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# THINKING

### SKILLS FOR CRITICAL UNDERSTANDING AND WRITING Second Edition

MATTHEW ALLEN

**SMART THINKING** is a practical, step-by-step guide to improving skills in analysis and critical thinking, and the effective communication of arguments and explanations. With an accessible and straightforward style, this book is of great use for students at university and also final-year school who are looking to improve their analytical skills.

This second edition treats reasoning as an aspect of communication, not an abstract exercise in logic. It not only provides detailed advice on how to practice better analytical skills, but also demonstrates their application to finding information and writing more coherently. The focus in this book is on improving one's own reasoning rather than simply reading others' arguments. In particular, **SMART THINKING** emphasises how to develop arguments that are coherent and take account of their audience and context.

Features of this new edition include:

- an updated glossary, a guide to further reading, and a guide to important skills
- additional advice on casting and developing arguments
- a new chapter at the end of the book that demonstrates, in an extended example, the skills learnt in the book
- a more thorough treatment of how to find and use information via reasoning, and
- exercises and review questions in each chapter to enhance knowledge and test readers' skills.

**Matthew Allen** is an Associate Professor who coordinates the Internet Studies Program, and Associate Dean Teaching and Learning, Humanities, at Curtin University of Technology.



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# **SMART** THINKING

For Jane and Verity (as ever)

# SINT CRITICAL UNDERSTANDING SKILLS FOR CRITICAL UNDERSTANDING Second Edition

### **MATTHEW ALLEN**



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# Preface to First Edition

The study and teaching of critical thinking (also known as informal logic) is relatively rare in Australia. There is little to guide the keen student or teacher in the development of skills for analysis and reasoning in everyday work and study. The orientation of most of the available books on this subject is more traditionally logical, and this orientation further complicates the process of teaching and learning applied critical thinking skills, since it tends to remove the use of reasoning and logical analysis from even its most basic social contexts.

Smart Thinking is designed to provide a simple, but not simplistic, guide for the development of critical thinking and analytical skills. It combines the undoubted strengths of the informal logical approach with a newer-but often-overlookedinsight: that reasoning and analysis are always communicative acts. I would not pretend that one can easily resolve the epistemological tensions between, on the one hand, the commonly held commitments to objective judgment and truth that underpin 'logic' as a mode of analysis and, on the other, the social relativism and intersubjectivity that a communicative-theory approach demands. However, from a pragmatic point of view, there is considerable profit to be gained from letting these two distinct approaches jostle alongside one another. Moreover, for all my attempts to keep competing epistemological ideas to a minimum in Smart Thinking, the book cannot remain purely 'practical'. Simple advice on 'better thinking' rubs up against deep and important matters of philosophy in a way that, I hope, creates a constructive interaction between the ease with which one can begin to improve one's thinking and the complexity of thinking about smart thinking.

While I myself work theoretically within post-structuralist frameworks, *Smart Thinking*'s bias towards communicative issues stems primarily from the very practical experiences I had in developing and teaching a critical thinking unit (Applied Reasoning 200) at Curtin University of Technology in Perth. On the basis of my experiences with many hundreds of students, I am confident in asserting that it is wrong to divorce analytical thinking from its communicative context. Outside the narrow confines of some academic disciplines, communication takes place on a

vast scale, with far too little critical analysis to support it. It is precisely at the junction between 'knowledge as something one knows' and 'knowledge as a function of communication' that most of us need assistance in sharpening up our thinking skills.

My work in Applied Reasoning 200 has not only helped my own development as a critical thinker but has given me the opportunity to test ideas and approaches on a captive audience. So, my first debt of gratitude is to all the students who have, in so many ways, contributed to the writing of this book. Applied Reasoning 200 also became the focal point for a series of collegial relationships from which I have benefited enormously. For their assistance, insights (and perseverance with often impractical ideas), my thanks are extended to Patrick Bertola, Gina Koczberski, Des Thornton, and especially, Eamon Murphy, all of Curtin University. Thanks also to Will Christensen, Dennis Taylor, and Roy Jones for their positive encouragement as heads of academic departments. I also owe a debt of gratitude to Richard Bosworth, who some years ago, when I began to study at university, first taught me that critical enquiry involves asking about the 'who', 'when', 'why', and 'how', as well as the 'what' that was the staple of high school study. Michelle Forster and Emma Rooksby provided invaluable research assistance and general help; both are fine young philosophers. Thanks, as well, to my publisher, Jill Lane, and editor, Lucy Davison, of Oxford University Press. Finally, I could not have written this book without the unstinting support and reassurance of my wife Jane and stepdaughter Verity; most of all, they remind me that a person cannot live on logic alone and confirm in my mind that life must be lived, not just with analytical reserve, but also with passion and commitment.

