ESSENTIAL QUESTIONS

Opening Doors to Student Understanding

1

What Makes a Question Essential?

Teachers regularly pose questions to their students, but the purpose and form of these questions can vary widely. This book is about a particular kind of question—one we call "essential." So, what makes a question "essential"? Let us begin by engaging you in a bit of inquiry using the following concept-attainment exercise to examine the characteristics of an essential question. The exercise has three parts, as explained in the next several paragraphs.

First, examine the questions in the two columns and try to determine the distinguishing characteristics of the ones labeled "Essential" compared to those labeled "Not Essential." What traits do the essential questions have in common? How do they differ from the others?

Essential Questions

- How do the arts shape, as well as reflect, a culture?
- What do effective problem solvers do when they get stuck?
- How strong is the scientific evidence?
- Is there ever a "just" war?
- How can I sound more like a native speaker?
- Who is a true friend?

Not Essential Questions

- What common artistic symbols were used by the Incas and the Mayans?
- What steps did you follow to get your answer?
- What is a variable in scientific investigations?
- What key event sparked World War I?
- What are common Spanish colloquialisms?
- Who is Maggie's best friend in the story?

Second, look at these additional examples, organized by subject area, to spark your thinking and clarify the qualities of essential questions, or EQs.

Essential Questions in History and Social Studies

- Whose "story" is this?
- How can we know what *really* happened in the past?
- How should governments balance the rights of individuals with the common good?
- Should _____ (e.g., immigration, media expression) be restricted or regulated? When? Who decides?
- Why do people move?
- Why is that there? (geography)
- What is worth fighting for?

Essential Questions in Mathematics

- When and why should we estimate?
- Is there a pattern?
- How does *what* we measure influence *how* we measure? How does *how* we measure influence *what* we measure (or don't measure)?
- What do good problem solvers do, especially when they get stuck?
- How accurate (precise) does this solution need to be?
- What are the limits of this math model and of mathematical modeling in general?

Essential Questions in Language Arts

- What do good readers do, especially when they don't comprehend a text?
- How does *what* I am reading influence *how* I should read it?
- Why am I writing? For whom?
- How do effective writers hook and hold their readers?
- What is the relationship between fiction and truth?
- How are stories from other places and times about me?

Essential Questions in Science

- What makes objects move the way they do?
- How are structure and function related in living things?
- Is aging a disease?
- Why and how do scientific theories change?
- How can we best measure what we cannot directly see?
- How do we decide what to believe about a scientific claim?

Essential Questions in the Arts

- What can artworks tell us about a culture or society?
- What influences creative expression?

- To what extent do artists have a responsibility to their audiences?
- Do audiences have any responsibility to artists?
- What's the difference between a thoughtful and a thoughtless critique?
- If practice makes perfect, what makes perfect practice?

Essential Questions in World Languages

- What should I do in my head when trying to learn a language?
- How can I express myself when I don't know all the words (of a target language)?
- What am I afraid of in hesitating to speak this language? How can I overcome my hesitancy?
- How do native speakers differ, if at all, from fluent foreigners? How can I sound more like a native speaker?
- How much cultural understanding is required to become competent in using a language?
- How can I explore and describe cultures without stereotyping them?

As a result of comparing essential and nonessential questions and studying the additional examples, you should now have an idea of what makes a question "essential." Here are seven defining characteristics. A good essential question

1. Is *open-ended;* that is, it typically will not have a single, final, and correct answer.
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. *Recurs* over time; that is, the question can and should be revisited again and again.

How does your working definition compare?

Questions that meet all or most of these criteria qualify as essential. These are questions that are not answerable with finality in a single lesson or a brief sentence—and that's the point. Their aim is to stimulate thought, to provoke inquiry, and to spark more questions, including thoughtful student questions, not just pat answers. They are provocative and generative. By tackling such questions, learners are engaged in *uncovering* the depth and richness of a topic that might otherwise be obscured by simply *covering* it.

Now we present the third part of the concept-attainment exercise. Using the characteristics we presented and those that you noted, which of the following questions do you think are essential? Why?

Question	Is it Essential?
1. In what year was the Battle of Hastings fought?	Yes/No
2. How do effective writers hook and hold their readers?	Yes/No
3. Is biology destiny?	Yes/No
4. Onomatopoeia—what's up with that?	Yes/No
5. What are examples of animals adapting to their environment?	Yes/No
6. What are the limits of arithmetic?	Yes/No

Check your answers against the key on page 15. How did you do? Are you getting a better feel for what makes a question essential? Good! Now we'll probe more deeply to uncover the nuances of EQs.

Two Sides of a Coin

Although we have characterized essential questions as being important for stimulating student thinking and inquiry, this is not their sole function. In the body of work known as Understanding by Design (McTighe & Wiggins, 2004; Wiggins & McTighe, 2005, 2007, 2011, 2012), we propose that education should strive to develop and deepen students' understanding of important ideas and processes so that they can transfer their learning within and outside school. Accordingly, we recommend that content (related goals) be unpacked to identify long-term transfer goals and desired understandings. Part of this unpacking involves the development of associated essential questions. In other words, EQs can be used to effectively frame our key learning goals. For example, if a content standard calls for students to learn about the three branches of government, then questions such as "When does a government overstep its authority?" or "How might we guard against governmental abuses of power?" help stimulate student thinking about why we need checks and balances, what the framers of the Constitution were trying to achieve, and other governmental approaches to balancing power. Note that the question has more than one answer, even if in the United States we have grown accustomed to our particular answer. In this sense, the question is still open, not closed.

