**Question Formulation Technique (QFT) Framework[[1]](#footnote-1)**

**Produce Many Questions:** [Divergent Thinking]

Follow the QFT Rules:

1. Ask as many questions as possible in the allotted time.
2. Do not answer or discuss the questions and do not judge the quality of the questions!
3. Write the question exactly as stated (include even grammatical errors!)
4. Articulate everything as a question (no statements allowed).

* Using the Question Focus (QFocus) provided by the instructor, create as many questions as possible on the topic at hand.

**Improve the Questions:** [Convergent Thinking]

* Categorize the *unrefined* questions as **closed-ended** (mark with a ‘c’) or **open-ended** (mark with an ‘o’)
  + Closed-ended questions are able to be answered directly with a single word (like a yes/no question).
  + Open-ended questions require explanation and cannot be answered directly with a single word.
* Rephrase any statements as questions.
* Change closed-ended questions to open-ended questions
* Consolidate questions that ask the same thing, or re-word to make them different.
  + Note which questions from the unrefined list have been combined or eliminated.
* Improve the clarity and specific focus of each question.
  + Ensure the question is clear without the context of the QFocus.

**Prioritize the Questions:** [Convergent Thinking]

* Choose the five most significant questions your group would like to ask based on propensity for exploration, relevance to the topic of the QFocus, and student interest.

**Explore the Questions:** [Divergent and Convergent Thinking]

* Each member picks a different question from the prioritized list of questions to explore.
* Research aspects of the question in search of one or more answers to the question.
* The research will lead to new questions along the way. Record these questions as well!
* Use at least one peer-reviewed or peer-edited technical resource in the exploration. Discuss how the resource aided the exploration process (did it help answer the question, lead to other good questions or other good research directions).

**Reflection:** [Metacognition]

* Why did you choose the questions above to be the most significant ones?
* Did the QFT process engage you more in the content?
* Do you find you know better what you don’t know about the topic?
* Did any of your questions get answered later in class or when reading the lecture notes or textbook?

1. D. Rothstein and L. Santana, “Make Just One Change: Teach Students to Ask Their Own Questions”, Harvard Education Press, Cambridge, MA, 2015. [↑](#footnote-ref-1)