

Asking Effective Questions

By Olivier Serrat

Questioning is a vital tool of human thought and interactional life. Since questions serve a range of functions, depending on the context of the interaction, the art and science of questioning lies in knowing what question to ask when.

Background

Seeking information is a vital human activity that contributes to learning, problem solving, and decision making. Questioning¹ is a vital tool of human thought and social interaction² with which to open doors to data, information, knowledge, and wisdom. Questions serve a range of functions,³ depending on the context of the interaction. Therefore, the art and science of questioning lies in knowing what question to ask when.⁴ A question is only as good as the answer it evokes, and questions thus contribute to success or failure across different contexts.



Typologies of Questions

*I keep six honest serving-men,
(They taught me all I knew);
Their names are What and Why and When,
And How and Where and Who.*

—Rudyard Kipling

Derived from the context of social interaction, different classifications of questions have been proposed. The most common refers to the degree of freedom, or scope, given to the respondent. Those that leave the respondent free to select any one of several ways in which to answer are termed open questions; those that require a short response of a specific nature are labeled closed questions. Other types include recall and process questions, affective questions, leading questions, probing questions, rhetorical questions, and multiple questions.

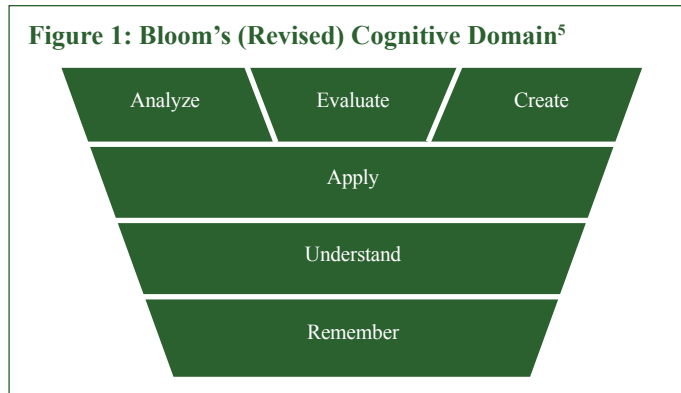
¹ A question is any statement—even nonverbal, e.g., hmmm?—that invites an answer. Of course, most questions are verbal in nature (even if nonverbal signs often accompany them).

² Social interaction is a dynamic, changing sequence of social actions that take into account the actions and reactions of other individuals (or groups) and are modified based on them. Put differently, they are events in which people attach meaning to a situation, interpret what others are meaning, and respond accordingly.

³ For example, questions can be used to (i) obtain information; (ii) maintain control; (iii) express interest; (iv) stimulate interest and curiosity; (v) sustain attention; (vi) diagnose difficulties; (vii) ascertain attitudes, feelings, and opinions; (viii) communicate that participation is expected and valued; (ix) foster participation; (x) assess the extent of a respondent's knowledge; (xi) encourage comments on the responses of others; and (xii) prompt critical thinking and evaluation.

⁴ In Western thought, investigation of knowledge owes much to Socrates (469–399 BC), an Athenian moral philosopher concerned with the conduct of virtuous human life through critical reasoning. The Socratic method requires participants to clarify their beliefs and understanding through questioning and dialogue.

Figure 1: Bloom's (Revised) Cognitive Domain⁵



Source: Lorin Anderson and David Krathwohl (eds). 2000. *A Taxonomy for Learning, Teaching and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*. Allyn & Bacon.

Table 1: Aligning Verbs to Bloom's Taxonomy

<p>Knowledge</p> <p>Count, Define, Describe, Draw, Enumerate, Find, Identify, Label, List, Match, Name, Quote, Read, Recall, Recite, Record, Reproduce, Select, Sequence, State, Tell, View, Write</p>	<p>Comprehension</p> <p>Classify, Cite, Conclude, Convert, Describe, Discuss, Estimate, Explain, Generalize, Give Examples, Illustrate, Interpret, Locate, Make Sense of, Paraphrase, Predict, Report, Restate, Review, Summarize, Trace, Understand</p>	<p>Application</p> <p>Act, Administer, Articulate, Assess, Change, Chart, Choose, Collect, Compute, Construct, Contribute, Control, Demonstrate, Determine, Develop, Discover, Dramatize, Draw, Establish, Extend, Imitate, Implement, Interview, Include, Inform, Instruct, Paint, Participate, Predict, Prepare, Produce, Provide, Relate, Report, Select, Show, Solve, Transfer, Use, Utilize</p>
<p>Analysis</p> <p>Break down, Characterize, Classify, Compare, Contrast, Correlate, Debate, Deduce, Diagram, Differentiate, Discriminate, Distinguish, Examine, Focus, Illustrate, Infer, Limit, Outline, Point out, Prioritize, Recognize, Research, Relate, Separate, Subdivide</p>	<p>Synthesis</p> <p>Adapt, Anticipate, Categorize, Collaborate, Combine, Communicate, Compare, Compile, Compose, Construct, Contrast, Create, Design, Develop, Devise, Express, Facilitate, Formulate, Generate, Incorporate, Individualize, Initiate, Integrate, Intervene, Invent, Make up, Model, Modify, Negotiate, Organize, Perform, Plan, Pretend, Produce, Progress, Propose, Rearrange, Reconstruct, Reinforce, Reorganize, Revise, Rewrite, Structure, Substitute, Validate</p>	<p>Evaluation</p> <p>Appraise, Argue, Assess, Choose, Compare and Contrast, Conclude, Criticize, Critique, Decide, Defend, Evaluate, Interpret, Judge, Justify, Predict, Prioritize, Prove, Rank, Rate, Reframe, Select, Support</p>

