

# Critical Thinking

**An Introduction**

Second edition

**Alec Fisher**



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*Dedicated to my grandchildren  
Leonora, May, Eliza and Barnaby*

# Preface

This book aims to teach *critical thinking* skills: the ability to interpret, analyse and evaluate ideas and arguments. It is based on a widely shared conception of critical thinking and it covers many of the basic skills or competencies displayed by good critical thinkers. It aims to develop those skills by teaching them *explicitly* and *directly*, rather than *indirectly* as many teachers claim to do in the course of teaching their subject – history, physics or whatever. It also aims to teach these skills so that they can be transferred to other studies and to everyday life. Critical thinking is now widely seen as a basic competency, akin to reading and writing, which needs to be taught. That is what this book aims to do.

After an initial chapter which explains what critical thinking is and how to teach it, the early chapters focus on analysing reasoning. However, students usually want to move on to the task of evaluating arguments and presenting their own! Since students enjoy the process of arguing, I usually encourage them to do this from the very beginning, and I also get them to note their responses. Later, as they learn more about evaluating and presenting arguments, they can look back at what they did earlier and see how much better they can do it. In this connection I have often required students to keep a ‘critical thinking notebook’ in which they answer questions as they are set, to help them evaluate their progress. To make this self-evaluation students need to compare their answers with those provided at the back of this book and have their work graded and the grading explained to them. This helps them internalise what they are learning.

Studying critical thinking involves trying to change the ways in which most of us think. To do this we need extensive practice and feedback. That is why the book has many stimulus passages on subjects of topical interest and over 220 questions for the student to answer.

Answers are provided to more than three-quarters of these to help students check their progress. The ‘thinking maps’ are sets of questions students should ask themselves when trying to think skilfully in various ways. Of course, critical thinkers not only exhibit the skills we have mentioned, but also value reasonableness. It is to be hoped that working through this material will also encourage what Socrates called the ‘examined life’.

The book is suitable for a wide range of students. It is used extensively in North American schools and colleges, in the UK for the Critical Thinking examinations produced by OCR (Oxford, Cambridge and RSA Examinations) and AQA (Assessment and Qualifications Alliance), for the International Baccalaureate and in many other contexts and countries. Many of the ideas and examples arose in the course of my teaching critical thinking to young people and adults in North and South America, Europe, Africa and the Far East. The material is presented in such a way that it can be worked through on a self-study basis, but those who do this should try to discuss their ideas and arguments with other people. This usually turns out to be instructive and fun for both parties!

Teachers who use this book for their students may find the following suggestions helpful. Although some things need to be explained by the teacher, I find that discussion in small groups can be very successful (four per group is a good number). Students love arguing with each other and, given good examples (stimulus passages), this can be both enjoyable and instructive. Applying thinking maps to your own thinking can be difficult at first so it can be useful to put students in pairs for this purpose – one doing the exercise whilst the other helps them focus on answering the questions in the thinking map. There are several good sources for finding further stimulus material of interest to students: look in any ‘quality’ newspaper at the letters to the editor, the editorials or ‘analysis’ articles. It can also be very helpful to draw on materials which students are encountering in other courses.

This second edition differs from the first in two main ways. Numerous small improvements have been made throughout the text, but the two large changes are (i) there is a new chapter about the internet and how to find reliable information there (chapter 12), and (ii) more than two-thirds of the examples and passages in the Questions appendix have been replaced by completely new material, with consequent changes in the body of the text and in the Answers section.

These days, people use the internet so much to find information – and so much of what is presented there is unreliable – that if you want to be a good critical thinker you need to know how to use the internet effectively, and that is what I have explained in chapter 12. There are many places earlier in the book where I suggest that the reader could research something on the internet, and the internet chapter contains exercises which mostly refer to issues discussed earlier in the book. Some readers might like to read chapter 12 early to help them work on exercises which occur in earlier chapters; others may prefer to read the chapters in the order presented.

Many of the passages in the Questions appendix are used for quite specific purposes in exercises in the book, but once the reader has become familiar with and practised the techniques described, most of the passages can be used for quite different purposes – thus yielding far more exercises than it appears at first sight – and practice makes perfect. Thus, teachers using this book, who also have access to the first edition, can have available a very large number of exercises (many of which also have model answers) if they wish.

I have enjoyed writing this book. Many people have helped and encouraged me and it is a pleasure to thank them here. My students at the University of East Anglia were both responsive and critical and helped me shape my ideas in the early stages. My colleagues at UEA were supportive, especially Nick Everitt and Andreas Dorschel from whom I have learned much. I have also learned much from other researchers in the field of critical thinking, especially, in the present context, Robert Ennis (assumptions and causal explanation), Robert Swartz (thinking maps and decision-making) and Michael Scriven (clarification and argument evaluation). These are acknowledged at appropriate places in the book, but I owe them a general debt too, which I am pleased to acknowledge here.

I should like to thank Dinah Thompson who read the whole first edition, helped me with examples and gave valuable comments, and Professor Steve Scalet who gave me invaluable advice on the new chapter 12. OCR kindly gave permission for me to use much of the material which I developed for the AS examination in Critical Thinking. Cambridge University Press have been helpful throughout, especially Keith Rose, Noel Kavanagh, Anne Rix, Rachel Wood and Lucy Poddington. Finally, affectionate thanks to my wife Sarah and my children, Dan, Max and Susannah, on whom I have sometimes practised my ideas!

## **About the author**

Dr Alec Fisher is a distinguished researcher and lecturer in critical thinking. He has conducted many workshops on critical thinking and its assessment for teachers and students in schools, colleges and universities. He has also worked extensively with the medical profession and business people to improve critical thinking skills in those contexts. Dr Fisher designed the AS-level examination in Critical Thinking for the Oxford, Cambridge and RSA Examinations Board and was its chief examiner for some years. He is the author of several books and numerous articles, especially on critical thinking.