

The Miniature Guide
to
The Art of
Asking
Essential Questions

by
Dr. Linda Elder
and
Dr. Richard Paul

Based on
Critical Thinking Concepts and Socratic Principles

The Foundation for Critical Thinking

Dear Reader:

This miniature guide introduces the art of asking essential questions. It is best used in conjunction with *The Miniature Guide to Critical Thinking* and *The Miniature Guide to How to Study and Learn*.

The quality of our lives is determined by the quality of our thinking. The quality of our thinking, in turn, is determined by the quality of our questions, for questions are the engine, the driving force behind thinking. Without questions, we have nothing to think about. Without essential questions, we often fail to focus our thinking on the significant and substantive.

When we ask essential questions, we deal with what is necessary, relevant, and indispensable to a matter at hand. We recognize what is at the heart of the matter. Our thinking is grounded and disciplined. We are ready to learn. We are intellectually able to find our way about.

To be successful in life, one needs to ask essential questions: essential questions when reading, writing, and speaking; when shopping, working, and parenting; when forming friendships, choosing life-partners, and interacting with the mass media and the Internet.

Yet few people are masters of the art of asking essential questions. Most have never thought about why some questions are crucial and others peripheral. Essential questions are rarely studied in school. They are rarely modeled at home. Most people question according to their psychological associations. Their questions are haphazard and scattered.

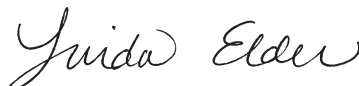
Essential questions fall into a range of categories. Some essential questions are principally analytic, some principally evaluative. Some apply predominantly to academic subjects, others to our innermost thoughts, feelings, and desires.

As you might expect, the categories and lists of essential questions in this mini-guide are illustrative, not exhaustive. Furthermore, the ideas we provide are useful only to the extent that they are employed daily to ask essential questions. *Practice* in asking essential questions eventually leads to the *habit* of asking essential questions. But we can never practice asking essential questions if we have no conception of them. This mini-guide is a starting place for understanding concepts that, when applied, lead to essential questions.

Sincerely,



Richard Paul
Center for Critical Thinking



Linda Elder
Foundation for Critical Thinking

Table of Contents

Introduction: The Power of Essential Questions	3
Part One: Analytic Questions	5
Questioning the Structure of Thinking	5–8
Asking One System, No System, and Conflicting System Questions . . .	9
Questioning Dogmatic Absolutism and Subjective Relativism	10
Questioning Concepts	11–12
Conceptual Tools for Conceptual Questions	13–14
Questioning Data, Information, and Experience	15
Questioning Questions: Identifying Prior Questions	16
Asking Complex Interdisciplinary Questions	17
Interdisciplinary Questions: An Example	18
Questioning in Decision-Making and Problem-Solving	19–20
Part Two: Evaluative Questions	21
Determining Value, Merit, and Worth	21
Evaluating Reasoning (Overall)	22–23
Evaluating Reasoning (The Parts)	24
Questioning Clarity and Precision	25
Questioning As We Read	26
Questioning As We Write	27
Asking Ethical Questions	28–30
Questioning Bias and Propaganda	31
Part Three: Questioning Within Academic Disciplines . . .	32
Questioning the Fundamental Logic of Academic Disciplines . . .	32–33
Questioning the Status of Disciplines	34
Questioning to Understand the Foundations of Academic Disciplines .	35–37
▪ Essential Questions in Science	35–36
▪ Essential Questions in the Social Disciplines	36
▪ Essential Questions in the Arts	36–37
Part Four: Questioning for Self-Knowledge and Self-Development	38
Questioning Ourselves as Learners	38–39
Questioning Our Egocentrism	40–41
Questioning Our Sociocentrism	42
Questioning to Develop Intellectual Dispositions	43–44
Conclusion: Questioning Systematically and Socratically	45–47

**The Quality
of Our
Thinking
is Given in
the Quality
of Our
Questions**

Introduction:

The Power of Essential Questions

It is not possible to be a good thinker and a poor questioner.

Questions define tasks, express problems, and delineate issues. They drive thinking forward. Answers, on the other hand, often signal a full stop in thought. Only when an answer generates further questions does thought continue as inquiry. A mind with no questions is a mind that is not intellectually alive. No questions (asked) equals no understanding (achieved). Superficial questions equal superficial understanding, unclear questions equal unclear understanding. If your mind is not actively generating questions, you are not engaged in substantive learning.

Thinking within disciplines is driven, not by answers, but by essential questions. Had no basic questions been asked by those who laid the foundation for a field — for example, physics or biology — the field would not have been developed in the first place. Every intellectual field is born out of a cluster of essential questions that drive the mind to pursue particular facts and understandings. Biology was born when some humans pursued answers to the questions: “What are the characteristics of living systems? What structures exist in them? What functions do these structures serve?” Biochemistry was born when biologists began to ask questions such as: “What chemical processes underlie living things? How and why do chemical processes within living things interact and change?”