Source: Lorin Anderson and David Krathwohl (eds). 2000. *A Taxonomy for Learning, Teaching and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*. Allyn & Bacon.

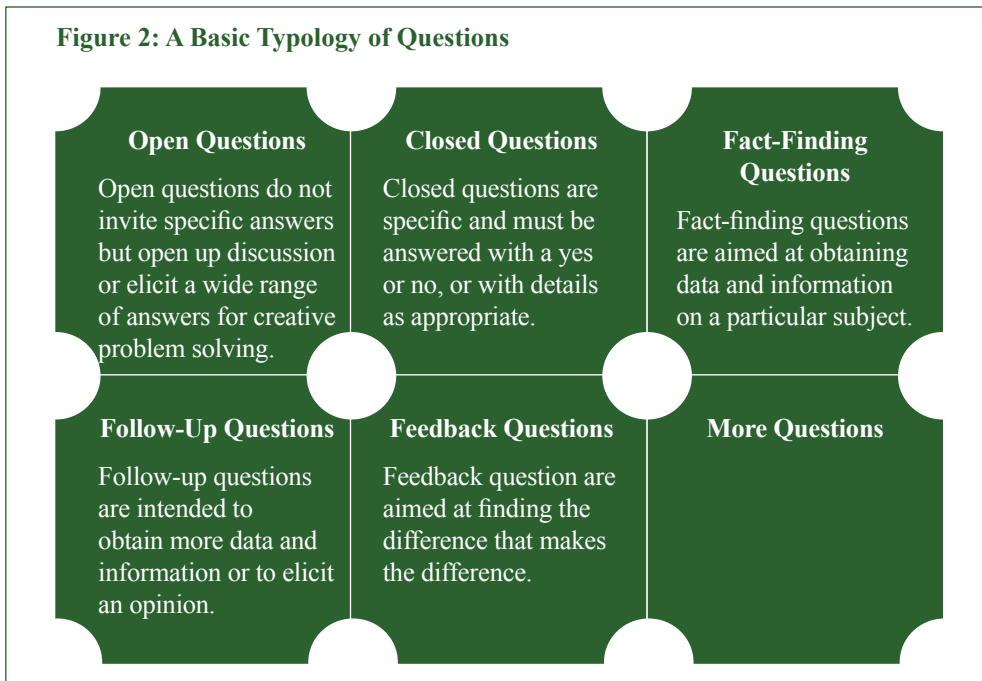
⁵ In 1956, Benjamin Bloom proposed a taxonomy of the different educational objectives that teachers set for students, encompassing psychomotor (manual or physical skills), affective (growth in feelings or emotional areas), and cognitive (mental skills) domains. Like most taxonomies, Bloom's cognitive domain is hierarchical—meaning that learning at the higher levels is dependent on having attained prerequisite knowledge and skills at lower levels. The six levels, moving through the lowest order processes to the highest, are knowledge, comprehension, application, analysis, synthesis, and evaluation. In 2001, Lorin Anderson and David Krathwohl revised the taxonomy and its verbiage.

