ASKING THE RIGHT QUESTIONS

A GUIDE TO CRITICAL THINKING

FIFTH EDITION

M. NEIL BROWNE
STUART M. KEELEY

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Preface

Previous editions of *Asking the Right Questions* have been welcome in hundreds of classrooms. Realizing that tens of thousands of learners have used our text to develop their critical-thinking abilities is both exhilarating and scary for us. We feel a major responsibility to earn anew the confidence of our readers. Toward that end we have maintained the basic structure of previous editions, while updating the illustrations and revising those sections that loyal readers have urged us to clarify or include.

This fifth edition is hence much more a joint work than the title page suggests. It is increasingly difficult for us to determine where our contributions end and where those of our readers begin. We hope that this edition reflects any wisdom that may have been lurking in former editions, while taking advantage of fresh insights gleaned from our own teaching and the caring suggestions of others.

Like this edition of *Asking the Right Questions,* critical thinking is both old and new. Systematic evaluation of arguments based on explicit rational criteria is as old as recorded history. Terminology changes, emphases emerge, and worthwhile disputes about the criteria for rational conversation break out. But the habit of questioning the quality of the reasoning for a belief or contention is implicit in our daily living.

Certainly, individuals may not be particularly skilled at this questioning process, but it is hard to imagine what it would mean to always and ever accept as true whatever we hear. Critical thinking thus has staying power. All of us can

be confident that the interest in critical thinking will outlive us. So this book is part of a very old, yet enduring, tradition. Our interest in critical thinking ties us together in an important respect: We want to think carefully before we make a belief our own.

From the start of this book's history, we have been motivated by a variety of personal experiences and observations. First, we have been dismayed by the degree to which students and citizens in general increasingly depend on "experts"—textbook writers, teachers, lawyers, politicians, journalists, and TV commentators. As the complexity of the world seems to increase at an accelerating rate, there is a greater tendency to become passive absorbers of information, uncritically accepting what is seen and heard. We are concerned that too many of us are not actively making personal choices about what to accept and what to reject.

Thus, the need for such a book is now even more pronounced. The use of "sound bites," the popularity of simplistic arguments, and the amount of information to which we are exposed every day have all increased dramatically. To encourage us all to use critical thinking more frequently as an antidote to this "information explosion" is the dream of *Asking the Right Questions.*

Our experience in teaching critical-thinking skills to our students over a number of years has convinced us that when individuals with diverse abilities are taught these skills in a simplified format, they can learn to apply them successfully. In the process, they develop greater confidence in their ability to make rational choices about social issues, even those with which they have formerly had little experience.

Another motivating factor for the book has been our inability to find materials with which to teach the skills we wanted students to learn. We did not want a philosophy text, but rather a book that, while informal in nature, would outline basic critical-thinking skills explicitly, concisely, and simply. We did not find such a book.

Thus, we have written a text that does a number of things that other books have failed to do. This text develops an integrated series of question-asking skills that can be applied widely. These skills are discussed in an informal style. (We have written to a general audience, not to any specialized group.)

The development of *Asking the Right Questions* has leaned heavily on our joint experience of 50 years as teachers of critical thinking. Our ideas have evolved in response to numerous classroom experiences with students at many different levels, from freshman to Ph.D. students.

These experiences have taught us certain emphases that are particularly effective in learning critical thinking. For instance, we provide many opportunities for the readers to apply their skills and to receive immediate feedback following the practice application. The book is replete with examples of writing devoted to controversial contemporary topics. The breadth of topics introduces the average reader to numerous controversies with which he or she may have little familiarity. The book is coherently organized, in that critical questions are dis-

cussed sequentially as the reader progresses from understanding to evaluating. In addition, it integrates cognitive and value dimensions—a very important aspect of critical thinking and personal decision making.

One feature that deserves to be highlighted is the applicability of *Asking the Right Questions* to numerous life experiences extending far beyond the classroom. The habits and attitudes associated with critical thinking are transferable to consumer, medical, legal, and general ethical choices. When our surgeon says surgery is needed, it can be life sustaining to seek answers to critical questions.

