

A Review of Selected Critical Thinking Texts

by Paul D. Tanner

In both the United States and Japan, critical thinking (CT) is a popular concept in education of late. A January 2005 Google Internet search of 'critical thinking' brought up 13.4 million hits. (By comparison 'George W. Bush' brought up 15 million). In the US, there is a National Council for Excellence in Critical Thinking, numerous publishers specializing in CT, and even a Church of Critical Thinking (with the motto "Your suspicion is our mission.") Many now call for CT to be specifically taught in schools and universities, including such influential groups as the US Department of Education, the Presidential Commission on Excellence in Education, the College Board, the National Council of the Teachers of English, as well as other organizations (Ruggiero xv).

Concern about lack of CT skills has been bandied about in Japan also. The Ministry of Education, Culture, Sports, Science and Technology has called for students to think logically in either Japanese or English (cited in Horton 41).

But what exactly is critical thinking? Certainly there is no consensus on a precise definition. A plethora of definitions abound. Neither does the Japanese language have a specific definition. Often, the term is written in katakana, クリティカル・シンキング. Other explanations this author has seen include 論理的思考 or 分析的思考.

This article will explore CT by reviewing five textbooks that teach CT concepts. These books are just a few of the profusion available, but illustrate various approaches to defining, examining, and using critical thinking.

Asking the Right Questions: A Guide to Critical Thinking by M. Neil Browne and Stuart Keeley. Upper Saddle River NJ: Prentice Hall, 2001.

Brown and Keeley's motivations for writing stemmed from their dismay at people's dependence on "experts," which leads to a "greater tendency to become passive absorbers of information uncritically accepting what we see and hear." (xii)

The authors take the novel organizational approach of "critical questions." "CT consists of an awareness of a set of interrelated critical questions, plus the ability and willingness to ask and answer them

at appropriate times.” (3) The chapters are organized around questions in that the titles of chapters 2-12 are questions a critical thinker should ask:

Chapter 2. What are the Issues and the Conclusion?

3. What Are the Reasons?

4. Which Words or Phrases Are Ambiguous?

5. What Are the Value Conflicts Assumptions?

6. What Are the Descriptive Assumptions?

7. Are there any Fallacies in the Reasoning?

8. How Good is the Evidence: Intuition, Appeals to Authority, and Testimonials?

9. How Good is the Evidence: Personal Observation, Case Studies, Research Studies, and Analogies?

10. Are there Rival Causes?

11. Are the Statistics Deceptive?

12. What Significant Information is Omitted?

13. What Reasonable Conclusions are Possible?

Each chapter explores the title question in depth, giving definitions (such as *assumption*, *dichotomous thinking*, *ambiguity*, *analogy*, *post hoc fallacy*, *ad hominem*, and *ad populum*) where necessary, and providing applications of the critical questions. Each chapter offers three practice exercises, which focus on the critical question for that chapter, followed by sample responses. The chapters finish with a list of Internet sites for additional practice.

Browne and Keeley conclude the text with a summary and a warning about how not to use critical questions. Using CT can be “annoying to listeners, seem mean and pushy, and come off as condescending.” They remind the reader that learning is a social activity in that “we need each other to share conversation and debate.” (213, 214) No one likes a pendantic know-it-all.

As the text is in its sixth edition, Browne and Keeley have refined the text into a highly organized, practical guide with interesting, appropriate examples. They have acted on reader requests and suggestions to improve the book. The authors are university professors. The text is suitable for anyone who wants to develop their critical thinking skills, not just the authors’ students. *Asking the Right Questions* is a worthwhile contribution to the catalogue of CT guides.

Examples of Practice Exercises

From Chapter 5, “What Are the Value Conflicts and Assumptions?”

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For most people, college is a waste of time and money. One does not need schools to learn. If you go to college to make it possible to earn more money, you have been had. More than half of those who earn more than \$55,000 never received a college diploma. When you do learn in college is rarely useful on the job. Most of you would be better off saving part of the money you earn while your naïve friends are in college. (74)

From Chapter 10, "Are there Rival Causes?"

A little bit of light may beat the winter blues. Researchers studied nine patients who suffered from winter depression, which is caused when the days get shorter. The patients were exposed to bright florescent light upon awakening and in the late afternoon, for three hours at a time. Within a week, seven of the patients had recovered from their depression completely, and the other two showed a modest improvement. The light treatment works because it tricks the body into thinking that it's summer. (161)

Critical Reading and Writing: An Introductory Coursebook

by Andrew Goatly. London: Routledge, 2000.

