

Asking Engaging Questions That Promote Higher-Ordered Thinking Skills:

A 15 Minute Faculty Development Snippet



- *Current as of August 2023*
- *Questions? Click on ?box to contact Dr. Karen Friedman via email*



Learning Objective:

Utilize the QARRD technique to create questions that require learners to use higher-level thinking skills to answer, which will improve their clinical reasoning.



Using questions leads to higher-ordered thinking

- In order for our trainees to become skilled, qualified clinicians, they need to develop higher-order thinking skills. When faculty use questions to teach, learners are prompted to develop these skills when they work to create answers.
- Clinical education occurs “in the moment” – at the bedside, during a procedure, in patient care discussions – and other opportunities outside of didactic sessions.
- Without practice, faculty can have difficulty forming questions in the moment that require learners to analyze or evaluate the information they know or to create new knowledge by applying information to different patient situations.
- Today, you will learn a technique that will give you words and phrases you can use to formulate open-ended “why” questions appropriate to the idea you want trainees to explore whenever an educational opportunity arises.

Q A R R D

QUESTIONING AID FOR RICH REAL-TIME DISCUSSION

1. Use open-ended questions.

- ❓ Avoid asking questions that can be answered “yes” or “no” or with a “fill in the blank.”

2. Allow time for a response.

- ❓ It can take up to 15 seconds for people to form an answer. Patiently let them know they have time to think it out.

3. Follow up with clarifying questions and not corrections.

- ❓ This takes practice. Use additional questions to enable learners to explore, without taking the lead.

4. Use active verbs to form your questions.

- ❓ Frame your questions using the appropriate verb for the ideas and issues you want them to explore to enrich their clinical learning.

USE THESE VERBS:

REMEMBER

Ask questions to prompt learners to retrieve relevant knowledge from memory

Define, Identify, Describe, Recognize

UNDERSTAND

Ask questions to invite learners to construct meaning from educational lessons

Comment, Discuss, Demonstrate, Show, Outline

APPLY

Ask questions to lead learners to use what they have learned in a new situation

Solve, Change, Relate, Plan, Organize, Utilize, Predict

ANALYZE

Ask questions so learners will differentiate & compare/contrast with new facts

Connect, Compare, Contrast, Distinguish, Dissect, Distill

EVALUATE

Ask questions that call on learners to make evidence-based judgments

Reframe, Appraise, Prioritize, Assess, Recommend

CREATE

Ask questions to encourage learners to hypothesize & create new knowledge

Design, Develop, Propose, Adapt, Compose

Let's Try It Out!

- 1. We'll watch a video together. In the video, there will be a resident and an attending discussing a surgical consult for a patient in the emergency room.**
- 2. You will have two opportunities to jot down a question you could ask the trainee at that opportunity to invite them to either analyze, evaluate, or create new knowledge by applying information they have learned to a new set of circumstances.**
- 3. Use the QARRD technique to formulate your question with active verbs and phrases to challenge the learners' higher-ordered thinking skills. Consult the handout to select an appropriate verb to use.**

What Did You Think?

After sharing questions with one another discuss:

- 1. What do you think of your colleagues' questions? Evaluate which of the questions posed would be most effective in getting learners to use higher-ordered thinking skills to answer.**
- 2. How easy or difficult was it for you to create a good question in the moment? Do you think this will become easier with practice?**
- 3. Is the QARRD technique aligned with your style of teaching and learning? Does it feel natural to you? Why do you feel that way?**

Sample Questions to Ask Before the CT Scan:

- “In addition to acute cholecystitis, can you **identify** other diagnoses that are in your differential?”
- “Can you **describe** the relevant anatomy of the right thorax and right abdomen to better explain what organs might be contributing to the patient’s complaints?”
- “How might you **connect** the recent colonoscopy with the patient’s complaints now?”

Sample Questions to Ask After the CT Scan:

- “Based on this new information, how can we **reframe** the differential diagnosis to explain the patient’s symptoms?”
- “How could you **connect** the anesthesia the patient received for the recent colonoscopy to these CT scan findings?”
- “What diagnostic study would you **propose** to be done that might help to clarify the diagnosis?”
- “Based on this discussion, how would you **prioritize** the management interventions for this patient’s care?”

Take Home Points

1

Asking questions that meaningfully engage learners facilitates the development of higher-ordered clinical reasoning skills.

2

The QARRD technique helps you to formulate open-ended “why” questions for trainees whenever an educational opportunity arises.

3

When employing QARRD, use active verbs appropriate to the idea you want learners to explore, give them time to answer, and respond with clarifying questions rather than corrections.



FOR FURTHER READING

For Access to our PubMed
Collection for Further Reading

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To Get the JiTT
(Just In Time Teaching) App

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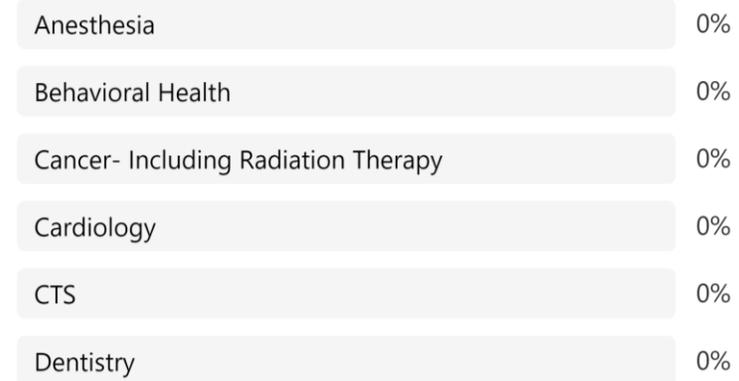
Access an evidence-based infographic
about the QARRD technique and 200+
additional medical education JiTTs

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Ask Me Why Campaign- Evaluation for Session #2- Asking Engaging Questions

Only people in my organization can respond, Record name, One response per person

1. What is your Department



0 response

< 1/10 >



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