



Question Formulation Technique (QFT) Outline

The 5 Core Elements of the QFT

1. Question Focus (QFocus)
2. Produce your questions
3. Improve your questions
4. Strategize
5. Reflect

The Rules for Producing Questions

1. Ask as many questions as you can
2. Do not stop to discuss, judge or answer the questions
3. Write down every question exactly as it is stated
4. Change any statement into a question

Step 1: Students review the rules for producing questions.

Introduce the 4 rules for producing questions:

1. *Ask as many questions as you can*
2. *Do not stop to discuss, judge or answer the questions*
3. *Write down every question exactly as it is stated*
4. *Change any statement into a question*

Ask students to discuss or share out one of the following:

- What might be difficult about following the rules?
- Which rule might be the most difficult to follow?

Step 2: Students produce questions on a question focus (qfocus) prompt.

Divide students into small groups. Pass out large butcher paper. Have students in each group assign themselves a scribe.

Introduce the question focus and have the scribe write it on their paper. Remind students to follow the rules and to number their questions. Students start asking questions with the scribe recording.

Step 3: Students improve their questions.

Define closed and open-ended questions.

Closed-ended: can be answered with "yes" or "no" or with one word.

Open-ended: require an explanation and cannot be answered with "yes", "no", or one word.

Ask students to go down their list of questions and label each with a "C" for closed-ended or "O" for open-ended.

Have students discuss and/or share out:

- Advantages and disadvantages of closed-ended questions.
- Advantages and disadvantages of open-ended questions.

Ask students to look back at their list of questions and change one closed-ended question into an open-ended, and one open-ended question into a closed-ended one.

Step 4: Students prioritize their questions.

Ask students to choose and "star" the 3 most important questions from their list.

Note: Teachers can decide the number of questions to prioritize based on the lesson. They might also choose to change the prioritization instructions. Examples of other instructions might include:

Choose 3 questions that...

- you consider most important.
- will help with your research.
- can be used for your experiment.
- can be answered as you read.
- will help you solve the problem.

Have students discuss:

- What were your reasons for selecting those three?
- Where did your priority questions fall in the overall sequence of your questions? What do you notice?

Step 5 (Optional): Students make an action plan for answering their priority questions.

Ask students to make a "T" chart on another piece of butcher paper with "Information" on one side and "Tasks" on the other.

Students fill in the chart with the following prompts:

- (For the "Information" side): To answer your 3 priority questions, what do you need to *know*?
- (For the "Tasks" side): To answer your 3 priority questions, what do you need to *do*?

1. Why does tide change?

INFORMATION	TASKS
<i>the forces that cause the tide to change</i>	<i>do an internet search</i>

Note: If students do not complete this step, instead share with students how the questions will be used. It may be that they will research one of their questions or the questions will become discussion prompts. It may be that the questions will be hung around the room and used as a guide for the unit. Even if you are only using their questions as a formative assessment, tell students explicitly that you will be reviewing their questions to see what they do and do not already know, and plan future lessons based on that information.

Step 6 (Optional): Students share out or with another group.

Have students share a part or all of the following:

- Questions they changed from open/closed
- Their three priority questions and their numbers in the original sequence
- Rationale for choosing priority questions
- Next steps from their action plan

Step 7: Students reflect on their learning.

Have students write, discuss, or share reflections on the activity and their learning. Two possible reflection questions are:

- What did you learn?
- How did you learn it?