This text is designed for native English-speaking undergraduates and pre-university students.

To understand the premise of the book, it is useful to examine Goatly's definition of "critical". After explaining conventional and educational meanings of the term, he gives his wider meaning for critical: "explaining how the world and our relationship within it and to it are constructed through reading and writing." (1) A second meaning derives from the word "crisis," and Goatly mentions some crises affecting the world today: unemployment, persistent food shortages, conflicting social roles of women, the subjection of modern society to scientifically based technological experiments, the culture of consumer capitalism (1,2). One of the themes of the text is how the ideology and way of thinking that causes these crises can be detected.

The text is divided into three parts consisting of 10 chapters. Part One concerns reading meanings from the text (Genre/Conceptual Meaning/Interpersonal Meaning). Part Two concerns reading meanings into the texts, and includes chapters on Interpreting Discourse, Reading and Writing Positions, and Intertextuality. Part Three concerns ideology and includes four chapters: Advertising and Consumerism, Fiction and Feminism, News and Institutional Power, and Nature Vocabulary and Grammar.

Part One is particularly useful for analyzing readings. The writing project is "simplifying an academic text," in this case being Little Red Riding Hood. Part Two explores the importance of inferences, the manner in which text sets up roles and positions for the reader and writer, and how readers develop a sense

of genre. The writing project is a letter to the editor.

Part Three concerns ideology. This section explores the relationship between advertising and consumer capitalism, stereotypes of women's roles, the bias in everyday news and media, and presents an ecological critical discourse analysis. Part Three contains three writing projects. One is to write promotional material for an organization. A second is to write a short love story, and the third is to write a news article.

Parts One and Two are instructive and useful. They provide a clear analysis with good examples, follow-up activities, and points of inquiry. However, Part Three contains prosletizing of Goatly's point of view. Chapter 7, for example, spends an inordinate amount of space outlining the history of consumerism and outlining the six aspects of consumerist ideology. Goatly makes some specious claims as if they were scientifically proven:

Very often obsolescence is deliberately built into these products, so that they do not last as long as they could-it is possible to produce a car tyre which never wears out, but to do so would obviously bankrupt Goodyear, Dunlop, Michelin and company, so that technological advance in this case is ignored in favour of profits. (186).

He offers no verification of his "facts", nor does he cite any sources. Chapter 8 uses a feminist critique of a short story. Chapter 9 argues that the press reflects the power structure of society and that the press is never entirely free. Chapter 10 suggests "how the existing grammar of English might be exploited or subverted to counter the technological ideology of the exploitation of nature" (275). Using ecological critical discourse analysis Goatly "proves" that Wordsworth's *The Prelude* is superior to *The Times* of London (9). Goatly is up-front with his political stance, but taking such extreme positions has a whiff of "use critical thinking, but on my terms" point of view. While this author could not in good conscience recommend the book for students or teachers, an appropriate exercise for students would be to analyze Part Three, identify biases, explore faults in logic, and write an alternative unit. Instead of teaching students *how* to think, Goatly seems to be telling students *what* to think.

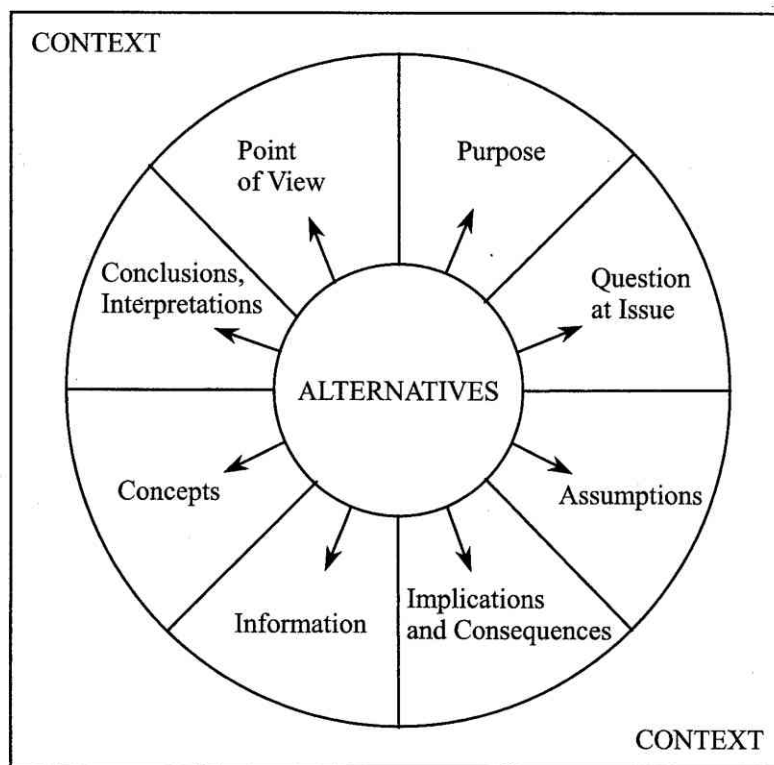
Learning to Think Things Through: A Guide to Critical Thinking in the Curriculum by Gerald M. Nosich. Upper Saddle River NJ: Prentice Hall Inc, 2001.

