Critical Reading and Thinking

'Critical analysis [involves] "identifying gaps in knowledge, recognizing conflicting schools of thought and assessing the reliability of research"

--(engineering lecturer cited in Bruce*)

How do you approach a published academic text? (Note: the sections below may or may not map into the headings in a given academic text.)

- Abstract: How can it help you? What does its structure tell you? What key information is presented?
- *Topic*: What is the article about? How quickly can you determine this from the title, abstract, introduction?
- *Background*: How is the article positioned in the academic (sub)field? Is anything omitted that you would have included?
- Focus (gap in literature): What is/are the research question(s)? Do they call up related questions in your mind? Is anything omitted that you would have included?
- Theoretical framework: What overt theories does the author draw on? What implicit theories are being used?
- Methodology: what methods are being used? Do these seem appropriate? Are there holes in the methodology? Does the author acknowledge and explain these? Could you envision using this mythology in your research? Could you envision using alternative or additional methods to investigate the same research question?
- Findings: What are they? Do they seem valid—and what criteria are you suing to determine this? Are they important? How does the author characterize or classify the findings? Would you have expected to find any other findings discussed? If so, why might they be missing (e.g., research design, other reasons)?
- *Implications*: Are practical applications or implications given for the findings? Do you agree with them?
- *Conclusion(s)*: What conclusions are drawn? Do they make sense to you? Are they valid/relaiable/generalisable? Do they leave gaps to be addressed?

Evaluate

Content, theory, method

Author's (self-) positioning in the field: What clues does the author give (e.g., citing certain theorists, previous studies, providing other information)?

Ideology: How can you identity ideologies at work in the text?

Academic or 'real-world' politics: Likewise, what clues are there to the author's political stance?

Usefulness to your work: Is this article potentially helpful in:

- --finding a gap in the literature; positioning your research
- --providing information
- --your own research design
- --understanding the implications of drawing on certain theories/methods/positions

Recourses to aid critical thinking

Handouts from Workshop on Critical Reading of Academic Texts

Who is the author? What is the motive for writing/doing the research?	Distinguishing between verifiable facts and value claims
For what audience is the author writing?	Determining the reliability of the source
Does the author have a bias?	Determining the factual accuracy of a
	statement
What research approach or data-gathering	Distinguishing relevant from irrelevant
method was used?	information, claims or reasons
Does the author satisfactorily justify the conclusions?	Identifying unstated assumptions
How does the study compare similar	Identifying ambiguous claims or
studies	assumptions
	Recognizing logical inconsistencies
	Distinguishing between warranted and
	unwarranted claims
(adapted from Bruce and Brameld, p. 165**)	Determining the strengths of an argument

*C. Bruce, 'Information literacy: A phenomenography.' Unpublished PHD thesis, University of New England, Armidale, Australia. Cited in ** C. Bruce and G. Brameled, 'Encouraging students-directed research and critical thinking in NESB students' in *Supervising postgraduates from non-English speaking backgrounds*, 1999. Buckingham: Society for Research into Higher Education and the Open University Press, pp. 157-166.

Types of Academic Publications

Types of publications related to research

Periodicals

Scholarly (peer-reviewed/refereed/juried)

Practitioner

Books

Single-auther

Edited, multiple autheors

Conference papers

Dissertations

Technical reports, unpublished manuscripts

Genres of writing related to research

<u>Library research paper:</u> integrates 1) information from a variety of sources with 2) your own insights. The focus may be to 1) analyze what experts have said on a topic or 2) argue your position on a topic.

<u>Emperical research paper:</u> derives knowledge from direct or indirect observation of a phenomenon of interest.

[American Educational Research Journal, Journal of Science Education, Developmental Psychology, etc.]

<u>Literature review:</u> summarizes and critically analyzes the body of knowledge on a topic, argues for future directions of research [Review of Educational Research]

<u>Theoretical paper</u>: takes a position on an existing theory or constructs a new one [Educational Theory, Journal of Philosophy of Education]

<u>Book review or article critique:</u> summarizes, analyses, & evaluates a book or article. [Education Review]

<u>Position paper:</u> argues for a practice, policy, or action, based on information from a variety of sources.

[Educational Researcher]