning good for?

p. 22

Research Connections

Golden Line Reading Protocol

Share one or more golden line(s) with your team members, and explain your connections to each line.

Coordinator Decide who shares first and make sure everyone has equitable sharing time.

Research Connections

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.

Students' 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 than one method and more than one opportunity.

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

Research Connections

Equity Principles and Beliefs

Professional Learning Portal:

- Click on your name dropdown to access **File Cabinet**
- **Foundations for *Inspiring Connections***
- **In Person** and **Days 1-4 Resources**
- Select **03. CPM Equity Principles and Access & Equity**

Research Connections

Not “Good” or “Bad”

Unproductive Beliefs

- Hinder implementation of effective instructional practice.
- Limit student access to important mathematics content and practices.

Productive Beliefs

- Enable implementation of effective instructional practice.
- Open mathematics to more students.

Research Connections

Beliefs

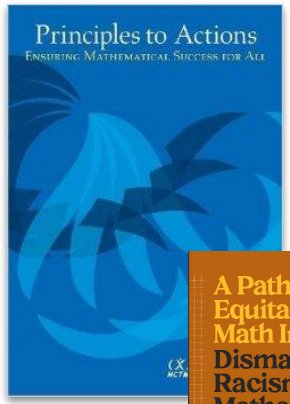
Teacher

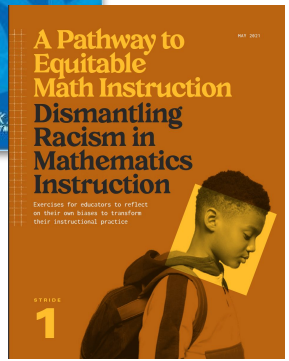
Read the following:

- Introduction (envision, mission) and Principle 1
- Table of Beliefs (page 2)

Use the Four A's protocol to reflect on the text:

- (❗) What do you **agree** with in the text?
- (?) What do you want to **argue** with in the text?
- (☆) What parts of the text do you want to **aspire** to?
- What **assumptions** does the author of the text hold?





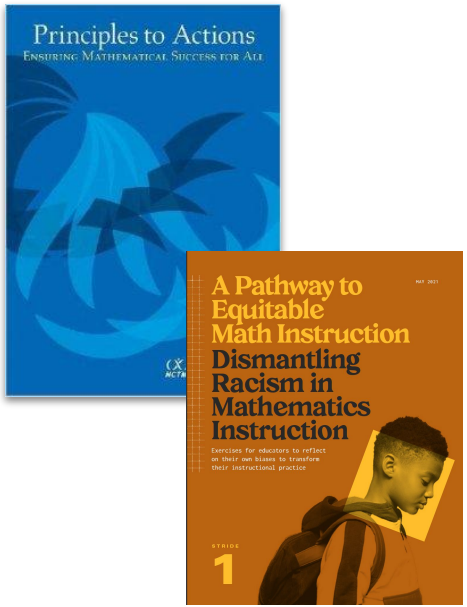
p. 22

Research Connections

Beliefs Team Discussion

Discussion Rounds

- Round 1: (❗) What do you agree with in the text?
- Round 2: (?) What do you want to argue with in the text?
- Round 3: (☆) What parts of the text do you want to aspire to?
- Round 4: Each person shares one assumption.



Research Connections

Beliefs Reflection

What does this mean for my work with students?

—

In what areas do I need more skills, motivation, and/or resources to make it happen?

Learning Target: I can reflect on how collaboration impacts students.

Research Connections

Debrief

Teacher

Go Chat

Use these sentence frames as needed:

+ *At first I was thinking _____, but now I think _____.*
+ *Another thought I have is _____.*

Use these sentence frames for whole group discussion as needed:

+ *We are still wondering _____.*
+ *We noticed _____.*

Break

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Ideas:

