Collaborative Questioning in a Layered Learning Setting

When engaging in a questioning session with multiple learners, there is a risk that 'not knowing' can feel shameful for learners. Both junior and senior learners can feel put on the spot especially when there's an audience of their peers. The goal is to create a safe environment and to help learners see 'not knowing' as an opportunity to learn together rather than as a method of comparison.

STEP 1: ELICIT

Junior and Senior learners will have different levels of knowledge and clinical experience. Ask questions to help understand what they each know and normalize the variation of learner knowledge and experience.

Start with a general question that is easily answerable to both junior and senior learners: "What struck you about the patient's experience with PMR (polymyalgia rheumatica)?"

Consider directing the question to the junior learner to give them a chance to answer first:

• Junior: "I remember learning about shoulder pain and aching in PMR but the patient's description made me realize how awful they feel and how many systemic symptoms people have."

Move to the senior learner - they may then answer in a way that builds on what has been said, and connects what they saw in the patient with their past clinical experiences:

• Senior: "I've seen two people with PMR before and I remember how awful they felt before getting a diagnosis."

STEP 2: EXPAND

Once you've heard the learners' initial thoughts on the patient, expand the conversation with another related question that draws the learners deeper into thinking about a differential.

For example, since the learners mentioned aspects of systemic unwellness, you can use that as an entry point for a larger discussion.

- **Preceptor:** "Systemic unwellness is a critical feature of PMR. What would help you think to check for PMR right away? Anything in the physical which might bring PMR to the top of your differential?"
- Junior: "Ummm, I'm not sure."
- Senior: "Well, I think some patients have trouble raising their arms over their heads...is that right?"

Consider a follow up question that will allow senior learners to share their knowledge with more junior learners.

STEP 3: ENCOURAGE

Encourage further exploration of the topic by asking questions that enable learners to engage at different levels. Pay careful attention to the responses to help gauge what might be useful for each learner.

- Preceptor: "Is there anything else that surprised you?"
- Senior: "The other patients I saw didn't have much of a headache, and I was wondering if the patient's headache could mean...could she have temporal arteritis as well?"
- Junior: "How would we know if they had temporal arteritis?"

Direct the junior learner's question back to the senior learner – or ask the senior learner a follow up question. If they can't answer, you've reached the edge of their knowledge, so provide an answer. While it is not wrong to also go back to the junior learner, the senior learner would typically be expected to know more, we want to reduce the risk that they feel badly if they can't answer a question that the junior learner can.

STEP 4: EXPLORE

Explore the next steps with your learners and come up with some future learning - and don't be afraid to model your own learning journey. Use each learner's natural curiosity to inform your answers and recommendations.

- Junior: "It makes me wonder...what is the connection between PMR and temporal arteritis? We talk about them together, but what's the connection?"
- Senior: "Hmmmm..."
- **Preceptor:** "That's a great question I've only seen one person with temporal arteritis in my practice but I worry about missing it. How can we look in to that?"

Give each learners an opportunity to decide their own path to future learning, and offer specific suggestions or guidance as relevant. For longitudinal teaching opportunities, consider asking them to bring back to the team what they have discovered at a later time/date so everyone can learn together.