The Art and Science of Powerful Questions⁶

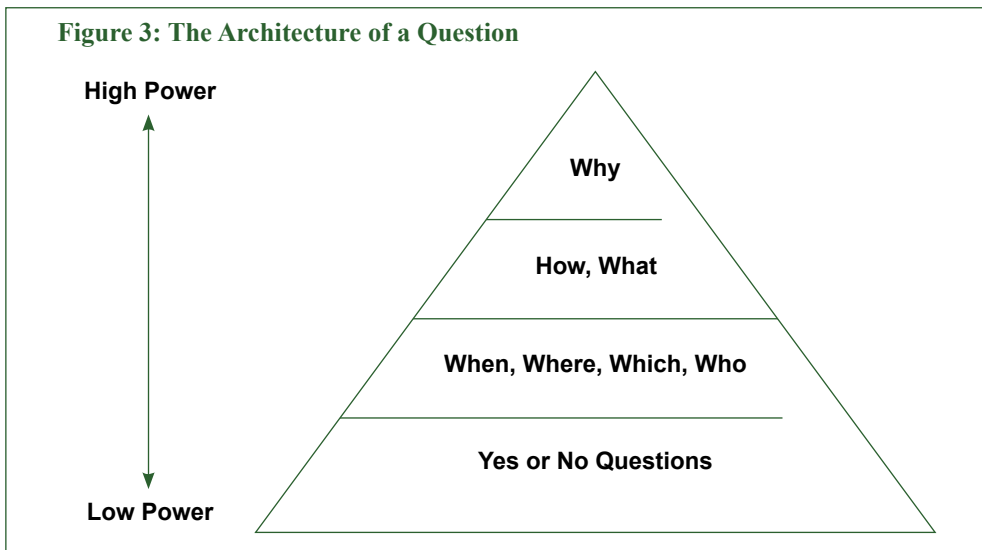
Questions are a prerequisite to learning. They are a window into creativity and insight. They motivate fresh thinking. They challenge outdated assumptions. They lead us into the future. A powerful question

- generates curiosity in participants;
- stimulates reflective thinking and conversation;

The unexamined life is not worth living.
—Socrates



Source: Author



Source: Author

⁶ This section and the next draw heavily from Eric Vogt, Juanita Brown, and David Isaacs. 2003. *The Art of Powerful Questions: Catalyzing Insight, Innovation, and Action*. Whole Systems Associates. Available: www.theworldcafe.com/articles/aopq.pdf

- surfaces and challenges assumptions;
- is thought-provoking;
- channels attention, focuses inquiry, and promises insight;
- invites creativity and new possibilities;
- generates energy, a vector to explore, and forward movement;
- is broad, enduring, and stays with participants;
- touches a deep meaning; and
- evokes more questions.

The trouble with the world is that the stupid are cocksure and the intelligent are full of doubt.

—Bertrand Russel

Powerful questions have three dimensions: (i) architecture; (ii) scope; and (iii) assumptions (context, meaning). Most work on the first dimension, *architecture*, produces a variant of the general hierarchy illustrated below—the hypothesis is that any question can be transformed into a more powerful question by moving up the pyramid.

In other words, the linguistic construction of a question can make a critical difference in either opening our minds or narrowing the possibilities we can consider. Is it a yes or no question? Is it an either/or question? Does it open with an interrogative, such as when, where, who, how, what, or why?

- If a question asks "when", it is inquiring about time or duration.
- If a question asks "where", it is looking for a location.
- If a question asks "who", it is soliciting identification.
- If a question asks "how", it is requesting an instruction or procedure.
- If a question asks "what", it is inviting a description.
- If a question asks "why", it is calling for an explanation.

Next, it is important to know that, besides the words we choose, the *scope* of a question affects the effectiveness of a query. Powerful questions, typically beginning with how or why, encompass more people, more resources, more volume, more time, and more concerns. Obviously, the scope of a question must be tailored and kept within realistic boundaries and the needs of an investigation

It is error only, and not truth, that shrinks from inquiry.

—Thomas Paine

if an answer is to emerge at all, at least in the short term.⁷

Lastly, the *assumptions* that underlie a question comprise a more complex, subtle axis. All questions are nourished by explicit or implicit assumptions that may not be shared by the individuals (or groups) taking part in the discussion. These presuppositions and axioms are taken for granted but have implications and consequences that will flow logically as effects. Assumptions must be surfaced if the question being raised is to display the powerful characteristics mentioned earlier.

Fostering Strategic Inquiry

In *The Art of Powerful Questions*, Eric Vogt, Juanita Brown, and David Isaacs outlined the steps of a game plan that organizations might follow to use query to catalyze insight, innovation, and action. The game plan involves (i) assessing the current situation, (ii) discovering the big questions, (iii) creating images of possibilities, and (iv) evolving workable strategies. In support, they devised a questionnaire to help judge the degree to which an organization is an inquiring system. (Only when an answer generates further questions does thought continue as inquiry that stimulates new ways to think and new paths to follow.) They also formulated sample questions to focus collective attention on a situation, connect ideas and find deeper insight, and create forward movement. Focusing on effective questioning, they identified the roles that leaders might play to design inquiring systems that co-evolve the

A prudent question is one-half of wisdom.

