

Module 5: Questioning
Six Highly-Effective Teaching Strategies
Handout

This handout accompanies the module 4 video. You can use this handout to review information on the video and record your answers to discussion. Follow along as prompted during the video.

Section 1: Growth & Discussion

Discussion 1

So, what makes a question good?

Discuss this question as a faculty, and write down three principles that make questions effective.

Discussion 2

Work with a partner to develop HOT questions for the following topics. Then, share your questions with the entire group, explaining how your question is HOT.

Science: Parts of a plant

Language Arts: Alliteration

Discussion 3

Write down the answer to this question.

Who committed the first sin—Eve, Adam, or both?

1. Write your answer on a piece of paper.
2. Find someone with an answer different than yours.
3. Convince your partner that your answer is best.

As a group, discuss how this quadrant four question/activity reveals students' knowledge and understanding.

Discussion 4

Make this question an open-ended one appropriate to the grade level you teach.

Who was the first U.S. president?

Have a few people share their open-ended questions with the whole group. Discuss how the question and people's answers help expand your own thinking.

Discussion 5

Work in groups of two or three. Compare the following essential questions to McTighe and Wiggins' criteria.

Topic	Essential Question
Constitution/Bill of Rights:	<i>How can the government be kept from abusing its power?</i>
Math Word Problems:	<i>What do good problem solvers do?</i>

Criteria for Essential Question Evaluation

1. Is *open-ended*.
2. Is *thought-provoking* and *intellectually engaging*, often sparking discussion and debate.
3. Calls for *higher-order thinking*, such as analysis, inference, evaluation, prediction. It cannot be effectively answered by recall alone.
4. Points toward *important, transferable ideas* within (and sometimes across) disciplines.
5. Raises *additional questions* and sparks further inquiry.
6. Requires *support* and *justification*, not just an answer.
7. *Recur*s over time; that is, the question can and should be revisited again and again.

Challenge: Come up with an essential question for a group of lessons on *Insects*.

Discussion 6

Application Time.

1. Reflect upon the teaching style you will use (Direct Instruction, Cognitive Instruction, Constructivism), and consider which questioning strategy or strategies from that teaching style you will try.
2. Take three minutes to jot down your ideas for the questions or approach you will take.
3. Share your ideas with a partner.

Section 2: Planning and Implementation

You will teach a lesson in which you plan and use effective questioning. That means your questions foster discussion, stimulate thinking, and avoid looking for a single, right answer. Instead, they should a) be HOT, b) engage all students, and c) be open-ended to foster discussion.

As you implement your plan, capture data of the experience through student work or classroom video. The data should help you reflect on the effectiveness, based upon student learning, of your approach. Bring your student learning product to your next meeting and share with your colleagues.

1. Select an upcoming lesson you will teach.
2. Decide whether you will use a Direct (behaviorist), Cognitive, or Constructivist instructional approach.
3. Select a questioning approach that fits the instructional approach.
4. Plan and use the question(s) you created.

Use the following as your lesson preparation guide:

Lesson or Unit Topic: _____

Instructional and Questioning Approach (circle one): Direct Cognitive Constructivist

Identify the Question or Questions you will use:

Essential Question: _____

HOT Question(s): _____

Quadrant 4 Question & Activity: _____

Socratic Seminar (Describe text, question, process): _____

Student Generated Questions (Describe the process and learning activities): _____

Section 3: Reflection and Revision

After you have taught your lesson(s) or unit using effective questioning, meet together and discuss how things went. Remember to bring some student work samples from that lesson that you can show your colleagues.

Use these questions as reflection prompts:

- How did your questions foster student thinking?
- How did your students react to your questioning approach?
- How do the student data (video, work samples) demonstrate their understanding and critical thinking?

Section 4: Optional Extensions

Books

McTighe, J. & Wiggins, G. (2013) *Essential questions: Opening doors to student understanding*. Alexandria VA. ASCD. <http://www.ascd.org/Publications/Books/Overview/Essential-Questions.aspx>

Ostroff, W. L. (2016) *Cultivating curiosity in K-12 classrooms*. Alexandria VA. ASCD. <http://www.ascd.org/Publications/Books/Overview/Cultivating-Curiosity-in-K-12-Classrooms.aspx>

Articles

McTighe, J. & Wiggins, G. (2013) Chapter 1: What makes a question essential? <http://www.ascd.org/publications/books/109004/chapters/What-Makes-a-Question-Essential%A2.aspx>

Finley, T. (2014) New classroom questioning techniques for the best school year ever. *EDUTOPIA*. <https://www.edutopia.org/blog/new-classroom-questioning-techniques-todd-finley>

Coffey, H. (n.d.) Socratic method <http://www.learnnc.org/lp/pages/4994>

Socratic Seminar Tools <https://www.nwabr.org/sites/default/files/SocSem.pdf>

Videos

Essential Questions <https://youtu.be/lx1tsuEm6k>

Case Study: Essential Questions in Social Studies http://essentialquestions.org/video_3.lasso

Socratic Seminar – teacher graded <http://www.authenticeducation.org/alexis/>

Socratic Seminar – student graded <https://www.teachingchannel.org/videos/bring-socratic-seminars-to-the-classroom>

Additional Resources

Appropriate Questioning Techniques for Learning Theoris / Teaching Styles

Behaviorists are primarily concerned with the transmission of knowledge through repetition, practice and testing, and reinforcement. Behaviorist primarily use a direct instruction approach. This mode of instruction is often associated with a priority for “covering the material.” Most students need time to think about and respond to the course content for them to learn it. As Daniel Willingham (2009) pointed out, “Memory is the residue of thought” (p. 54).

So effective questions in a behaviorist inspired, direct instruction teaching approach must cause students to think. Such a teacher should utilize

- Essential Questions
- HOT Questions
- Quadrant 4 Questions

Cognitivists are primarily concerned with the understanding or application of knowledge by connecting it to previous learning through manipulation and verbal and non-verbal representations. Cognitivists use hands-on learning, small group work, graphic organizers, and curricular integration within a teacher-directed context. The kind of questioning tools we discussed in this module fit well in the cognitivist teacher’s tool belt, in particular the following:

- Essential Questions
- HOT Questions
- Socratic Seminars

Constructivists are primarily concerned with students creating their own understandings and new knowledge through a student-driven, open-ended approach. Constructivists facilitate student-directed learning. Teachers employing a constructivist learning theory naturally incorporate powerful questioning approaches such as the following:

- Socratic Seminars
- Student-generated questions

If you wish to experiment with learning driven by student-generated questions, you might try this technique developed by Rothstein and Santana (2011, as found in Ostroff, p. 103).

Question Formulation Technique

1. Teacher provides Question Focus (theme or topic)
2. Students in groups of 3 – 5 produce as many questions as can in 5 minutes
3. Improve questions by changing closed-ended to open-ended
4. Students select their priority questions (3 best)
5. Provide rationale for their choices
6. Teachers and students work together to decide how to use the priority questions
7. At end of unit, reflect on what they learned, how they learned it, and how they will use it.

Criteria for Essential Question Evaluation

1. Is *open-ended*.
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