

Tab 1

Things to observe
[student name] - MATH 201

I think it might be helpful to have some specific things to watch for as you are observing how people participate today. Here are some thoughts I had (some of which I would selfishly be interested in the data you collect, lol); please don't feel like you have to limit yourself to watching for these things specifically.

Problem-solving conversations often organize themselves into **"turns"** -- instances of somebody doing or saying something. I think this is a useful unit of analysis to pay attention to.

- About how long is an average turn?
- On average, how many turns does each person take?
- Are there big outliers in the distribution of either of those things? That is, are there exceptionally long or exceptionally short turns, or people who take exceptionally many or exceptionally few turns?
- On average, what proportion of turns are focused on math content?

A turn might end "naturally" when someone kinda runs out of stuff to say or do, or they might be ended "purposefully" when someone else grabs the turn.

- What are some signals that mean a turn is ending "naturally"?
- What do other people do or say when someone's turn has just ended "naturally"?
- What are some words or actions that people deploy when a turn has ended "naturally" and they are taking up the next turn?
- What are some words or actions that people deploy when they are "purposefully" grabbing the turn?
- How do other people react to different ways of "purposefully" grabbing a turn? Which strategies are more effective / less effective?

One thing that is difficult about doing research about turn-taking in problem solving conversations is that it's easy to *only* pay attention to whoever is currently taking the turn. Widening the focus can help us understand the broader dynamics happening *around* the board.

- What do other people do when someone else is taking a turn?
- The obvious answer to that question is "listen," but maybe we can say more. Based on observable behaviors, what can you say about what is going on in other people's heads?
- What observable behaviors distinguish someone who is listening "actively" from someone who is listening "passively" -- whatever those two words might mean?
- Is there any kind of correlation between types of listening and who takes the next turn?
- What are some observable signals that someone gives off when they are *about to* purposefully grab the turn?