To make this general applicability apparent and to provide an element of cohesiveness to the book, each chapter begins with brief exchanges concerning the desirability of capital punishment. We all care about this issue, and critical thinking enables us to express our concerns in a more reasonable fashion. The exchange should be read both before and after the applicable chapter. It is our hope that the second reading will be more satisfying.

In addition, the fifth edition includes the following new features:

1. *Caution Boxes* that warn readers of common misunderstandings that interfere with the effective use of an idea or skill. These are set off in the text by dynamite sticks and a long fuse encasing the cautions.
2. Expanded use of graphics and cartoons to provide a livelier presentation format and to clarify complex or significant points.
3. Revision of almost half of the practice passages to reflect changing student interests.
4. Highlighting of key definitions of critical-thinking terminology.

Each new element has emerged from the teaching experience of numerous colleagues.

Who would find *Asking the Right Questions* especially beneficial? Because of our teaching experiences with readers representing many different levels of ability, we have difficulty envisioning any academic course or program for which this book would not be useful. In fact, the first four editions have been used in law, English, pharmacy, philosophy, education, psychology, sociology, religion, and social science courses.

A few uses for the book seem especially appropriate. Teachers in general education programs may want to begin their courses by assigning it as a coherent response to their students' requests to explain what is expected of them. English courses that emphasize expository writing could use this text both as a format for evaluating arguments prior to constructing an essay and as a checklist of problems that the writer should attempt to avoid as he or she writes. The book is especially functional in courses for training prospective teachers and graduate assistants because it makes explicit much that teachers will want to encourage in their students. Courses in study-skill development may be enriched by supplementing their current content with our step-by-step description of

the process of critical reading and thinking. The text can also be used as the central focus of courses designed specifically to teach critical reading and thinking skills.

While *Asking the Right Questions* stems primarily from our classroom experiences, it is written so that it can guide the reading and listening habits of almost everyone. The skills that it seeks to develop are those that any critical reader needs in order for reading to serve as a basis for rational decisions. The critical questions stressed in the book can enhance anyone's reasoning, regardless of the extent of his or her formal education.

This fifth edition owes special debts to many people. Many readers of earlier editions have cared enough about this project to suggest improvements. Several have been especially helpful. As always, Andrea Giampetro-Meyer of Loyola College in Baltimore has provided us with much dependable advice. We also wish to acknowledge the following Prentice Hall reviewers: Beth M. Waggenspack of Virginia Tech, Donald Heidt of the College of the Canyons, Barbara Fowler of Longview Community College, and Verlyne Starr of Oakland Community College.

While our students are always a major source of suggested improvements, a few distinguished themselves in that regard. The fifth edition depended heavily on improvements suggested by Carrie Williamson, whose concern for quality is extraordinary.

M. Neil Browne
Stuart M. Keeley

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The Benefit of Asking the Right Questions

Introduction

Each of us is bombarded with information. Every day we encounter new facts and opinions. In text books, newspapers, magazines, and on the Internet, writers present ideas they want us to accept. One social scientist tells us violence on television is bad for young people; another tells us it does no harm. One economist argues for reducing taxes to stem inflation; another argues that we should increase interest rates. One educational critic recommends eliminating the "frills," such as foreign language and physical education requirements; another recommends we expand such "necessities."

In all areas of knowledge there are issues about which experts in those fields disagree. You as a reader have the tough job of deciding which authority to believe. Whether you are reading a nursing journal, a critique of a poem, a textbook, or even the sports page, you will be faced with the problem of deciding which conclusions to accept, which to reject, and which to withhold judgment on.

As a thoughtful person you must make a choice about how you will react to what you see and hear. One alternative is to accept passively what you encounter; doing so automatically results in your making someone else's opinion your own. A more active alternative consists of asking questions of yourself in an effort to reach a personal decision about the worth of what you have experienced. This book is written for those who prefer the second alternative.

Critical Thinking to the Rescue

Listening and reading critically—that is, reacting with systematic evaluation to what you have heard and read—requires a set of skills and attitudes. These skills and attitudes are built around a series of critical questions.

We could have expressed them as a list of things you should do, but a system of questions is more consistent with the spirit of curiosity, wonder, and intellectual adventure essential to critical thinking. Thinking carefully is always an unfinished project, a story looking for an ending that will never arrive. Critical questions provide a structure for critical thinking that supports a continual, ongoing search for better opinions, decisions, or judgments.