+ Add to the Parking Lot
+ Take pictures or notes to summarize your learning

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Effective Study Teams

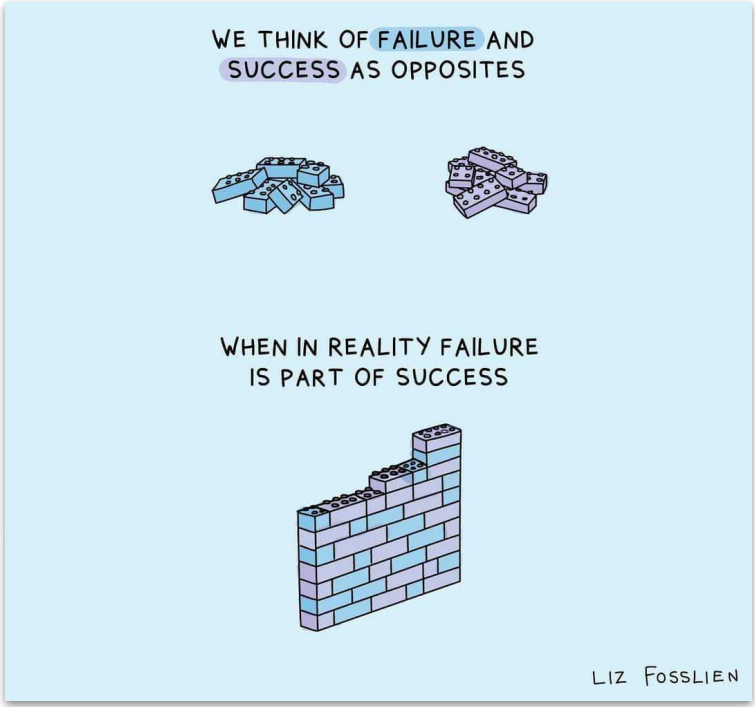
Agenda and Learning Target

- Lesson & Opening
- Research Connections
- Break
- **Effective Study Teams**
- Walkthrough
- Lesson
- Break
- Walkthrough
- Logistics & Management
- Closure

Learning Target: I can develop effective study teams.

Effective Study Teams

IC3 Lesson 0.1.2



Effective Study Teams

Groups vs. Teams

How would you describe a group?

How would you describe a team?

How are they similar? How are they different?

Effective Study Teams

Collaboration Brainstorm

What does good collaboration look like?

Effective Study Teams

Collaboration Opposites

Student

What does good collaboration look like?

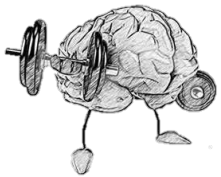
What does collaboration **not** look like?

What does collaboration look like?

Effective Study Teams

Brain Break

Animal Roundup

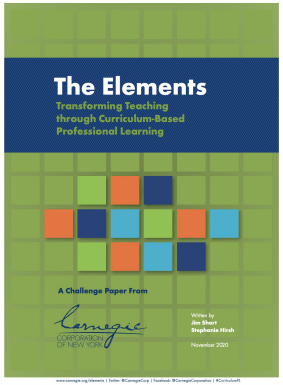


Effective Study Teams

The Elements

“The implications are clear. Curriculum matters, but how teachers use curriculum matters even more.”

Short, J., & Hirsh, S. (2020). *The elements: Transforming teaching through curriculum-based professional learning*. Carnegie Corporation of New York, 9.



Effective Study Teams

Jigsaw

Teacher

How does implementing _____ support effective study teams?

Representative – 1	*Inspiring Connections* → Teacher Materials → Lesson Implementation → Teamwork → 1. Team Roles 2. Visibly Random Teams
Investigator – 2	
Coordinator – 3	The Three Pass Promise: bit.ly/3passpromise
Organizer – 4	5 Ways to Stop Thinking for Your Students: edut.to/3WwSjVP

p. 23

Effective Study Teams

Four Corners Jigsaw

Teacher

Stronger & Clearer

- **Representative**
- **Investigator**
- **Coordinator**
- **Organizer**

Effective Study Teams

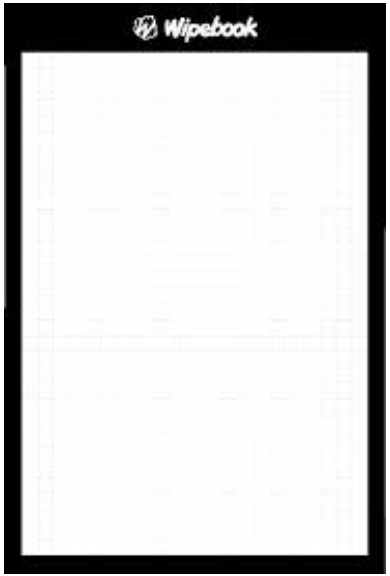
Synthesize Your Learning

Teacher

Your Task:

Represent effective study teams using pictures, words, diagrams, etc.

