Student-Generated Questions

to Increase Learning

August 2018

Galena, AK

Becky Graf

http://bit.ly/Aug2018-LitMaterials

beckygraf3@gmail.com

Student-Generated Questions

Allowing students to generate their own questions is a simple, but rigorous, step-by-step process designed to help students go deeper with content. The process incorporates three thinking abilities in one process: divergent (creative), convergent (analytical), and metacognitive thinking.

Phases for Student-Generated Questions

1. The Question Focus
2. The Rules for Producing Questions
3. Producing Questions
4. Categorizing Questions
5. Prioritizing Questions
6. Sharing Results
7. Planning Next Steps
8. Reflecting

See pages 2-4 for info about each phase.

Student Rules for Producing Questions

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

Why Use Student Questions?

- Help students learn MORE & remember LONGER
- Help students analyze content

As a teacher …

- Make your teaching easier
- Generate excitement & curiosity around your content
- See A-ha moments occur for students
- Have flexible timing – use at the beginning, middle, or end of lessons or units
- Have a process to use in multiple ways. Students examine examples, solve problems, generate ideas, and more!

Teacher Steps

1. Plan Question Focus & Goals
2. Teach the rules
3. Introduce the Question Focus
4. Give Instructions at Each Step

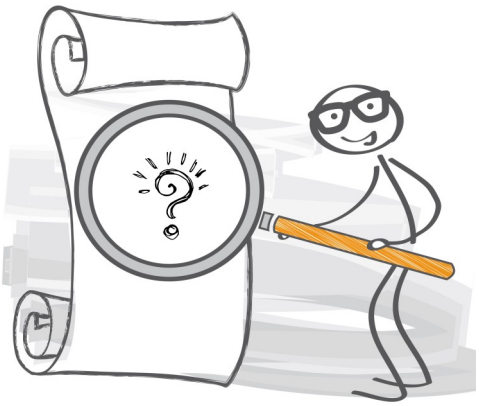
1 The Question Focus (QFocus)

A QFocus is a simple statement or a visual used to help students generate questions created from curriculum content. A new QFocus is needed *every* time you have students generate questions.

Question Focus Goals

The Question Focus 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



A Good Question Focus

- Is brief
- Provokes or stimulates new lines of thinking
- Is a statement or visual (In other words, the QFocus should not be worded as a question.)

2

Rules for Producing Questions

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

Teaching Tips

- Teach the rules the first time you use the process with students.
- Before sharing the Question Focus, have students review and discuss the Rules for Producing Questions. Review the rules every time you use the process with students.
- Distribute or post the Rules for Producing Questions.

Why have these rules for students?

- The rules enable students to access curriculum and learn in a safe environment. They can brainstorm and share their thinking. The rules work when working with groups or working solo.
- Students are thinking metacognitively when they think about how the rules contribute to the exercise. Ask students to reflect about one of these questions:
    - ◊ What do you think would be difficult about following these rules?
    - ◊ Which one of these rules might be difficult to follow? Why?
- The rules allow for student choice, autonomy, and independence.

3 Producing Questions

Once you have taught and reviewed the "Rules for Producing Questions:"

- Divide students into small groups of 3-5.
- Ask groups to identify a notetaker.
- Distribute paper (newsprint, flipchart, worksheet) for recording to each small group.

Introduce the Question Focus and ask students to

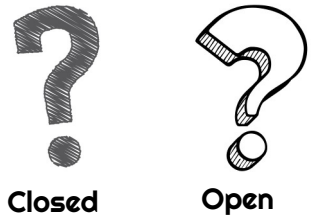
- Produce as many questions as they can in the allotted time.
- Follow the Rules for Producing Questions.
- Number the questions.

TIP: The note-taker should also contribute questions.

Teaching Tips

- In this process, the teacher's role shifts to one of coach.
- The teacher's job is to step back and refrain from over-explaining the question focus or modeling too many questions.
- Student groups will approach the QFocus in different ways. This is not a competition for the most questions, but rather a process for divergent thinking. As long as all are engaged in the process, the rate at which they work is secondary.

4 Categorizing Questions



- Define 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.
- Have students determine which questions are closed-ended and which are open-ended. They can mark their questions "C" and "O."
- Students continue working as a small group to change a set number of questions from open-ended to closed-ended and from close-ended to open-ended. (Tip: If students have questions from only one type, ask them to change extra questions from their list to the other type.)
- Ask students to name the advantages and disadvantages for both types of questions.
  - ◊ Many students believe that open-ended questions are ideal and close-ended questions are inferior. Through this process they can discover strengths in using both types of questions.

Often students are given questions to answer and material to study, but they are rarely asked to analyze the questions. Going through this process of reading, analyzing, and discussing questions helps deepen their understanding of the nuances in questions and content.

Options for next steps with the categorized lists:

1. Relate categories of questions to a purpose.
2. Move forward to prioritizing questions (Phase 5).
3. Create lists of situations where these questions would be appropriate.

5 Prioritizing Questions

Criteria for prioritizing questions is usually set by the teacher. Criteria will depend on your learning goals and what you have planned as next steps with the questions. Instructions for prioritization will vary. Here are just a few examples:

Choose three questions that …

- Most interest you.
- You consider to be the most important.
- Will best help you design your research project.
- Will best help you design your experiment.
- Will best help you solve the problem.
- You want/need to answer first.

Ask students to review their list of questions and choose THREE questions and mark them with an "X."

Remind students to keep the QFocus in mind while prioritizing.

Ask students to think about and discuss in their small groups their rationale for choosing their priority questions. For example, "why did you choose these three as the most important?"

Ask students to identify where their priority questions are in the sequence of the whole list of questions. For example, "what numbers are the priority questions?"

6 Sharing Results

Ask students to share the following aloud: (TIP: One group member can report and others can join in.)

1. The questions they changed from closed-ended to open-ended and then from open-ended to closed-ended.
    - Read the original question
    - Read the new question
2. Their three priority questions
3. Their reasons for choosing their priority questions.
4. The numbers of the priority questions in the sequence of the entire list.

    Often, students notice that the priority questions came from different places (beginning, middle, end) and this helps them see the value of generating many questions before choosing priority questions.

7 Planning Next Steps

The QFT can be used at any point during a unit or lesson. A teacher only needs a Question Focus and a goal to begin. The options for using priority questions are endless. At the beginning of a unit, priority questions may be used for reading/study guides, homework, research, and essential questions for the unit. In the middle of a unit they might be used for formative assessments, Socratic seminars, or quick checks. At the end of a unit they may be used for essay prompts, test questions, research projects, and other summative assessments.

Often, asking questions unlocks ideas or solutions that were not clear before the activity. This light bulb moment gives students ownership over the process and the work.

Using Student Questions

Students can use their questions for many purposes.

- Conduct research
- Reports
- Conduct experiments
- Participate in group or individual projects
- Write papers/essays
- Debate
- Prepare for presentations or interviews

8 Reflecting

Ask students to think about the work they have done, what have learned and its value. For example, you can use questions like:

- What did you learn?
- What is the value of learning to ask your own questions?
- How can you use what you learned?

They can also reflect on their role in the process. This step is flexible, which offers teachers many different options for having students think metacognitively.

Tips

- Use one or more reflection questions.
- Ask one question at a time.

For more information ...

http://bit.ly/Aug2018-LitMaterials

Or Email BeckyGraf3@gmail.com