—Francis Bacon

⁷ The domains that might be embedded in a complex question include mathematics and quantitative disciplines, physical and life sciences, arts and humanities, and social disciplines.

uture.⁸ They are

- Engage in shared conversation,
- Convene and host learning conversations,
- Include diverse perspectives,
- Support appreciative inquiry,⁹
- Foster shared meaning,
- Nurture communities of practice, and
- Use collaborative technologies.

Box: Is Your Organization an Inquiring System?

- To what degree do leaders in your organization foster an environment in which discovering the "big questions" is encouraged as much as coming up with workable solutions?
- Does your organization have rewards or incentives for members to work across functional boundaries to find challenging questions that create common focus and forward movement for knowledge creation?
- Do your leadership development programs contain as much of a focus on the art and architecture of framing powerful questions as they do on techniques for solving problems?
- Do your organization's strategic planning processes include structured ways to discover the "big questions" that, if answered, would have real strategic leverage?
- What enabling tools or technologies does your organization employ to "seed" itself with strategic questions that "travel well" and catalyze learning conversations both within and across functions?
- Does your organization use collaborative technology tools to enable people on the frontlines to ask each other questions related to their daily work (i.e., customer service, equipment maintenance) and receive help with these questions from colleagues in other locations?
- Do senior leaders in your organization see the process of strategy evolution as one that engages multiple voices and perspectives in networks of conversation?

Source: Eric Vogt, Juanita Brown, and David Isaacs. 2003. *The Art of Powerful Questions: Catalyzing Insight, Innovation, and Action*. Whole Systems Associates. Available: www.theworldcafe.com/articles/aopq.pdf

Table 2: Questions for All Seasons

Questions to Focus Collective Attention on a Situation
<ul style="list-style-type: none"> • What question, if answered, could make the most difference to the future of (our specific situation)? • What is important to us about (our specific situation) and why do we care? • What draws us to this inquiry? • What is our intention here? What is the deeper purpose (the big "why") that is really worthy of our best effort? • What opportunities can we see in (our specific situation)? • What do we know so far or still need to learn about (our specific situation)? • What are the dilemmas and opportunities in (our specific situation)? • What assumptions do we need to test or challenge in thinking about (our specific situation)? • What would someone who had a very different set of beliefs than we do say about (our specific situation)?

⁸ It is not possible to be a good thinker and a poor questioner. With a nod to critical thinking, the intellectual standards that leaders might apply to assess reasoning are (i) clarity, (ii) accuracy, (iii) precision, (iv) relevance, (v) depth, (vi) breadth, (vii) logic, (viii) significance, and (ix) fairness. As they help their organization focus on asking effective questions, the elements of thought that will be implied are (i) what is our fundamental purpose?, (ii) what is the key question we are trying to answer?, (iii) what information do we need to answer our question?, (iv) what is the most basic concept in our question?, (v) what assumptions are we using in our reasoning?, (vi) what is our point of view with respect to the issue?, (vii) what are our most fundamental inferences or conclusions?, and (viii) what are the implications of our reasoning (if we are correct)?

⁹ Appreciative inquiry is the process of facilitating positive change in organizations. Its basic assumption is uncomplicated: every organization has something that works well. Appreciative inquiry is usually worked out using a 4-D Cycle of discovery, dream, design, and delivery.

Questions to Connect Ideas and Find Deeper Insight

- What is taking shape? What are we hearing underneath the variety of opinions being expressed? What is in the center of the table?
- What is emerging here for us? What new connections are we making?
- What had real meaning for us from what we have heard? What has surprised us? What has challenged us?
- What is missing from this picture so far? What is it that we are not seeing? What do we need more clarity about?
- What has been our major learning, insight, or discovery so far?
- What is the next level of thinking we need to evolve to?
- If there was one thing that has not yet been said in order to reach a higher level of understanding and clarity, what would that be?

Questions to Create Forward Movement

- What would it take to create change on this issue?
- What could happen that would enable us to feel fully engaged and energized about (our specific situation)?
- What is possible here and who cares? (Rather than "What is wrong here and who is responsible?")
- What needs our immediate attention to move forward?
- If our success were completely guaranteed, what bold steps might we choose to take?
- How can we support one another in taking the next steps? What unique contribution can we each make?
- What challenges might come our way and how might we meet them?
- What conversation, if begun today, could ripple out in a way that created new possibilities for the future of (our situation)?
- What seed might we plant together today that could make the most difference to the future of (our situation)?

Source: Eric Vogt, Juanita Brown, and David Isaacs. 2003. *The Art of Powerful Questions: Catalyzing Insight, Innovation, and Action*. Whole Systems Associates. Available: www.theworldcafe.com/articles/aopq.pdf

Further Reading

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For further information

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