How do circulation, team roles, and visibly random teams support collaborative learning?



Effective Study Teams

Reflection

Exhibit Visit

How will you develop effective study teams?

Students' involvement in effective teams increases their ability to learn mathematics.

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

Teacher

p. 23

Learning Target: I can develop effective study teams.

Walkthrough

Agenda and Learning Target

- Lesson & Opening
- Research Connections
- Break
- Effective Study Teams
- **Walkthrough**
- Lunch
- Lesson
- Walkthrough
- Break
- Closure

Learning Targets:

- I can experience and explain the development of classroom community and mathematics content in my course.
- I can navigate the curriculum materials.

Walkthrough

Chapter 1

Authors' Vision

Prelude

- Develop collaborative learning expectations
- Highlight different ways of thinking mathematically
- Focus on respect and valuing perspectives
- Build trust and routines

Chapter 1

- Introduce the course content
- Establish content threads
- Continue to use instructional routines and introduce new ones

Walkthrough

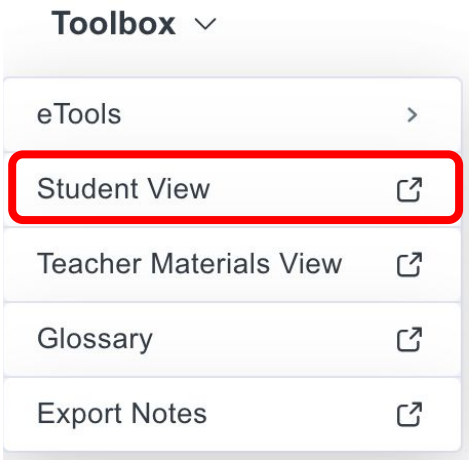
Chapter 1 Snapshot & Storyline

		Where?
Representative	Review the Learning Targets	MNB
Investigator	Review the Reflection & Practice	MNB
Coordinator	Review the Learning Intent (in Lesson at a Glance)	Digital Platform
Organizer	Review the Methods & Meanings & Vocabulary	MNB

Describe the chapter in one sentence.
Show your teammates where you found your resources.

Walkthrough

Team Task



Are we ready to start? Complete the checklist below:

- ❑ Locate the **Learning Ladder** and **Red Light, Green Light** materials.
- ❑ Identify the vertical surface and marker for your team.
- ❑ Access your student Mathematician's Notebook and Chapter 1 task card.
- ❑ Review your role on the placemat.

Goal: Complete as many of the Prelude activities as possible.
Navigate the teacher and student materials (Digital Platform and MNB).

Walkthrough

Chapter 1 Learning Ladder

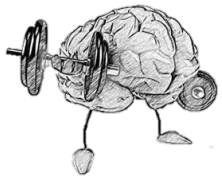
Team 0 (IC2) Example		Team 1 (IC#)		Team 2 (IC#)		Team 3 (IC#)		Team 4 (IC#)		Team 5 (IC#)		Team 6 (IC#)		Team 7 (IC#)		Team 8 (IC#)	
1.1.1																	
1.1.2																	
1.1.3																	
1.2.1																	

Walkthrough

Brain Break

Student

I love math, shoot



Walkthrough

Reflection

Teacher

Learning Targets:

I can experience and explain the development of classroom community and mathematics content in my course.

I can navigate the curriculum materials.

Share Around: Share one thing you noticed or wondered.

p. 4

Add questions, comments, good ideas to share, and burning issues to the Parking Lot!

Lunch Time

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+ Move into your new visibly random teams
+ Please return by: ##:##

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Model Lesson

Welcome Back!

Door Question

Would you rather cook at home or eat at a restaurant?

Model Lesson

Agenda and Learning Target

- Lesson & Opening
- Research Connections
- Break
- Effective Study Teams
- Walkthrough
- Lunch
- **Lesson**
- Break
- Walkthrough
- Closure

Learning Target: I can identify ways to support collaboration in many venues.

Lesson & Opening

Student Logins

Team Task:

1. Only one device is needed per team.
    a. Enter bit.ly/CPMlogin into an incognito window.
2. Click on “Inspiring Connections.”
3. Click on the green pop-up in the top right corner.

