How to Make Your Questions Essential

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The well-known aphorism that "writing is revision" applies particularly well to crafting essential questions. With more than 30 years' experience in teaching through questions and helping educators create great unit-framing queries, we've repeatedly seen the wisdom of this saying.

But what makes a question essential in the first place? Essential questions foster the kinds of inquiries, discussions, and reflections that help learners find meaning in their learning and achieve deeper thought and better quality in their work. Essential questions meet the following criteria:

- They stimulate ongoing thinking and inquiry.
- They're arguable, with multiple plausible answers.
- They raise further questions.
- They spark discussion and debate.
- They demand evidence and reasoning because varying answers exist.
- They point to big ideas and pressing issues.
- They fruitfully recur throughout the unit or year.
- The answers proposed are tentative and may change in light of new experiences and deepening understanding (McTighe & Wiggins, 2013).

Here are some examples of good essential questions: *To what extent does* where *you live influence* how *you live? What should we make of outliers—error, anomaly, or insight? What should our diet and wellness plans be in a world of constantly changing advice from experts?*

Seven Ways to Hone Your Questions

Alas, such questions rarely emerge in the first draft. Here are some common first-draft questions: *How do good readers use strategies to understand text? What's the value of chemistry? What were the three major causes of World War I? Why do earthquakes happen?* These questions fail to meet the suggested criteria. They're all convergent, low-level questions designed to support content acquisition. They either point toward the one official "right" answer, or they elicit mere lists and thus no further inquiry.

If first drafts of essential questions are likely to be too fact-focused, how can we ensure that subsequent drafts better meet the criteria? Here are some editing tips, which, in the spirit of the topic, we've framed as questions.

1. How well does the draft question meet the criteria?
Writers of essential questions need to develop the discipline of pausing to deliberately self-assess their question against specific criteria. Look at the first nonexample: *How do good readers use strategies to understand text?* The question is leading; it merely aims to remind students of the answer. It asks for recall, not inquiry.
A better question might be, *Which strategy should I use when I don't understand what I'm reading?* By putting the question this way, the student must think about all possible moves and determine which to use in each "stuck" situation. The research on effective instruction in comprehension strategies shows that asking students to generalize their answers helps them become self-regulated learners because generalizations facilitate transfer (Bransford, Brown, & Cocking, 2000; Brown & Palincsar, 1984; Wiggins, 2015).

Tip: Create a simple checklist to use for either self- or peer-assessment of draft questions. The checklist should include the criteria listed above. You can also use the seven questions in this article to self-assess your draft. Finally, get in the habit of running draft ideas by others. Sometimes by just saying the draft question aloud, you'll realize how to edit it.

2. If the question is too convergent, how can I phrase it to invite inquiry and argument? If the question is factual, what question on the same topic is worth arguing about?
Arguments involve unsettled issues of understanding or application—not settled knowledge and skill. We typically find debates not in the content itself but in discussions of its value, importance, or applicability. For example, there's no argument about how to kick a soccer ball with the instep, but there are endless debates over when to shoot, pass, or dribble.

Here's a draft question in English language arts: *What is proper punctuation, and why is it important?* There's little argument about the first half of the question, and the second half seems likely to limit, rather than expand, inquiry. Referring to the soccer example—and to debates on when to execute certain actions in the game—we can revise the punctuation question to read, *When is proper punctuation mandatory, and when is it optional?* We can easily prompt debate by looking at poems and social media messages that are not "properly" punctuated and at unfortunate punctuation errors in more formal writing to deepen the inquiry and lead to important general understandings.

Some easy editing moves can open things up. Rephrase a draft question using sentence stems like, *To what extent … ?, In what contexts … ?, How important was … ?*, and so on. By doing so, you can turn a humdrum question—such as, *Why is World War I important?*—into something vastly improved: *How important was World War I in shaping the modern world?*

Tip: When planning your questions, make a T-chart in which you list both the important factual questions and the essential questions of the unit to avoid conflating the two or landing on factual questions out of habit. To move from inarguable to arguable aspects of the topic, try framing key learning and assessment tasks using the suggested stems. Here are a few more: *What's the value of … ? When should we … , and when shouldn't we … ? What's the optimal strategy?* Or try the provocation we use in Understanding by Design: If the facts are answers, what were the questions?

3. Is the question merely engaging? Or will pursuing it lead to the topic's big ideas?

To engage students, some teachers frame an essential question that goes off on a tangent. But a good question has to be more than just intriguing. The best essential questions are, literally, of the essence: They take you to the core issues and insights of a topic. Our longtime favorite engaging, but tangential, question is, *Crustaceans: What's up with them?* It's certainly open ended, and it could go in a million directions. But it's unlikely to uncover rigorous, in-depth learning in biology. On the other hand, *What good is a bug?* more easily leads to deep inquiries into ecology, agriculture, health, and so on. In math, here's a common first-draft question: *Where do we find examples of ____ in the real world?* This question means well, but it leads to the world of things, not to the world of ideas; it will yield only a list of factual answers. There's no inquiry into mathematics.

A teacher we worked with wanted to ask, *Where in the world do we find examples of similar triangles?* After listening to the above argument, he quickly came up with this edited version: *How much and in what ways would we most miss similar figures if they didn't exist?* Not only is this a more intriguing and arguable question, but it also goes deep into math, opening up an exploration of other geometries besides the familiar Euclidean one.