Nosich has written a guidebook for learning to think critically within a particular discipline or field of study. The book is designed to be used at universities as a supplemental text in conjunction with a subject core text. The two core parts of the book are 1) elements of reasoning; and 2) The standards of critical thinking. Nosich emphasizes that critical thinking is not learning how to *think*, it is learning how to think

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well. He stresses that CT promotes “a different way of approaching the world by thinking your way through it” (xiii). He also stresses the necessity of *doing* in addition to the reflecting on and understanding of CT. Active engagement, not passive reception, is essential for students to learn CT skills.

Nosich uses a slightly modified form of Richard Paul’s CT model. He feels that there is no short, integrated presentation of Paul’s model suitable for use in a subjective course. He groups the most central concepts of critical thinking into eight elements of reasoning. He adds *context* (background to the reasoning rather than literally being an element in it), and *alternatives*, which encompass the different choices that could be made in the reasoning. He calls this “thinking outside the box.”



(Nosich 87)

Nosich’s CT model and his explanation is one of the strengths of the book. He illuminates the importance of the ideas, explains exactly what they are, and provides clear examples of each category in action.

Nosich enlightens the reader by contrasting CT with what it is not. For example, it is not negative or emotionless, as some people mistakenly believe. He outlines potential impediments to CT including: world views based on the news media or advertising, all-or-nothing thinking, stereotyping, fears, egocentrism, developmental patterns of thinking, previous commitment, personal experience, and background stories and logic. He presents seven standards for thinking to become critical and illuminates how and why these standards are important. They are clearness, accuracy, relevancy, sufficiency, depth, breadth, and precision.

Nosich then contrasts the seven standards with non-critical thinking standards (fun, popular, fashionable, etc.) These sections are another strength of the text.

The chapter on CT within a field is wordy, but contains a few utile nuggets of wisdom. He believes that all fields have a relatively small number of Fundamental and Powerful (F and P) concepts, which are the most central and useful ideas in the discipline. Any new problem or question that arises should be related / filtered through the F and P concept as part of the explanatory context. New material can be illuminated by F and P. He illustrates the idea with the concept of Romanticism in a poetry class. A second gem is his suggestion to identify and think in terms of a central question of the course as a whole. A third nugget is the impediment Nosich calls "school stuff" which is the tendency to isolate course material into something used only for passing tests. Nosich stresses the necessity for a student to take the subject matter as his own and to participate in the construction of his own knowledge. Applying the three aforementioned points into this writer's university career would have resulted in more learning and a higher grade point average.

Throughout each chapter, Nosich includes sidebars; black boxes which give case studies or propose questions for thought and reflection. Unfortunately, the quality and interest level of the topics are uneven. Some are excellent: "What is an example of something you learned in a course that still has major importance in your thinking or in your life?" (73). Others are mundane, irrelevant, or difficult to relate to: "Take a concept like terrorist and try to get clear about it by asking yourself about the implications of being a terrorist" (119).

Likewise, there are 15-20 chapter exercises at the end of each of the five chapters. The exercises are applications and extensions of some CT concepts. Personal reflection is also a component of the exercises. The exercises taken as a whole are not very inspired. For example, to illustrate "reasoning" he suggests students "take a paragraph or two from your textbook...Try to describe the process of reasoning that might have led to these conclusions..." (49). Another example is from Chapter 4 (Standards of CT): "Spend a day on a standard. Keep a log" (146). These exercises, while useful for illustrating the concepts, are not invigorating. They make one wish the assignments were as illuminating as the text, instead of appearing to be make-work required homework exercises.

Overall, Nosich presents his material systematically, and does a good job of relating CT to the individual subject. He presents the material clearly and thoroughly. More stimulating chapter exercises would tremendously improve an otherwise informative text.

The Art of Thinking: A Guide to Critical and Creative Thought by Vincent Ryan Ruggiero. New York: Pearson Longman, 2004.