Model Lesson

IC2 Lesson 1.1.5 – How can I prove two ratios form a proportion?

Student

Learning Target: I can determine if two ratios form a proportion.

Collaboration Goal:
I can [insert language from one indicator of the collaboration rubric from before lunch].

p. 24–25

Model Lesson

IC2 Lesson 1.1.5 – Board Report

	1-44a & justify	1-44b & justify	1-44c & justify	1-48a (Fig.100)
Team 1				
Team 2				
Team 3				
Team 4				
Team 5				
Team 6				
Team 7				
Team 8				

Lesson

IC2 Lesson 1.1.5 – Debrief

How did the teacher support this guiding principle?

How was collaboration supported in each section of the lesson?

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

Learning Target: I can identify ways to support collaboration in many venues.

Break

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Return to your **course-like team** for our next activity.

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Walkthrough

Agenda and Learning Target

- Lesson & Opening
- Research Connections
- Break
- Effective Study Teams
- Walkthrough
- Lunch
- Lesson
- Break
- **Walkthrough**
- Closure

Learning Targets:

- I can experience and explain the development of classroom community and mathematics content in my course.
- I can navigate the curriculum materials.

Walkthrough

Chapter 1

Teacher

Partner: Turn & Talk

What stood out to you from the lessons you experienced as a student this morning?

Walkthrough

Team Roles

Representative

Investigator

Coordinator

Organizer

Complete the checklist below:

- ❑ Locate the **Learning Ladder** and **Red Light, Green Light** materials.
- ❑ Identify your vertical workspace and materials, if preferred.
- ❑ Access the learner-facing lessons, **Mathematician's Notebook**, and **Chapter 1** task card.
- ❑ Review your role on the placemat.

Goal: Complete Chapter 1 activities.
Navigate the learner-facing materials (Digital Platform and MNB).
Navigate the teacher-facing materials, as needed.

Walkthrough

Chapter 1 Learning Ladder

Team 0 (IC2) Example		Team 1 (IC#)		Team 2 (IC#)		Team 3 (IC#)		Team 4 (IC#)		Team 5 (IC#)		Team 6 (IC#)		Team 7 (IC#)		Team 8 (IC#)	
1.1.1																	
1.1.2																	
1.1.3																	
1.2.1																	

Walkthrough

Reflection

Learning Targets:

I can experience and explain the development of classroom community and mathematics content in my course.

I can navigate the curriculum materials.

Share Around: Share one thing you noticed or wondered.

Add questions, comments, good ideas to share, and burning issues to the Parking Lot!

Closure

Agenda and Learning Target

+ Lesson & Opening
+ Research Connections
+ Break
+ Effective Study Teams
+ Walkthrough
+ Lunch
+ Lesson
+ Break
+ Walkthrough
+ **Closure**

Learning Target: I can identify strategies to support implementation of *Inspiring Connections*.

Closure

What will you do this school year?

How will you manage the following?

Discuss ideas with your team and be prepared to share.

- Team Roles
- Visibly Random Teams
- Mathematician's Notebook
- VNPSs
- Transitions
- Reflection & Practice

Guiding Questions:

How will I introduce _____ to students?

What routines/procedures will need to be in place?

Closure

Share Your Ideas

Teacher

Carousel

- Each vertical workspace features a different topic.
- Visit each location with your team.
- Write down your team's management ideas.

Exhibit Visit

- Read responses from other teams.

p.28–29

Closure

Collaborative Learning Embedded Supports

How does *Inspiring Connections* support an environment for effective collaborative learning?

