

Review Of Critical Thinking Skills. Developing Effective Analysis And Argument By Stella Cottrell, Palgrave MacMillan, 2011

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The lens through which this book is reviewed is that of an academic involved in a pilot critical skills module for first year university undergraduate students. Twenty-first century graduates are expected to have developed analytical skills, the ability to communicate ideas both verbally and in writing, the ability to deal with complex arguments, evaluate evidence and make balanced judgments. Critical thinking, reasoning and analytical skills are expected to be developed throughout the university experience, in all subjects, and in other areas of students' lives.

The reality is however, that for many students, endeavours to develop effective analysis and argument can be challenging, intimidating and sometimes, overwhelming. Depending on the culture of the higher education institution or department, the acquisition of critical skills can be made extremely difficult for students because of barriers such as an institution or department having a culture of summative assessment practices, limited feedback or lack of feedback on assignments or assessments, time constraints and limited availability of resources. The risk is that students, particularly academically weaker students, may opt to surface learn; to learn by rote and strategically use 'learning' to pass assessments and end of year examinations rather than 'learning' to learn.

Although Stella Cottrell's book, *Critical Thinking Skills. Developing effective analysis and argument*, is not explicitly targeted at undergraduate students, it is designed to help readers experience, practice and develop various essential skills that will support and enhance learning. Cottrell's stated aims are '... to help readers develop an understanding of what is meant by critical thinking and so develop their own reasoning skills.' Cottrell focuses '...mainly on aspects of critical thinking that can be applied to work and study...' (viii).

Book Outline

Critical Thinking Skills is structured and designed to help the reader build skills of critical thinking starting from a basic understanding through to applying techniques and strategies in academic writing. The book is organised in 12 chapters beginning with a short preface which sets out the aims of the book and an explanation of terminology used throughout the text. The preface also briefly outlines the contents of chapters and provides a valuable glossary. Each chapter is divided into sections and subsections, beginning with a list of learning outcomes and ending with a very useful, clear and concise summary. Each chapter offers activities to apply to the various concepts and provides answers to these activities. At the end of the book readers are directed to longer texts written to support the practice activities covered in Chapters 8, 9 and 11. Practice activities based on the longer texts are provided and explanatory answers to these activities are also offered.

Chapter one provides a broad introduction to critical thinking, covering topics such as attitudes and barriers to acquiring critical thinking skills and the benefits which accrue once the reader has acquired the skills of reasoning, reflection, critical thinking and so on. Chapter two identifies foundational aspects of critical thinking including a section on knowing where to look and where to focus attention, how to identify difference, categorise, recognise sequence and so on. Chapters three and four introduce argument as central to critical reading and looks at how to identify key components of an argument and the difference between critical argument and other types of writing argument. In chapter five Cottrell tackles and focuses on the topic of reasoning, providing good examples and practice on how to evaluate the arguments of others. Chapters six and seven focus on developing the readers' skills in analysing the details of argument – reading between the lines and identifying flaws in argument. Chapter eight demonstrates how to evaluate evidence and sources, recognise the difference between primary and secondary sources, understand what is meant by a literature search, how to identify relevant and irrelevant evidence and how to recognise potential weaknesses in oral testimony. Chapter nine concentrates on how to apply critical thinking to note taking and to ways of categorising theory. Chapters ten and eleven focus on applying critical thinking to academic writing. Finally chapter 12, a new chapter in this revised second edition, focuses on critical reflection and how to present your reflection to others through logs, blogs, journals, reflective summaries and essays.

Although the book is over two hundred and eighty pages long and contains twelve chapters, it does try to be reader friendly by providing examples, vignettes, activities, explanations and summaries. The answer pages at the end of chapters and at the end of the book do more than

merely provide the answers to the practice activities – crucially the reasons behind the answers are carefully explained. Throughout, the emphasis is on active learning and on practice through self-testing and reflection.

Overall, this is an excellent resource and a very useful critical thinking supplement to any textbook for any course or programme of study which if read, consulted and studied regularly could only improve and develop effective analysis and argument.

What could be better about this book?

Cottrell provides a shared, common concept of critical thinking and covers an immense amount of information and knowledge and introduces key concepts and tools relating to the development of critical thinking skills. However, this general and broad approach to critical thinking, analysis and argument comes at a price. Specificity does suffer as little attention is devoted to the varieties of intellectual culture in academia, to the individual nature of academic disciplines, and crucially to the differences in analytical styles (while acknowledging the author does use the long passages to draw on a range of different academic disciplines).

While recognising that certain broad approaches for developing students' critical thinking, analytical capacities and reasoning can be adjusted for use in different contexts and different intellectual cultures and although formal patterns of analysis are of great importance in academia they cannot give students the wide range of specific critical skills needed to study particular areas in the sciences, social sciences, arts and humanities (Meyer 1986). The intellectual skills needed to solve problems in astrophysics are not necessarily the same as those needed to successfully critique a piece of art (except in a very general sense). Writing a philosophy paper or constructing an algebraic proof requires the application of very precise critical skills.

The problem is that many inexperienced readers (particularly many first year undergraduate students) will be unaware of such distinctions in analytical styles and if the skill is not practiced in specific contexts, the danger is that the reader will view the acquisition and teaching of critical thinking skills as an independent discipline – and much of the benefit which can accrue from the acquisition of critical thinking will be lost or at least diluted. Critical and analytical thinking skills must be incorporated into disciplines, studied in-depth and practiced regularly using the distinctive conceptual structures and methodological norms which guide investigation and shape theory in a given discipline (Meyer 1986).

There is also a concern that with this book, as with any self-help guide, the learner may feel overwhelmed or simply lack the discipline to persist in the study of the text, particularly if an inexperienced student attempts to read the book from cover to cover. Much depends on the intellectual maturity of the reader.

Conclusion

Critical Thinking is clearly written and accessible introduction to the core concepts of critical thinking, breaking down a complex area into easily understandable sections. The common sense approach filters enormous amounts of scholarship on the topic and provides excellent examples of good practice and opportunities for the reader to practice what is learnt from each chapter.

Summaries and application based examples at the end of every chapter provide students with the opportunity to utilise the knowledge gained throughout the text. Summaries and the longer text practice activities are particularly useful. The book provides a broad guide for students, at all levels, to enhance their reflection, analytical and critical skills and construct arguments more effectively. Any problem of lack of specificity can be easily solved in a classroom situation, facilitated by a lecturer or tutor. The revised second edition incorporates an excellent chapter on 'Critical Reflection' and additional material on essays and referencing.

Critical Thinking Skills. Developing Effective Analysis and Argument is, above all, an excellent resource for teaching staff on any course or programme of study.

Reference

Meyers, C. (1986) *Teaching Students to Think Critically*. San Francisco: Jossey-Bass.