Consequently, *critical thinking*, as we will use the term, refers to the following:

1. awareness of a set of interrelated critical questions,
2. ability to ask and answer critical questions at appropriate times, and
3. desire to actively use the critical questions.

The goal of this book is to encourage you in all three of these dimensions.

Questions require the other person to do something. We are saying to them: I am curious; I want to know more; help me. This request shows respect for the other person. You really want to understand what he or she is saying. The point of your questions is that you need her help to have a deeper understanding or appreciation of her reasoning.

The critical questions will be shared with you bit by bit, one question at a time. As a package, they will be useful whenever you choose to react to what you are hearing or reading. This book will guide you through the critical questions so you can recognize their benefit to every thinking person.

These skills and attitudes will be especially helpful to you as a student and as a citizen. As a student, they should be useful whenever you are asked to:

1. react critically to an essay or to evidence presented in a textbook,
2. judge the quality of a lecture or speech,
3. form an argument,
4. write an essay based on a reading assignment, or
5. participate in class.

Attention: Critical thinking consists of an awareness of a set of interrelated critical questions, plus the ability and willingness to ask and answer them at appropriate times.

As a citizen, you should find them especially helpful in shaping your voting behavior and your purchasing decisions, as well as improving your self-confidence by increasing your sense of intellectual independence.

The Sponge and Panning for Gold: Alternative Thinking Styles

One approach to thinking is similar to the way in which a sponge reacts to water: by *absorbing*. This commonly used approach has some clear advantages.

First, the more information you absorb about the world, the more capable you are of understanding its complexities. Knowledge you have acquired provides a foundation for more complicated thinking later. For instance, it would be very difficult to judge the value of a sociological theory before you had absorbed a core of knowledge about sociology.

A second advantage of the sponge approach is that it is relatively passive. Rather than requiring strenuous mental effort, it tends to be rather quick and easy, especially when the material is presented in a clear and interesting fashion. The primary mental effort involves concentration and memory.

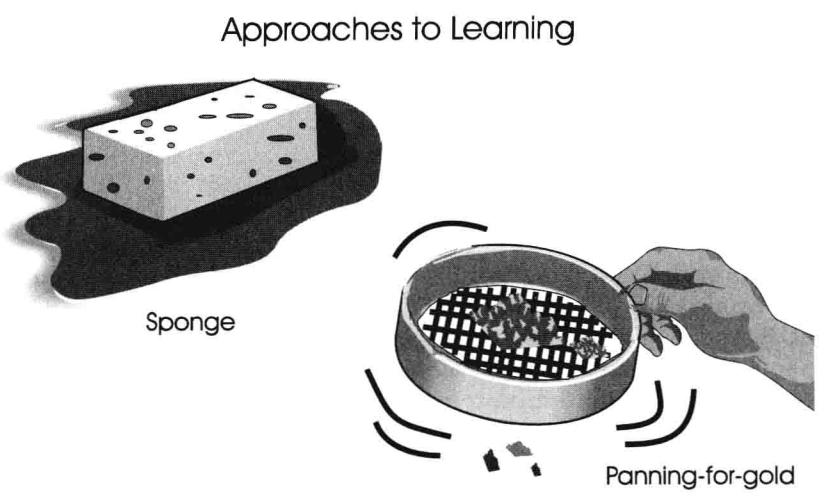
While absorbing information provides a productive start toward becoming a thoughtful person, the sponge approach has a serious disadvantage: It provides no method for deciding which information and opinions to believe and which to reject. If a reader relied on the sponge approach all the time, she would believe whatever she read *last*.

We think you would rather choose for yourself what to absorb and what to ignore. To make this choice, you must read with a special attitude—a question-asking attitude. Such a thinking style requires active participation. The writer is trying to speak to you, and you should try to talk back to him, even though he is not present.

We call this interactive approach the *panning-for-gold* style of thinking. Gold is a soft, bright yellow metal that has been highly valued since prehistoric times. It is found in most parts of the world, but almost always in low concentrations. As a result, finding it is a challenging and difficult task.