Every field stays alive only to the extent that fresh questions are generated and taken seriously as the driving force in thinking. When a field of study is no longer pursuing significant answers to essential questions, it dies as a field. To think through or rethink anything, one must ask the questions necessary to thinking through the logic of that thing, clearly and precisely.

In this miniature guide, we introduce essential questions as indispensable intellectual tools. We focus on principles essential to formulating, analyzing, assessing, and settling primary questions. You will notice that our categories of question types are not exclusive. There is a great deal of overlap between them. Deciding what category of question to ask at any point in thinking is a matter of judgment. Having a range of powerful questions to choose from is a matter of knowledge.

Because we cannot be skilled at thinking unless we are skilled at questioning, we strive for a state of mind in which essential questions become second nature. They are the keys to productive thinking, deep learning, and effective living.

**Questioning in a live and
“learning” mind never ends**



Questions become transformed



**Questions generate
more questions**



**Stimulate new ways to think,
new paths to follow**



as we

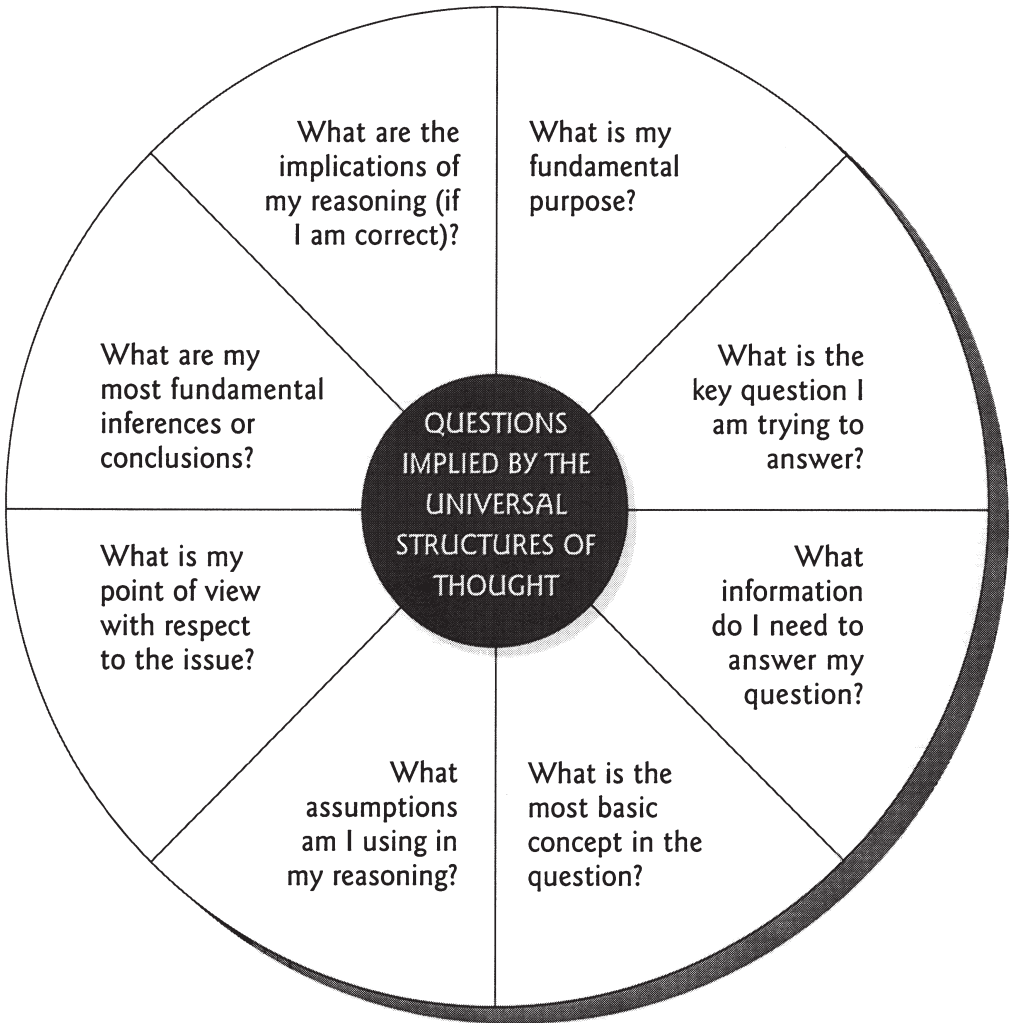
**Analyze
thinking**

**Evaluate
thinking**



Improve our thinking

Analytic Questions Implied by the Elements of Thought



Asking Complex Interdisciplinary Questions

When addressing a complex question covering more than one domain of thought, target prior questions by formulating questions according to domain. Does the question, for example, include an economic dimension? Does it include a biological, sociological, cultural, political, ethical, psychological, religious, historical, or some other dimension? For each dimension of thinking inherent in the question, formulate questions that force you to consider complexities you otherwise may miss.

