

The Question Formulation Technique

A routine for helping students formulate, work with, and use *their own* questions.

Steps of the QFT

1. Design a Question Focus (QFocus)

The QFocus is a stimulus for jumpstarting student questions. It is the focus for students to generate their questions. The QFocus may be a statement, phrase, image, video, aural aid, math problem, equation, or anything else that gets the questions flowing. The QFocus may not be a question, and it should be related to the content or intended learning outcomes. A good QFocus should be simple and clear, and it should encourage divergent thinking.

2. Introduce the Rules

Introduce the four essential rules for producing questions to students:

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.

Give instructions for students to think about the rules and let them discuss one of the following:

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

Avoid naming or telling students the difficulties or value of the rules. Let them think about it themselves.

3. Introduce the Question Focus & Produce Questions

Present the QFocus without any additional information, keeping explanation to a minimum.

Following the rules, students make a list of questions using the QFocus as the focus for their questions. Students number each question. This step helps students think divergently.

4. Improve Questions

Students work with the questions they produced. This step helps students do high-level work with their questions and identify how different types of questions elicit different types of information and answers.

Questions can be open- or closed-ended: Closed-ended questions can be answered with *yes*, *no*, or with *one word*. Open-ended questions require an explanation and cannot be answered with *yes*, *no*, or with *one word*.

Categorize questions as closed- or open-ended. Students find closed-ended questions and mark them with a "C." Students find open-ended questions and mark them with an "O."

Discuss the value of each type of question. Students identify advantages and disadvantages of closed-ended questions. Students identify advantages and disadvantages of open-ended questions.

Change questions from one type to another. Students change one closed-ended question to open-ended. Students change one open-ended question to closed-ended.

5. Prioritize Questions

Prioritization instructions should bring students back to teaching objectives and the plan for using student questions. This step helps students think convergently. Below, we prioritize three questions, but facilitators may decide the amount of questions to prioritize based on what's best suited for the lesson.

Examples of prioritization instructions: Choose three questions that ...

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

Students should discuss and share why they selected their priority questions and where their priority questions fell in the sequence of their question list.

6. Discuss Next Steps

How will questions be used? Next steps should align with priority instructions. For students, this further contextualizes how their questions will be used.

7. Reflect

Students should reflect:

- What did you learn?
- How can you use what you learned?

This step helps students think metacognitively about how they used questions to learn and reflect on new lines of thinking they may have developed.

General Tips

- The role of the teacher is to facilitate the students moving through the different steps of the QFT as simply as possible.
- Monitor group work and give clarifying instructions as needed. Go around the room to observe group work and interactions during the process. Listen for the types of questions they are asking. Try your best not to get pulled into their discussions. Avoid answering any questions while students are in the process of producing questions.
- Validate all student contributions equally. Use the same words for all contributions. For example: "thank you" acknowledges contributions neutrally. Using different words to validate different students' contributions (e.g. good, great, excellent question) may affect student behaviour.
- Avoid giving examples of questions students should be asking. If you do, you will be setting the direction of the questions and impeding upon students' independent thinking.
- Allow groups to work at their own pace. It is okay if some groups produce more questions than others. If a group seems stuck, prompt them with the QFocus. For example, "Look at your QFocus and think about if there's anything you would like to know about it and ask a question." The value of producing questions is in the process of thinking and not in the number of questions produced.

From The Right Question Institute, <https://rightquestion.org/what-is-the-qft/>