Teaching Students to Ask Their Own Questions

A Presentation Revised From:

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<th>Your Presenters</th>
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| **Hayley Dupuy**  
Terman 7th- and 8th-Grade English Teacher |
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English/Social Studies Support TOSA |
1. Welcome and Session Overview
2. Experiencing the Question Formulation Technique™ (QFT™)
3. Exploring the QFT & Three Thinking Abilities
4. Integrating the QFT into the Classroom
5. Reflection & Questions
LAURENCE, MA, 1990

“We don’t go to the school because we don’t even know what to ask.”
The skill of question formulation is the single most powerful renewable source of intellectual energy and an essential learning skill for students, employees and citizens.
“What people think of as the moment of discovery is really the discovery of the question.”

Jonas Salk - Polio Researcher

“I would rather have questions that can’t be answered than answers that can’t be questioned.”

Attributed to Richard Feynman
PERCENTAGE OF BASIC SKILL ATTAINMENT

http://nces.ed.gov/nationsreportcard/pubs/main2007/2008468.asp#section1
PERCENTAGE OF CHILDREN WITH BASIC SKILLS ATTAINMENT

Data on question-asking based on parent and teacher feedback
http://nces.ed.gov/nationsreportcard/pubs/main2007/2008468.asp#section1
How can we easily develop students’ question formulation skills?
The Question Formulation Technique

A rigorous step-by-step process that helps students (across grades, subject areas and levels of academic readiness) to consistently:

- **Produce** their own questions
- **Improve** their questions
- **Strategize** on how to use their questions
MAKE JUST ONE CHANGE

Teach Students to Ask Their Own Questions

DAN ROTHSTEIN and LUZ SANTANA

Foreword by WENDY D. PURIEFOY
Agenda

1. Welcome and Session Overview

2. Experiencing the Question Formulation Technique™ (QFT™)

3. Exploring the QFT & Three Thinking Abilities

4. Integrating the QFT into the Classroom

5. Reflection & Questions
Components of the Question Formulation Technique

1. A Question Focus
2. Rules for Producing Questions
3. Producing Questions
4. Categorizing Questions: Open/Closed
5. Prioritizing Questions
6. Next Steps
7. Reflection
Rules for Producing Questions

1. ASK AS MANY QUESTIONS AS YOU CAN

2. DO NOT STOP TO ANSWER, JUDGE OR DISCUSS

3. WRITE DOWN EVERY QUESTION EXACTLY AS STATED

4. CHANGE ANY STATEMENTS INTO QUESTIONS
STUDENTS ARE NOT ASKING QUESTIONS
CLOSED AND OPEN-ENDED QUESTIONS

Closed-ended questions can be answered with a “yes” or “no” or with a one-word answer.

Open-ended questions require more explanation.

IDENTIFY YOUR QUESTIONS AS CLOSED-ENDED OR OPEN-ENDED BY MARKING THEM WITH A “C” OR AN “O”
## Closed-Ended Questions

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<th>Open-Ended Questions</th>
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Both Types of Questions are Useful
Rewriting Closed and Open-Ended Questions

Take one closed-ended question and change it into an open-ended question.

Take one open-ended question and change it into a close-ended question.
Prioritize:

REVIEW YOUR LIST OF QUESTIONS AND CHOOSE THE THREE QUESTIONS YOU CONSIDER MOST IMPORTANT.

While prioritizing, think about your QFocus!
1. Questions you changed from open to closed and vice versa.
2. Your three priority questions (including which number they are on your list - e.g. #3, #5, #12)
3. Rationale for choosing priority questions
The Question Formulation Technique

1. A Question Focus
2. Rules for Producing Questions
3. Producing Questions
4. Categorizing Questions-Open/Closed
5. Prioritizing Questions
6. Reflection
Reflection:

What did you learn?
1. Welcome and Session Overview

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A Question Focus

- Rules for Producing Questions
- Producing Questions
- Categorizing Questions: Open/Closed
- Prioritizing Questions

Reflection
Thinking in many different directions
CONVERGENT THINKING

narrowing down, focusing
METACOGNITIVE THINKING

Thinking about thinking
Students:

- Are more engaged
- Take more ownership of their learning
- Learn more
I learned that when you ask your own questions you can actually learn more.

Because when you ask your own questions you're basically challenging yourself.

Because it gives you an outlet for further expanding your learning through asking more questions.
Question Focus: “Powerlines from a power plant carry electricity at voltages of 345,000 volts or more! Transformers, like the one shown reduce that voltage to 120V for home use.”
THE SHIFT IN PRACTICE

ONE BASIC CHANGE:

Your students are the ones asking the questions.
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Using the QFT in a Unit or Lesson

Beginning-----Middle------End
Beginning of a Unit - 8th Grade English Class

- Image: Woman applying lipstick with the text: "If you don't want blood on your hands, why would you put it on your face? End animal testing.

- Image: Protest sign: "PRO-Test, many human lives saved thanks to animals."
FIGURE A.11.2  Moose and Wolf Populations, 1959–2009

Middle of a Unit - Art

Campbell's Condensed Tomato Soup
End of a Unit - 8th Grade Social Studies Class

Question Focus: Questions that should be asked about American Imperialism at the turn of the 20th century.
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Reflecting on Next Steps:

Where in your current or next unit, might you try a QFocus?

Please either talk with a neighbor about your next steps OR jot down your ideas.
Teaching Students to Ask Questions:

What questions do you have for us?

For More Information:
- Handouts posted on Sched
- Rightquestion.org (Educator Network)