> Matthew Allen Perth September 1996

# Preface to Second Edition

I have been fortunate enough to find that I was right to assume that a practical book on critical thinking skills set in the context of communication would be both popular and necessary. I continue to be involved in teaching critical thinking in the unit Applied Reasoning, which is now a part of some courses of study through Open Learning Australia (REA11—visit http://www.ola.edu.au), and is being revived on campus at Curtin University. I have also realised that, in writing *Smart Thinking*, I myself learnt as much as I would hope for its readers and so, in the end, it was an easy decision to produce a new edition.

This second edition reflects the experiences of teaching with *Smart Thinking* over the years since it was first published. In revising it, I have found that much of what I had originally written remains valuable, and that students have learnt from

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it. But I have also made some significant changes, including greater assistance in the earlier chapters to help readers with the more complicated skills and concepts, as well as expanding later chapters on reasoning and on research. The final chapter is now a fully worked example of the skills that underpin the whole book, providing a model for readers of the power and value of the approach I am outlining. I would hope that readers will now find the sometimes-confusing journey towards greater ability in critical thinking and reasoning just that little bit easier, and with a clearer goal ahead.

In writing the second edition, I have been aided greatly by Jane Mummery and Robyn Mayes, both fine teachers of critical thinking, who have struggled with the problems of the first edition in teaching Applied Reasoning and have generously provided advice on how I might improve it. To them both, I owe a great deal. I also wish to thank Christine Richardson with whom I taught elements of critical thinking and who gave me the opportunity to develop further my ideas about reasoning and research. To my long-suffering publishers at Oxford University Press, especially my editors Lucy McLoughlin, Anne Mulvaney, and Chris Wyness, great thanks and apologies for all the delays. Perhaps they could ask the government about its neglect of higher education and the consequent doubling of workloads since I wrote the first edition. And to Jane and Verity, this book is still and always for you both.

> Matthew Allen m.allen@curtin.edu.au Perth February 2003

# How to Use this Book

To get the most out of this book, you will need to read it carefully chapter by chapter. The book builds sequentially, so that many of the ideas and concepts introduced in earlier chapters underpin more complex discussion of related issues in subsequent chapters. Also, as you go, you should do the exercises in each chapter. Do not check the answers until you have completed all of a particular exercise and are satisfied with them. When you turn to the Answers, Discussion, and Further Advice, you will see that, in most cases, there is further discussion of the issues and concepts relevant to each exercise. As much as you can, don't be tempted to look at the next set of answers until you have completed the exercises for them. Often, you will be asked to do an exercise in order to provide you with the experience necessary to get the most out of the further advice offered in the answers. And, when you have done the exercises and checked the answers, I expect you will need to reread and revise the chapter again.

After you have read a chapter, done the exercises, and checked the answers, look at the Concept Check and Review Exercise at the end of the chapter. The concepts introduced in each chapter are listed. You should briefly write down what you know about them, then turn to the Glossary to check your answers. There are, by contrast, no answers provided for the review questions that you will find at the end of most chapters. If you have understood and integrated the material in each chapter, you should be able to answer these questions confidently. If you cannot, then it is probably a sign that you have missed something.

Finally, you should integrate what you learn about reasoning in this book with the work or study you are doing at the moment. For example, when doing the exercises and review questions, you will often be called upon to use information from your own life as examples or basic material with which to do an exercise. The whole point of this book is to give practical, applied advice. I can provide the advice; you must apply it.

This book aims to provide you with structured information, exercises, and reflections to guide your own learning. Your investment of time and effort in working through this structure will provide you with considerable returns in improving your smart thinking.



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