Tip: Start by making a concept web for the topics of the unit. Identify the hard-to-understand but vital connections of ideas. Make sure your question points to the ideas identified, suggests interesting inquiries, and helps uncover the powerful ideas. Ask yourself, What does this idea help us make sense of? How does it help us connect the dots of our learning?

4. Is the question general enough to use across other units? Or is it bound too narrowly to just this topic or text?
We want a question that rewards us for revisiting it. Here's a draft question, based on a reading of one of the stories in Arnold Lobel's Frog and Toad series: *How do Frog and Toad act like friends?* By revising the question to this—*Who is a true friend?*—we can connect to varied texts and to personal experience. In addition to making us question the question—What do we mean by *true*friend?—this revised query recurs over and over throughout our lives, in history and psychology as well as in literature. The genius of Lobel is that Frog and Toad sometimes *don't* act like friends, which deepens the inquiry.

Here's another example showing the virtue of a more general focus. The question, *Why did we fight in Vietnam, and was it worth it?* sets a more helpful agenda for a history course when we revise it to read, *Why have we gone to war? When was it wise, and when was it foolish?*

Tip: Avoid mentioning or edit out the specific topic in the question. Don't mention specific books, events, or facts. Instead, pose the question more generally about concepts such as friendship, war, ecosystems, and so on. We call such questions *overarching* (McTighe & Wiggins, 2013; Wiggins & McTighe, 2005, 2013).

5. Does the question get at what's odd, counterintuitive, or easily misunderstood? Or is it a predictable question with mundane and relatively superficial answers?
Here are some common first-draft questions: *What's the difference between fiction and nonfiction? What's a theory in science? What is history? What can numbers help us do?* These questions don't lead us very far. They call attention to key ideas, but they don't promote in-depth inquiry. And frankly, they're a bit dull and "teacherly."
By contrast, successful questions do just the opposite: They highlight apparent paradoxes or counterintuitive investigations. Here are those "teacherly" questions revised: *When is fiction revealing, and when is it a lie? If we can't see something (gravity, human evolution, dinosaurs, and so on), how do we* know *it is or was there? If history is the story told by the winners, what stories* aren't *we hearing? What* can't *the language of numbers communicate?*

Misconceptions are a rich resource for such questions. For example, a common misconception in physics is the assumption that a ball thrown in the air has two forces acting on it once it leaves the hand: the force from the hand pushing it up and the force of gravity pulling it down. Actually, there's only one force acting on the ball: the force of gravity. So, a devilishly simple essential question would be, *Why does the ball move*

that way? Not only will you generate interesting and diverse theories, but you'll uncover misunderstandings.

Tip: Familiarize yourself with the most counterintuitive and commonly misunderstood aspects of the subjects you teach, and build your questions around them. There are countless websites on common student misconceptions for all academic subjects. Simply search for "student misconceptions in ____" in your web browser.

6. Am I trying too hard to craft the perfect question?

We often see question writers trying hard to create *the* one ideal question on the first try. Everything we know about the writing and design processes reminds us that this is an unsuccessful approach. We want numerous and diverse ideas at first, jotted down quickly, from which a good one will emerge.

The problem is compounded when writers spend too much time wordsmithing the question instead of trying to generate the best intellectual direction. Don't try to write and edit simultaneously. Draft a bunch of questions first, *then* edit. The more versions you draft, the easier the editing will be.

Tip: Use brainstorming rules: Don't judge (or self-judge), and jot down lots of ideas in a brief span of time. Also, draft webs of related questions. For example, when it comes to a piece of writing, you might ask, *What am I trying to say? To whom am I trying to say it? What do I want readers to leave with or be ready to do after reading this?* Maybe you'll use all the questions, and maybe you won't. But creating such webs usually points to a deeper and more powerful direction for inquiry.

7. Am I looking for questions in all the wrong places?

By committing to essential questions as a framing approach, you're planning for inquiry and argument as a priority outcome. Essential questions aren't a teaching move. Rather, they're a *design* move intended to make it more likely that the work and talk get beyond low-level coverage. So looking only at the content you wish students to acquire is *not* the optimal way to come up with good questions.

To aim for understanding is to aim for three kinds of learning: acquisition, meaning making, and transfer. Given the content, then, what theories should learners build and test? What problems and texts will prompt them to do so? What attempts at application will raise all the right arguments and require further generalizations?

For example, in a unit on mean, median, and mode, just learning to manipulate those three concepts won't develop understanding. The interesting and arguable aspects of those concepts lie in how to best use them—and avoid misusing them!—in making sense of real data. So this draft question heads in the wrong direction: *When do we use mean, median, and mode*? Rather, focus on the significance and applicability of the ideas: *What's the fairest way to calculate grades? What are the strengths and*

weaknesses of each measure of tendency? When are measures of central tendency most abused, and how can we defend against such abuses?

Tip: Build into your lessons meaning-making and application challenges—for example, a Socratic seminar, formal debate, or problem-based learning project. By committing to using at least one such interactive approach, you'll more likely come up with an arguable and intriguing question for framing the unit.

The Bottom Line

The fact is you need to develop the habit of always critiquing the essential questions you draft. High-level inquiries and questioning yield some of the greatest gains possible on conventional tests of achievement, as well as better student engagement.
Getting the questions right takes discipline, skill, and artfulness. But it's well worth the effort to ensure that students tackle inquiries that are important, intriguing, and revealing.

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