- **Visibly Random Teams**
- **Team Roles**
- **Collaborative Learning Agreements**
- **Embedded Supports (STTS & MLRs)**
- **Circulation and Questioning**
- **Vertical Non-Permanent Surfaces (VNPS)**

Closure

Embedded Supports

Ambassador	Go Chat	Pass It On	Stop and Scan	Stronger & Clearer
Board Report	Huddle	Pick Three	Swapmeet	Collect & Display
Carousel	Jigsaw	Quick Pitch	Talk-Write-Discuss	Critique, Correct, Clarify
Dyad	Learning Ladder	Reciprocal Teaching	Teammates Consult	Information Gap
Exhibit Visit	Listening Post	Red Light, Green Light	Team Spotlight	Co-Craft Questions
Fishbowl	Numbered Heads	Relay	Think-Ink-Pair-Share	Three Reads
Give One, Get One	Pairs Check	Share Around	Visibly Random Teams	Compare & Connect
Glow and Grow	Partner	Silent Debate		Discussion Supports

Closure

Outcomes

Participants will…

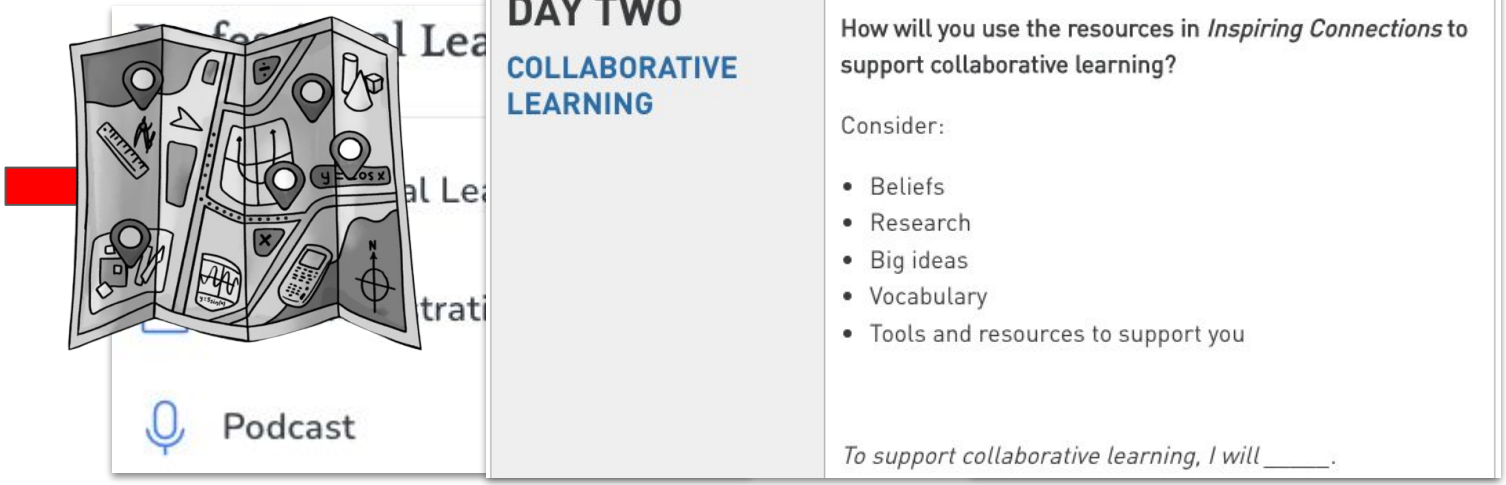
+ Become familiar with the CPM Collaborative Learning research pillar.
+ Learn how the design of *Inspiring Connections* supports and develops collaborative learning.
+ Explore and experience *Inspiring Connections*.
+ Reflect on current practices and beliefs to develop a plan for implementing *Inspiring Connections*.

Learning Event Feedback:

1. Open up the learning event module.
2. Scroll down to Event Attendance and Feedback.
3. Open Day 2 Feedback.
4. Complete the Feedback form.

Closure

Inspiring Connections Action Plan



Learning Target: I can identify strategies to support implementation of *Inspiring Connections*.

Closure

- **Parking Lot**
- **Attendance**
  - Enter passcode in the PL Portal

    X X X X X X
- **Before Next Session:**
  - Reflection & Practice for IC3 Lesson 1.1.3 (1-20 to 1-25)

p.30–31

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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

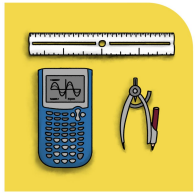
STUDY TEAMS

LEARNING TARGET

TASK CARD

TEAM ROLES ALL

RESOURCE MANAGER



TASK MANAGER

REPORTER RECORDER

FACILITATOR

IMPLEMENTATION ACTION PLAN

TEAM ROOMS

IMPLEMENTATION PROGRESS TOOL

STTS

Share your experience using

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