The process of panning for gold provides a model for active readers and listeners as they try to determine the worth of what they read and hear. The task is challenging and sometimes tedious, but the reward can be tremendous. To distinguish the gold from the gravel in a conversation requires you to ask frequent questions and to reflect about the answers.

The sponge approach emphasizes knowledge acquisition; the panning-for-gold approach stresses active interaction with knowledge as it is being acquired. Thus, the two approaches can complement each other. To pan for intellectual gold, there must be something in your pan to evaluate. To evaluate arguments we must possess knowledge.



Let us more closely examine how the two approaches lead to different behavior. What does the individual who takes the sponge approach do when he reads material? He reads sentences carefully, trying to remember as much as he can. He may underline or highlight key words and sentences. He may take notes summarizing the major topics and major points. He checks his underlining or notes to be sure he is not forgetting anything important. His mission is to find and understand what the author has to say. He memorizes the reasoning but doesn't evaluate it.

What does the reader who takes the panning-for-gold approach do? Like the person using the sponge approach, he approaches his reading with the hope that he will acquire new knowledge. Then the similarity ends. The panning-for-gold approach requires that the reader ask himself a number of questions to clarify logical steps in the material and to help identify important omissions. The reader who uses the panning-for-gold approach frequently questions *why* the author makes various claims. He writes notes to himself in the margins indicating problems with the reasoning. He continually interacts with the material. His intent is to critically evaluate the material and formulate personal conclusions based on the evaluation.

An Example of the Panning-for-Gold Approach

A major enduring issue in American society concerns what kind of gun control laws we need. Let's look at one position on this issue. Try to decide whether the argument is convincing.

> Arguments for banning guns are mostly myths, and what we need now is not more laws, but more law enforcement. One myth is that most murderers are ordinary,

law-abiding citizens who kill a relative or acquaintance in a moment of anger only because a gun is available. In fact, every study of homicide shows the overwhelming majority of murderers are career criminals, people with lifelong histories of violence. The typical murderer has a prior criminal history averaging at least six years, with four major felony arrests.

Another myth is that gun owners are ignorant rednecks given to senseless violence. However, studies consistently show that, on the average, gun owners are better educated and have more prestigious jobs than nonowners. To judge by their applications for permits to carry guns at all times, the following are (or were) gun owners: Eleanor Roosevelt, Joan Rivers, Robert Goulet, Leland DuPont, Arthur Godfrey, Sammy Davis Jr., Donald Trump, John Foster Dulles, and John, Laurance, David Winthrop, and Nelson Rockefeller.

A third myth is that the Second Amendment protects only the states' right to arm a militia. But this interpretation is recent. Significantly, the two earliest commentaries on the Second Amendment, which were before Congress when it passed the Bill of Rights, described it as guaranteeing to the people "their right to keep and bear their private arms" (Tinch Coxe) and "their own arms" (Sam Adams). To James Madison, author of the Second Amendment, "the advantage that the Americans have over every other nation is that they are armed."

A fourth myth is that guns are not useful for self-defense. On the contrary! Every study has shown that handguns are used more often in repelling crimes than in committing them. While handguns are used in about 581,000 crimes yearly, they are used to repel about 645,000 crimes.

The emphasis on changing gun laws is fundamentally diversionary. In the premier criminological study of gun control enforcement, Bendis and Balkin conclude: "It is very possible that if gun laws do potentially reduce gun-related crime, the present laws are all that are needed if they are enforced. What good would stronger laws do when the courts have demonstrated that they will not enforce them?"[1]

If you apply the sponge approach to the passage, you probably will try to remember the reasons that we don't need further controls on guns. If so, you will have absorbed some knowledge. However, how convinced should you be by the above reasons? You can't evaluate them until you have applied the panning-for-gold approach to the passage—that is, until you have asked the right questions.

By asking the right questions, you would discover a number of possible weaknesses in the communicator's arguments. For instance, you might be concerned about all of the following:

1. What does the author mean by "overwhelming majority" or by "typical

[1]Adapted from D. Kates, Jr. and P. Harris, "How to Make Their Day," *National Review* (October 21, 1991), p. 30–32.