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Ruggiero has written a guide to developing critical thinking and becoming more creative. The book is targeted for American university students, but is broad enough in scope for the general reader. Ruggiero shows the applicability of CT to life experiences beyond the classroom. Ruggiero has written numerous books concerning thinking and CT and is a Professor Emeritus at the State University of New York at Delhi.

Four premises constitute the basis of Ruggiero's content and organization:

1. The textbook on thinking should be more on what to do than on what to avoid doing.
2. It should introduce students to the principles and techniques of critical thinking.
3. The text should teach students how to evaluate their own ideas, as well as the ideas of others. It is much more difficult for students to see their own blind spots, prejudices, and errors than it is for them to see other people's.
4. A text on thinking should teach students how to persuade others (xvi).

Like most writers on CT, Ruggiero gives a definition of the term, in Chapter 10. Unlike the others, he first gives a definition of *thinking*, in Chapter 1. "*Thinking* is any mental activity that helps formulate or solve a problem, make a decision, or fulfill a desire to understand. It is a searching for answers, a reaching for meaning" (14). *Critical Thinking* "means reviewing the ideas we have produced, making a tentative decision about what action will best solve the problem or what belief about the issue is most reasonable, and then evaluating and refining that solution or belief" (159).

While explaining how to develop critical, analytical, and creative skills with clear explanations, Ruggiero also mentions flaws in logic, habits that stifle creativity and hinder judgment.

The warm-up exercises, applications and composition and speech exercises are one of the strengths of the book, both for the topic, and for the variety. Each unit has three warm-up exercises to get the creative juices flowing. Here are three random examples:

The chain letter is usually associated with dishonesty, superstition, and even illegality. But it could be used constructively and beneficially. Think of as many such ways as you can to use the chain letter, modifying it in whatever ways you wish. (178)

Think of as many creative names as you can for a restaurant. Consider all types of establishments, from the fancy high-priced variety to the lowly coffee shop, as well as all types of cuisines. (154)

Divide the circle below into as many parts as you can, using four straight lines. (103)

Each chapter has 5-15 applications following the warm-up exercises. Here are two examples:

Think of the most unpleasant task you ever had to do. Use your creativity to make it more pleasant.

Follow the directions given at the beginning of Application 5.1. (93)

An 18-year-old San Francisco resident sued the high school from which he graduated, contending that the faculty were responsible for his inability to read and write adequately. Do you think such a suit is reasonable? What factors would you consider if you were responsible for judging its merits? (56)

Each unit concludes with a Composition or Speech Exercise. These are timely, thought-provoking controversial topics. One example: "Is a national identity card a good idea for America?" (156)

I have only minor quibbles with the content. One tiny point is that he perpetuates the canard that Eskimos have more words for snow than other languages. Also, he spends 13 pages outlining a step-by-step approach to composition. This is better and more thoroughly done in composition texts and seems out of place here. Otherwise, *The Art of Thinking* is an excellent, thought-provoking resource book for anyone who wants to learn more about creative thought and CT.

Critical Thinking: Building the Basics by Timothy L. Walter, Glenn M. Knudsvig, and Donald E.P. Smith. Wadsworth/Thomson Learning, 2003.

The title says it. The text is written at an easy-to-understand level, and could work with most Japanese university students. The book starts off with a strategy for "learning and thinking smart" they call the TCDR Strategy (Topic, Class, Description, and Relevance). The authors give clear examples and include a number of exercises for students to follow for each step. They define and explain the importance of establishing a cognitive schema.

The authors give examples of methods that work for strong critical thinkers. For example, strong critical thinkers compare their ideas with other viewpoints and assimilate new information with what they already know.

Critical Thinking is designed for university students, and lists and explains four basic principles that successful students follow. They are: 1, Read and study to pass tests; 2, Ask intelligent questions; 3, Anticipate your instructor's questions; and 4, Develop Good Answers. Walter *et al* explain strategies for following those principles, and guide students through the process. They also give examples of good and bad types of questions to formulate and ask.

Finally, the authors explain about the psychology of learning to learn. Metacognitive strategies such as formulating pre-reading questions, answering the questions while quickly reading through the material, and reflecting on these main ideas reinforce the learning process.

Critical Thinking features many individual and group work tasks to reinforce the ideas of the text. The writing style is simple, direct, and purposeful. In short, Walter, Knudsvig, and Smith have written a basic guide to CT without any superfluous clutter. It contains a lot of common sense, but reads as if the readers

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are discovering these ideas for the first time. This comes off as a strength, not a weakness. *Critical Thinking* covers a few valuable skills in a thorough, systematic fashion.

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