

Activity ➔ 21

Reading, critiquing and questioning

STUDENT HANDOUT 1

Read the paper given to you. As you read, answer the following questions. Be prepared to discuss your critical appraisal in our next session.

1. Who is the author(s) of the paper?
2. Why do you think the author(s) has decided to publish this paper?
3. Is the source you are looking at the original source of data (is the study reporting primary or secondary data)?
4. Has the author(s) included a relevant background literature review? Is this adequate?
5. Is there a good, clear description of how the research was carried out? Can you understand how the research was carried out, from the description given? Do you think any information is missing?
6. What questions form in your mind as you read the paper? How can you go about answering these questions?
7. Can you understand the interpretations/findings presented in the paper? Has the author(s) explained results in a clear and succinct way?
8. Are all interpretations/conclusions backed up by evidence? Has the author(s) jumped to conclusions about anything, or made assumptions that are not backed up by evidence?
9. Is there anything in the paper that you don't understand? If so, what do you think the author(s) should have done to make it clearer?
10. Are all sources acknowledged and referenced properly?
11. Is the paper well-written? Can you make any suggestions for improvement?
12. Is the paper useful to other researchers and/or the general public? Does it tell us something important? If so, what does it tell us?

Learning outcome: By the end of this activity you will have a deeper understanding of what is involved in critical appraisal and will be able to apply this understanding to academic texts, and to your written work, as your studies progress.

STUDENT HANDOUT 2

Read the paper given to you. As you read, answer the following questions. Be prepared to discuss your critical appraisal in our next session.

1. Who is the author(s) of the paper and what are their credentials?
2. What is the reason for making data/research results public?
3. Is the source you are looking at the original source of data (is the study reporting primary or secondary data)?
4. Are research topic and purpose well-justified?
5. Is there a well-described conceptual or theoretical framework? Is it adequate and appropriate?
6. Is there a philosophical/epistemological discussion? Is it adequate and appropriate?
7. Is there a detailed description of methodology? Is it clear why this methodology was chosen and how it is the best way to answer the research question?
8. Are methods well-documented or described? Is there a description of sampling procedures, method(s) of data collection and method(s) of data analysis? Are methods and descriptions appropriate and adequate?
9. Do you think the correct procedures have been followed (this could include, for example, when forming

- hypotheses, generating samples, conducting experiments, analysing data and reaching conclusions)?
10. Are all data reported (including those that weaken or contradict the results presented)? Do statistics apply to the point/argument that is being made? Have the figures been manipulated to fit the argument? Have data been interpreted correctly?
 11. What questions are raised by data? Are these questions answered in the paper and, if not, how might you go about answering them?
 12. Are visual data presented in a way that enables readers to draw their own conclusions and verify the assertions that have been made (if relevant)?
 13. Have conclusions been investigated, tested and verified by other scientists? If not, would it be possible for others to do so?
 14. Are assumptions and conclusions valid and backed up by evidence? Are results credible, dependable, authentic and trustworthy?
 15. Have generalisations been made that are not based on careful experimentation and analysis?
 16. Has bias been introduced into any of the information presented? Has the researcher(s) highlighted, and acknowledged, any bias that might be present in the research process? Is positionality discussed?
 17. Are ethical considerations discussed and well-described? Are they adequate and appropriate?
 18. Have all sources been acknowledged?
 19. Is the report well-written and presented? Are all diagrams, charts, figures and graphs well-presented, complete and referenced in the text, if used?
 20. Is the importance/impact of the research demonstrated clearly?

Learning outcome: By the end of this activity you will have a deeper understanding of what is involved in critical appraisal and will be able to apply this understanding to academic texts, and to your written work, as your studies progress.

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