





INTRODUCTION

A key aspect of the research you do for your GCSE Plus is 'taking a critical approach to sources' (AO2). This means that, in addition to selecting relevant information from a range of sources, you also need to think carefully about how **credible** ('**believable**' or '**trustworthy**') each source is – you need to **evaluate** your sources of information. The reason for this is that, if you base your report on sources that cannot be trusted, the ideas you present may be misleading, or even wrong.



TAKING A CRITICAL APPROACH TO PRIMARY RESEARCH

Remember - it is not necessary to include primary research in your GCSE Plus project, and many students will base their research purely on secondary research, which is perfectly fine. However, if you do choose to do some primary research you should consider the following questions.

How valid/reliable is your primary data? You need to be sure that the data you collect is accurate. For example, if someone else did the same research, using the same methods, would they get similar results? There is more information on how you can ensure primary research is valid and reliable in the 'Primary Research' handout but the key thing is to be careful, consistent and systematic when collecting primary data.



• How representative is your primary data? You need to make sure your sample group (see 'Primary Research') is an accurate reflection of the bigger group you are researching. For example, if you are researching attitudes towards sport in schools and only interview people who play for a school sports team, you are not getting a representative picture of how everyone feels. Also, you need to make sure your sample group is large enough to get accurate findings: you can't say everyone in your town feels a particular way about a certain topic if you have only interviewed five people.



TAKING A CRITICAL APPROACH TO SECONDARY RESEARCH

When considering how credible secondary sources are, consider the following questions.

• Has the source been **peer-reviewed**? This means that other experts working in the same field have read the source and judged it to be good quality. A peer-reviewed source is more credible than one that has not been peer-reviewed, like a website blog or magazine article. Journal articles are often peer-reviewed. To check if a source has been peer-reviewed look at the publication information in the front of the journal. If the article is from an electronic journal, go to the journal home page and look for a link to 'About this journal' or 'Notes for Authors'.



- Is the information **corroborated** by other sources? Corroboration means agreement or backing up. If you find a source that puts forward a particular point of view, it is more likely to be reliable if you can find another source that agrees with it.
- Is the source supported by relevant **references** to other sources? If so, this increases the credibility. See the handout on 'Plagiarism, appropriate referencing and bibliography skills' for more information on referencing.

Also, if the secondary source is online, you should ask the following questions.



- What can I tell from the website address? One of the ways you can judge how
 much to trust a website is to consider the type of organisation that made it.
 Sometimes the website address can help here:
 - '.com' businesses
 - '.edu' / '.ac' educational organisations such as colleges and universities
 - '.org' non-business organisations such as charities
 - '.gov' official government sites.

These website endings don't necessarily guarantee that a source is or isn't reliable but it gives you clues about the kind of organisation that wrote that information.

USING THE **RAVEN** APPROACH TO EVALUATING SOURCES



One useful way to evaluate your sources is to use the RAVEN approach. RAVEN stands for: Reputation, Ability to see, Vested interest, Expertise and Neutrality/bias. Each of these can be applied to a secondary source and will either increase or decrease how much you can trust that source.

- **Reputation**: What is the reputation of the person or organisation responsible for the source? Eg if a company has been involved with a number of scandals relating to research it has undertaken, you may question the results of any research they present.
- **Ability to see**. Can the person or organisation who has written the source look at the situation objectively? Or would they have a biased version of events? Eg if two opposing football fans watch the same match together, they will both have very different versions of how the match went, who played best and any important referee decisions.
- Vested interest. Does the person or organisation have a vested interest to lie or tell the truth regarding the matter in question? Eg a company launching a new product might have a vested interest to hide particular facts about that product if it might damage sales. Whereas a high-profile newspaper reporter would possibly have a vested interest in telling the truth as they would lose their good reputation if they were found to be lying.



• **Expertise**. Is the source written by a person or organisation that can claim to be an expert in the subject? This often isn't the case for blogs and can be an issue with resources such as Wikipedia. Things to look out for are relevant academic qualifications or evidence of a high level of experience in that area.

Eg someone who has been working in the textile industry for 30 years could claim to be an expert in the production of cloth. It is worth noting, however, that just because someone is a Professor, they might not be an expert in an area they are commenting on.

• **Neutrality/bias**. Does the person or organisation approach the issues in a neutral way? Eg do they look at both sides of the argument or just put forward their own case? Are they linked to groups that are biased towards a particular viewpoint? Neutral sources are generally more reliable.

RELIABILITY GRID

The grid below gives you another approach to determining the reliability of a source, based around the provenance of the source (where it came from), its intention and how it relates to other sources of information.



