

The Question Formulation Technique

The QFT has six key steps:

Step 1: Teachers Design a Question Focus. The Question Focus, or QFocus, is a prompt that can be presented in the form of a statement or a visual or aural aid to focus and attract student attention and quickly stimulate the formation of questions. The QFocus is different from many traditional prompts because it is not a teacher's question. It serves, instead, as the focus for student questions so students can, on their own, identify and explore a wide range of themes and ideas. For example, after studying the causes of the 1804 Haitian revolution, one teacher presented this QFocus: "Once we were slaves. Now we are free." The students began asking questions about what changed and what stayed the same after the revolution.

Step 2: Students Produce Questions. Students use a set of rules that provide a clear protocol for producing questions without assistance from the teacher. The four rules are: ask as many questions as you can; do not stop to discuss, judge, or answer any of the questions; write down every question exactly as it was stated; and change any statements into questions. Before students start generating their questions, the teacher introduces the rules and asks the students to think about and discuss possible challenges in following them. Once the students get to work, the rules provide a firm structure for an open-ended thinking process. Students are able to generate questions and think more broadly than they would have if they had not been guided by the rules.

Step 3: Students Improve Their Questions. Students then improve their questions by analyzing the differences between open- and closed-ended questions and by practicing changing one type to the other. The teacher begins this step by introducing definitions of closed- and open-ended questions. The students use the definitions to categorize the list of questions they have just produced into one of the two categories. Then, the teacher leads them through a discussion of the advantages and disadvantages of both kinds of questions. To conclude this step, the teacher asks the students to change at least one open-ended question into a closed-ended one, and vice versa, which leads students to think about how the phrasing of a question can affect the depth, quality, and value of the information they will obtain.

Step 4: Students Prioritize Their Questions. The teacher, with the lesson plan in mind, offers criteria or guidelines for the selection of priority questions. In an introduction to a unit, the instruction may be, "Choose the three questions you most want to explore further." When designing a science experiment, it may be, "Choose three testable questions." An essay related to a work of fiction may require that students select "three questions related to the key themes we've identified in this piece." During this phase, students move from thinking divergently to thinking convergently, zero in on the locus of their inquiry, and plan concrete action steps for getting information they need to complete the lesson or task.

Step 5: Students and Teachers Decide on Next Steps. At this stage, students and teachers work together to decide how to use the questions. One teacher, for example, presented all the groups' priority questions to the entire class the next day during a "Do Now" exercise and asked them to rank their top three questions. Eventually, the class and the teacher agreed on this question for their Socratic Seminar discussion: "How do poverty and injustice lead to violence in *A Tale of Two Cities*?"

Step 6: Students Reflect on What They Have Learned. The teacher reviews the steps and provides students with an opportunity to review what they have learned by producing, improving, and prioritizing their questions. Making the QFT completely transparent helps students see what they

have done and how it contributed to their thinking and learning. They can internalize the process and then apply it in many other settings.

When teachers deploy the QFT in their classes, they notice three important changes in classroom culture and practices. Teachers tell us that using the QFT consistently increases participation in group and peer learning processes, improves classroom management, and enhances their efforts to address inequities in education. As teachers see this happen again and again, they realize that their traditional practice of welcoming questions is not the same as deliberately teaching the skill of question formulation. Or, as one teacher put it: "I would often ask my students, 'Do you have any questions,' but, of course, I didn't get much back from them." In his seven years of teaching, Muhammad also encouraged his Roxbury students to ask questions but had seen just how difficult that could be for them. After using the six-step process outlined above, he was struck by "how the students went farther, deeper, and asked questions more quickly than ever before."

One Significant Change

For teachers, using the QFT requires one small but significant shift in practice: Students will be asking all the questions. A teacher's role is simply to facilitate that process. This is a significant change for students as well. It may take a minimum of 45 minutes for students to go through all the steps the first time it is introduced in a classroom; but as they gain experience using the QFT, teachers find that the students can run through the process very quickly, in 10 to 15 minutes, even when working in groups.

The QFT provides a deliberate way to help students cultivate a skill that is fundamentally important for all learning. Teaching this skill in every classroom can help successful students to go deeper in their thinking and encourage struggling students to develop a new thirst for learning. Their questions will have much to teach us.

Dan Rothstein and Luz Santana, codirectors of the Right Question Institute, are the authors of the forthcoming book [Make Just One Change: Teach Students to Ask Their Own Questions](#) to be published in September 2011 by Harvard Education Press.