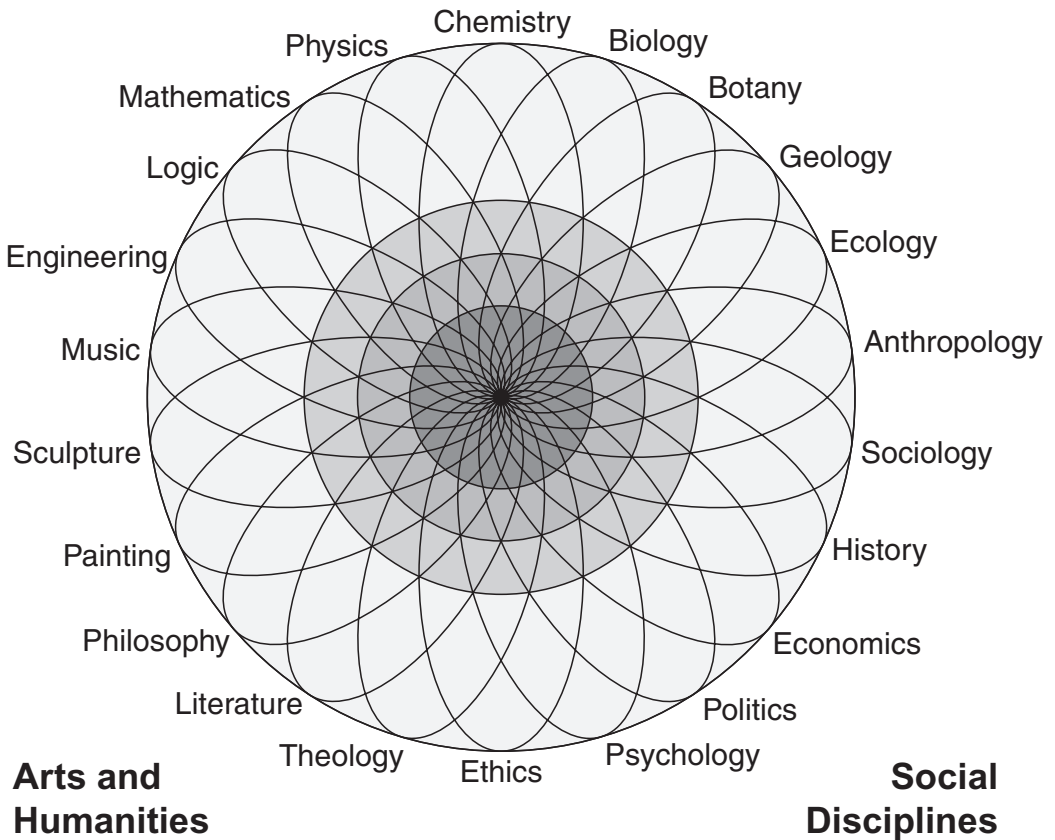
When focusing on domains within questions, consider such questions as:

- What are the domains of thinking inherent in this complex question?
- Am I dealing with all the relevant domains within the question?
- Are we leaving out some important domains?

This figure shows some of the domains that might be embedded in a complex question:

Mathematics and Quantative Disciplines

Physical and Life Sciences



Domains of Questions (by discipline)

This diagram was adapted from a diagram created by John Trapasso.

Questioning the Status of Disciplines

When studying any discipline, it is important to determine the strengths and weaknesses in it. To do this you must question the status of knowledge and “expert” information in the field, rather than blindly accepting what you read and are told about the discipline. Of course, you must do this through disciplined and responsible thinking, being alert to both strengths and weaknesses. Some critical questions to ask about a field of study are:

- To what extent do competing schools of thought exist within this field?
- To what extent do experts in this field disagree about the answers they give to important questions?
- What other fields deal with this same subject, from a different standpoint perhaps? To what extent do conflicting views exist about this subject in light of these different standpoints?
- To what extent, if at all, is this field properly called a science?
- To what extent can questions asked in the field be answered definitively? To what extent are questions in this field matters of (arguable) judgment?
- To what extent does public pressure influence professionals in the field to compromise their professional practice in light of public prejudice or vested interest?
- To what extent is it likely that professionals within the discipline will act in accordance with their vested or selfish interest, rather than in a fair-minded way? What types of “opportunities” exist for professionals within the field to serve their own interest in lieu of serving those they purport to serve?
- What does the history of the discipline tell us about the status of knowledge in the field? How old is the field? How common is controversy over fundamental terms, theories, and orientation?
- How wide is the likely gap between the promised ideal of instruction in the discipline and the actual results?

Some Critical Questions to Ask About a Textbook Are:

- If there are competing schools of thought within this field, what is the orientation of the textbook writers? Do they highlight these competing schools and detail the implications of that debate?
- Are other textbooks available that approach this field from a significantly different standpoint? If so, how should we understand the orientation or bias of this textbook?
- Would other experts in this field disagree with any of the answers to important questions given in this textbook? How would they disagree?
- Are there textbooks in other fields dealing with this same subject, from a different standpoint perhaps? To what extent do conflicting views exist about this subject in the light of these different standpoints?
- To what extent does this textbook represent this field as a science? If so, do some experts in the field disagree with this representation? In what sense is it not a science?
- To what extent do the questions asked in this textbook lead to definitive answers? Conversely, to what extent are questions in this textbook matters of (arguable) judgment? And does the textbook help you distinguish between these very different types of questions?