	Most Reliable				Least Reliable	
Who is the author?	International organisation (eg UNICEF, WHO, NATO) Governmental organisation	Respected university Well respected institute or group (eg Academy Francais, MOMA, CERN,)	Respected individual or expert in the field Major company (if not advertising)	Moderate pressure group Manufacturer (particularly if advertising) Individual with knowledge but no extreme views	Pressure group or individual with extreme views	Individual with little or no specialist knowledge
Where was the information found?	Peer-reviewed journal Governmental report (eg CNKI)	Respected specialised website or publication (eg New Scientist, The Economist, IMDB, The Stage) Book written for students or specialised audience	Well established media with generally unbiased views (eg BBC, The Wall Street Journal)	Unspecialised website known to base information on well conducted research (eg Snopes)	Website with information which can be added or amended by anyone, but with history and links to sources (eg Wikipedia, Zhihu)	Individual comments or blog Website with known extreme focus
What is the aim of the source?	To set out both sides of the argument, giving the data or information used to come to any conclusion.	To argue a particular point, with links to the data or information used.	To set out both sides of the argument, with little link to data or information.	To set out one side of an argument with little or no link to data or information.	To persuade you using shock tactics or selectively chosen data or information.	To give an opinion with no back up.
How mainstream is the view?	Established as the standard viewpoint or explanation	Agreed by the majority of experts within a field	There is not an established view, but this is one of the major competing views	Unusual view with a growing reputation or evidence base	Individual view but with some evidence	Extremist view that ignores the majority of evidence

WHERE TO RECORD YOUR EVALUATION OF YOUR SOURCES

As you do your research, you should keep a record of your sources and evaluate how reliable they are. There are a number of ways you could do this. For example:

- **Progress diary**. As you make entries in your *Progress diary* you can make notes after each source, explaining how you decided whether they were reliable or not
- **Annotated bibliography**. An annotated bibliography is a normal bibliography but under each source is a brief evaluation of the source. Some students choose to put their bibliography into a table format, with a final column for source evaluation.
- **Separate sheet**. You might choose to provide a separate 'Source Evaluation' sheet: a separate document that lists your sources and gives an evaluation of each one. You would submit your 'Source Evaluation' sheet along with your *Progress diary*. It would come under 'additional evidence' and therefore wouldn't be a part of your report word count.



Within your report. It is possible to evaluate your sources in your actual report, as
and when you reference them. However, this will be included in your word count
so probably isn't the most effective way of doing it – unless the reliability of that
source is part of your argument.

TAKING AN ETHICAL APPROACH TO SOURCES (PRIMARY)



If you are conducing primary research, as well as making sure your research is reliable, you must also make sure it is ethical. This means that you have collected your data in a way that is fair and follows good moral principles. Here are some things you should consider:

- Informed consent: If you conduct interviews or ask people to fill in a research form, you must first gain their informed consent. This means that they know a) what the research is about and what it's aiming to achieve, b) what they will have to do, and c) if there are any potential risks. You will need to make a consent form that explains a), b) and c) and get participants to sign it before they take part.
- Deception: However, there may be instances when you don't want your participants to know too much about what your research is about as this might affect the way they answer the questions. For example, if your project was about how teenage boys have sexist attitudes towards female classmates, if your participants knew this in advance, they might change their answers to make themselves look better. In these situations, you can employ a degree of deception. This could involve describing the research in terms that are a bit vague (eg you could say you are researching 'stereotypes within secondary schools' rather than mention 'sexism' explicitly). You might even do some covert observation: putting yourself in a situation where you can see or overhear particular situations and make notes on what you observe. If you use either deception or covert observation, then you must debrief anyone involved (see below).

- Right to withdraw: Anyone who takes part in any research has the right to
 withdraw at any point. This means any information that relates to them must be
 removed from the research and the final report, even if their name isn't given.
- **Duty of care**: As a researcher, you have a duty of care to your participants. This means not making them feel uncomfortable (eg asking them questions that are very personal or likely to upset them) or putting them at risk from physical harm (eg making them do something very physically demanding to test how their body reacts).
- **Privacy**: If someone volunteers to be part of your research, they have the right to control how the information you collect from them is used. This is called privacy. One way to ensure privacy in your research is to make the data you collect anonymous. This means that you don't refer to anyone by their actual name. Instead you can use false names (change 'Abdul' to 'Mohammed') or codes (Student A, Student B, etc). If you use false names, you should mention this at the end of your report, eg 'All names referred to in this report have been changed.'



• **Debriefing**: It is important that you debrief anyone who takes part in your research. This means explaining to them afterwards what the research was for and how you will use the information you have collected from them. This is especially true if your research has involved any degree of deception (see above). Debriefing can be done in writing or verbally, but it is important that it is done before you write your report so that participants can confirm they are happy to use any information you collected from them.

Other useful links to further information on taking a critical (and ethical) approach to sources:

- Purdue Online Writing Lab: owl.english.purdue.edu/owl/resource/553/01/
- Oxford Brookes University (web sources): **brookes.ac.uk/library/library-services/ information-skills/evaluating-web-sources/**
- NCSU Libraries: lib.ncsu.edu/tutorials/evaluating-sources/
- BBC Bitesize (reliable websites): bbc.co.uk/schools/gcsebitesize/dida/using_ict/ webresearchrev5.shtml



TASK

TEAM WORK

To practice taking a critical approach to sources, select a range of resources of different types (eg books, journal articles, websites etc.) and practice applying one of the evaluation strategies above (the RAVEN approach or the reliability grid). Ask a friend to do the same with the same resources and then compare your results. They should be fairly similar. If not, explore why – did one of you miss an important piece of information, eg the level of peer review or details about the author?



WHAT ASSESSMENT OBJECTIVES DOES THIS RELATE TO?

AO2: Research - Given the nature of the proposal, undertake appropriate research by:

ii. taking a critical approach to sources



OXFORD INTERNATIONAL AQA EXAMINATIONSGREAT CLARENDON STREET, OXFORD ,OX2 6DP UNITED KINGDOM

enquiries@oxfordaqaexams.org.uk oxfordaqaexams.org.uk