Teaching Students to Ask Effective Questions Using the QFT

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How do we build student capacity to ask their own questions?
A question can take you anywhere
"There is no learning without having to pose a question."

-Richard Feynman
Nobel-Prizewinning physicist
Self-questioning (metacognitive strategy):
• Student formulation of their own questions is one of the most effective metacognitive strategies
• Engaging in pre-lesson self-questioning improved students rate of learning by nearly 50% (Hattie, p.193)

John Hattie
students need the intellectual power to recognize societal
problems; ask good questions and develop robust
investigations into them; consider possible solutions and
consequences; separate evidence-based claims from
parochial opinions; and communicate and act upon what
they learn.

The standards help educators create a student-centered
approach to social studies in which critical skills and
inquiry are the focus, rather than rote memorization of
facts.

The aim is to create lifelong learners who are equipped
with the skills and knowledge to shape our nation’s
democratic institutions and respond to any challenge
they may meet in the future.
SS.K.1 With prompting and support, generate compelling questions to explore how learning and working together builds a classroom community.

SS.1.1 With prompting and support, generate compelling questions to explore the places people live and work.

SS.5.1 Generate compelling questions to explore the creation of the United States.

SS.9-12.WH5 Generate and answer supporting questions while explaining how they contribute to an inquiry and how new compelling and supporting questions emerge through the inquiry process.
How do we teach our students to ask the questions?
Introducing the Question Formulation Technique Into Your Classroom

www.rightquestion.org
The Question Formulation Technique (QFT) is a simple, but rigorous, step-by-step process designed to help students produce, improve and strategize on how to use their questions.

The **QFT** allows students to practice three thinking abilities in one process: divergent, convergent and metacognitive thinking.
Choosing a Q Focus

The QFocus should be designed to accomplish one or more of the following:

• Generate Interest
• Stimulate New Thinking
• Introduce a Topic
• Set a Learning Agenda
• Deepen Comprehension
• Formative Assessment
The QFT in a 5th grade classroom was used to develop questions to ask a guest speaker.
Your Turn

- Engage in the QFT as a student to experience the process
- If you have “teacher” questions write them on a sticky note
RULES FOR PRODUCING QUESTIONS

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

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1. Follow the Rules for Producing Questions
   - Ask as many questions as you can
   - Do not stop to discuss, judge or answer the questions
   - Write down every question exactly as it is stated
   - Change any statement into a question

2. Number your questions

**QFocus:**
Some students are not asking questions.
STEP #2: CATEGORIZE THE QUESTIONS

• **Closed-ended questions** – they can be answered with “yes” or “no” or with one word.

• **Open-ended questions** – they require an explanation and cannot be answered with “yes” or “no” or with one word.
STEP #2: CATEGORIZE YOUR QUESTIONS

Identify closed- and open-ended questions.

• Mark the closed-ended questions with a C and the open-ended questions with an O.
1. What are the advantages of open ended questions?
2. What are the disadvantages to open ended questions?
3. What are the advantages of close ended questions?
4. What are the disadvantages to close ended questions?

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STEP #2: CATEGORIZE YOUR QUESTIONS

- Review your list of questions and change one closed-ended question into an open-ended.

- Then, change one open-ended question into a closed-ended one.
Choose the three most important questions from your list.

Keep in mind the QFocus.

Mark each priority question with an “X”
STEP #3: SHARE YOUR QUESTIONS

Share with the group:

• your three priority questions
• your rationale for selecting those three
• the numbers of your priority questions

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STEP #4: NEXT STEPS

Discuss at your table:

What would you have your students do with their three priority questions?

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Students can use their questions for many purposes, including the following:

- Conduct Research
- Reports
- Conduct Experiments
- Independent Projects
- Write Papers/Essays
- Group and Individual Projects
- Socratic Seminars/Debates
- Prepare for Presentations/Interviews
Classroom Example
Using a Quote

**Question Focus**

“The disciplinary policies of our society perpetuate injustice.”
Classroom Example Using a Photograph

Question Focus
Classroom Example Using a Political Cartoon

Question Focus
How will you use the QFT in your classroom to build the capacity of your students in asking their own questions?
1) Question Focus
   - Follow the rules
   - Number your questions

2) Produce Your Questions
   - Follow the rules
   - Number your questions

3) Improve Your Questions
   - Categorize questions as Closed or Open-ended
   - Change questions from one type to another

4) Prioritize Your Questions

5) Share & Discuss Next Steps

6) Reflect

1. Ask as many questions as you can
2. Do not stop to discuss, judge or answer
3. Record exactly as stated
4. Change statements into questions

**Closed-Ended:** Answered with “yes,” “no” or one word

**Open-Ended:** Require longer explanation
The Skill of Asking Questions

- Moving from ignorance as weakness to ignorance as opportunity
- Arriving at better answers (and more questions)
- Increasing engagement and ownership
- Demonstrating inquiry in the classroom

And…
“We need to be taught to study rather than to believe, to inquire rather than to affirm.” - Septima Clark
Information about the QFT can also be found here:
Make just one change: Teach Students to Ask Their Own Question
By Dan Rothstein and Luz Santana

www.therightquestion.org
Videos of the QFT in action
Template for facilitating the QFT with your students
Student handouts
Blog

TED X Talk: https://www.youtube.com/watch?v=_JdczdsYBNA
• How and when will you introduce the QFT into your classroom with your students?
Questions?
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