We'll have more to say about how to come up with good essential questions in later chapters, but for now try this simple thought experiment. If the content you are expected to teach represents "answers," then what questions were being asked by the people who came up with those answers? This conceptual move offers a useful strategy both for seeing a link between content standards and important questions and for coming up with ways of engaging students in the very kind of thinking that is required to truly understand the content. In short, expert knowledge is the result of inquiry, argument, and difference of opinion; the best questions point to hard-won big ideas that we want learners to come to under-

Figure 1.1 Examples of Four Types of Classroom Questions

Content or Topic	Questions That Hook	Questions That Lead	Questions That Guide	Essential Questions
Nutrition	Can what you eat help prevent zits?	What types of foods are in the food groups?	What is a balanced diet?	What should we eat?
Novel Study on *Catcher in the Rye*	Do you know any teenagers that act crazy? Why do they act that way?	When (time period) and where (location) does the novel take place?	Is Holden normal? (Note: The main character is telling the story from a psychiatric hospital.)	What makes a story timeless? What "truths" can we learn from fiction?
Musical Scales	Do your parents like your music?	What are the notes of the C major scale?	Why would a composer use a major as opposed to a minor scale?	What distinguishes music from "noise"? What influences musical tastes (e.g., culture, age)?
Constitution/Bill of Rights	Do you agree with the "stand your ground" laws?	What is the Second Amendment?	Does the Second Amendment support "stand your ground" laws, according to the courts?	Which constitutional principles are timeless and which should be amended if outdated or outmoded (e.g., only white males were once seen as "persons")? Where is the balance between personal freedoms and the common good? Is the Fourth Amendment or any other parts of the Bill of Rights out of date?
Psychology/Human Behavior	Why do kids sometimes act stupid when they are in groups?	Who was B. F. Skinner? What is behaviorism?	What are the similarities and differences among behaviorism, Gestalt psychology, and Freudian psychology?	Why do people behave as they do?

Figure 1.2 Characteristics of Four Types of Classroom Questions

Questions That Hook
• Asked to interest learners around a new topic • May spark curiosity, questions, or debate • Often framed in engaging "kid language" • Asked once or twice, but not revisited
Questions That Lead
• Asked to be answered • Have a "correct" answer • Support recall and information finding • Asked once (or until *the* answer is given) • Require no (or minimal) support
Questions That Guide
• Asked to encourage and guide exploration of a topic • Point toward desired knowledge and skill (but not necessarily to a single answer) • May be asked over time (e.g., throughout a unit) • Generally require some explanation and support
Essential Questions
• Asked to stimulate ongoing thinking and inquiry • Raise more questions • Spark discussion and debate • Asked and reasked throughout the unit (and maybe the year) • Demand justification and support • "Answers" may change as understanding deepens

Summing Up

Classroom questions can be classified into different types, each with different, legitimate purposes. As you consider the appropriate types of questions to include in your teaching, we caution you, however, to distinguish between two connotations of the term *essential:* (1) essential to me in my role as a teacher, where questions that "hook" and "guide" are regularly employed, versus (2) essential for students to continuously examine so as to "come to an understanding" of key ideas and processes. We are using the second meaning in this book. Indeed, in an understanding-focused curriculum, we want more of the latter kinds of questions.

Now that you have a better understanding of what makes a question essential, we will look more closely at when and why we should pose them. (Note: Although you might "get" the idea of essential questions, it doesn't follow that you will necessarily be able to automatically develop great essential questions on your own. We will explore ideas for generating and refining EQs in Chapter 3.)

FAQs

My principal says that we should have at least one essential question for every lesson we teach. I am finding this very hard. Can you help?

In Understanding by Design, we have chosen the unit as a focus for design because the key elements of UbD—transfer goals, understandings, essential questions, and performances of understanding—are too complex and multifaceted to be satisfactorily addressed within a single lesson. In particular, essential questions are meant to focus on long-term learning and thus be revisited over time, not answered by the end of a class period. Not only would it be difficult to come up with a new EQ for every lesson; the predictable result would be a set of superficial (leading) or, at best, guiding questions.

Your principal is presumably well intended, but we would want her to distinguish between *using* EQs on a regular basis (we endorse that) and using a *new* one for each lesson. One or two truly essential questions can be used to frame the learning over the course of many lessons. Perhaps you should give your principal this book!

Answers and Commentary for Exercise on p. 4

Question	Is the question essential?	Commentary
1. In what year was the Battle of Hastings fought?	No	This is a factual question with a single correct answer.
2. How do effective writers hook and hold their readers?	Yes	This is a rich question for exploring the many facets of effective writing, including different genres, audience/purpose connections, writer's voice, and organizational structures.
3. Is biology destiny?	Yes	This is intended to be a thought-provoking, open question with many nuances (so don't be fooled by the phrasing).
4. Onomatopoeia—what's up with that?	No	Although the format of the question may wake up a sleepy student, it doesn't really open up worthy inquiry. At best, it can lead to a definition of a new term.
5. What are examples of animals adapting to their environment?	No	This is a useful question for helping students understand the concept of adaptation in various manifestations; however, there are specific answers that could be found in a book.
6. What are the limits of arithmetic?	Yes	This is an open question, widely applicable across mathematical topics across the grades; the question helps students come to understand an abstract yet important idea: mathematics involves tools and methods that have both strengths and limitations.