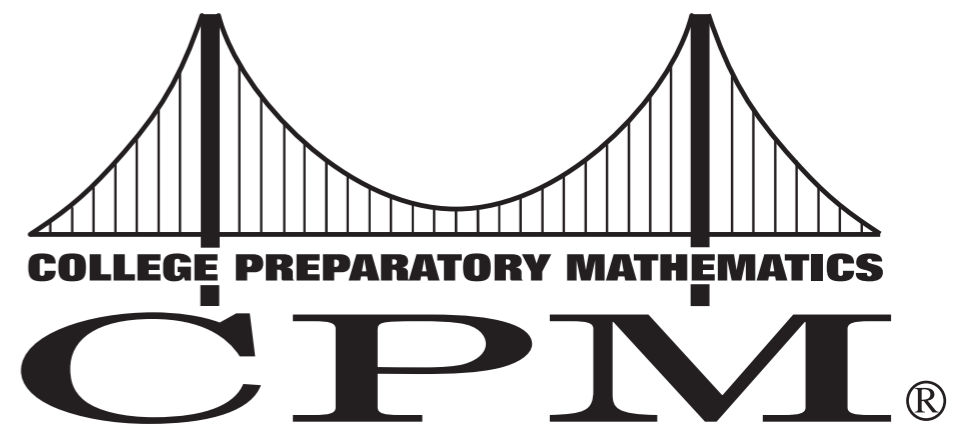


Reconceptualizing Team Roles

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Dyad

- What is your experience with using Team Roles in the Connections courses? If you have used them, what purpose did they serve?

Math Task

- To stimulate discussion about team roles, we'll work on a math task! (yay!)
- We'll use team roles as currently designed in Algebra Connections.
 - * Facilitator
 - * Recorder / Reporter
 - * Resource Manager
 - * Task Manager

Team Roles

Facilitator

- Help your team get started by having someone read the task.
“Who wants to read?”
- Make sure everyone understands what to do.
“How can we start?”
“What does the first question mean?”
“I’m not sure – what are we supposed to do?”
“Let’s check the directions.”
- Make sure everyone understands your team’s answer before you move on.
“Do our calculations agree?”
“How can we figure out which one is right?”
“I’m not sure I get it yet – can someone explain?”

Recorder/Reporter

- Keep the diagram of the apartment in the center of the table or desks so that all team members can write on it and refer to it during the discussion.
- Be prepared to share your team’s data and methods with the class.
- Make sure your team agrees about how to show your work.
“Let’s mark the diagram.”
“How can we keep track of our calculations?”

Task Manager

- Make sure no one talks outside your team.
- Help keep your team on-task and talking about math.
“Okay, let’s get back to work!”
“Which part should we work on next?”
“What does the next question say?”
- Listen for statements and reasons.
“Can we make a better guess?”
“Can you prove that?”
“Can you show us another way?”

Resource Manager

- Get supplies for your team, and make sure your team cleans up.
- The teacher may call you up to give you extra information.
- Call the teacher over for team questions.
“No one has an idea? Should I call the teacher?”

More about Team Roles

- The role makes the individual responsible for helping the team achieve its goal in whatever dimension(s) the role takes.
 - ▶ (In other words, the recorder / reporter is not the only person who writes on a poster! He or she oversees the effort.)
- Work with your team on the task using the role assigned to you. (10 minutes)

Part 1

My Team Role: _____

1. SEATING ARRANGEMENTS

Wanda is arranging seating for a party. She currently is planning to invite four people and has arranged four stools to form a square. (For convenience, consider each stool as a point on a plane).

- a. When the stools are arranged as a square, how many distinct distances between pairs of people are there? Is everyone an equal distance from everyone else? If not, how many different distances are there? Justify your response.
- b. Are there any other arrangements for four stools that Wanda could use that have the same number of distinct distances that you found for the square in part (a)? How many different arrangements can you find?

Reconceptualizing Team Roles

- What if the role of roles is slightly changed?
 - ➔ Not “doing”
 - ➔ Responsible for “thinking”

Cognitive Roles

- **information sorter**
- synthesizer - brings it together
- **encourager**
- part of the web representer
- connector
- questioner - getting team unstuck
- quality control
- justifier
- mathematical operations manager (**MOM**)
- the “why” person, the “other” person
-

Other ideas

- From Jen's group:
 - The "Why guy / gal" - justifier
 - The "Other brother / sister" - alternative solution finder
 - All boy / girl - Includer, encourager
 - The "Wrapper Dude / chick" - closer

New Cognitive Roles

- Explainer
- What if'er -- wonderer, extender,
- Consolidator
- Finisher / progresser
- Question Solicitor (Ask us a question)
- Brainstormer
- How do you know? (Justifier)
- Strategizer (how can we do this different way?)

Organization Ideas

- Blue, Red, Green, Yellow lights
- CEO, Manager, Editor, Foreman

- quality control
- justifier
- mathematical operations manager (MOM)
- the “why” person, the “other” person
-

Reflecting and Reshaping

- Which parts of your role were cognitive (“thinking”)? Which were process related (“doing”)?
- What other cognitive roles should students to be responsible for?

Math Task

- Let's try out our new “cognitive” roles with more math!

Part 2

My Team Role: _____

2. Wanda is still thinking of new arrangements of stools for her party.
 - a. What if not all stools are the same height? In other words, if the stools can have different heights (so that the tops of the stools are not on the same plane), does that change the number of distinct distances possible with four stools? Use diagrams to support your answer.
 - b. If the stools do not need to be the same height, how many guests could Wanda invite and still have the same number of distinct distances as the original square arrangement?
 - c. If Wanda is willing to have an arrangement that has a total of 3 distinct distances, what is the maximum number of friends Wanda can invite? Explain how you found your answer.
 - d. Wanda is distressed – she wants all pairs of guests to have the same distance between them so no one feels slighted. How many guests can she invite? How could she arrange the stools to allow for every pair to have the same distance between them? Look for all possible options for Wanda.

Final Reflection

- Individually, reflect on your experience using the cognitive roles during the task. Be ready to share.
 - ➔ What worked? What didn't work?
 - ➔ What did you learn or think about during this session?
 - ➔ What might you try in your classroom?

Thank You

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