

The purpose of reflection is to become aware of both kinds of bias and to control them during the remaining steps.

Step 3: Read

If you have skimmed well, this step will be relatively easy. You will already know what the author is saying; you will also understand the sequence of the author's points and the kind and amount of evidence presented. Now your task is to deepen and refine your understanding. Read the entire work carefully, at a single sitting if possible. Keep a pen or pencil in hand while reading and underline the most important sentences. Try to limit your underlining to one sentence per several paragraphs. Where appropriate, add your questions and thoughts in the margin.

In the case of a book or a long article, it is a good idea to *summarize* what you have read. To do this, review the sentences you have marked as important. Consider how many sentences you can combine without changing the author's meaning. Next write your summary in complete sentences, keeping to the original phrasing and the original order of presentation as much as possible to avoid distortion. Then briefly note in your own words the evidence offered by the writer. Do not attempt to elaborate on the evidence as the author did, or your summary will be too long to be useful.

If you have summarized effectively, you should now have a brief version of the original work that is faithful in content yet much easier to analyze. A whole book can be reduced to several paragraphs in this way; a full-length magazine article, to seven or eight sentences or less. Whenever you summarize, however, keep in mind the danger of distortion and oversimplification. It is not only unfair but pointless to criticize an author for something he or she did *not* say.

Step 4: Evaluate

Read your summary carefully, asking these questions:

Are any of the author's terms vague or ambiguous (open to more than one meaning)? In such cases, you will have to decide what meaning is implied.

Does the author use emotionally charged language as a substitute for evidence? Words like "harassment," "terrorism," "rape," "censorship," "diversity," "multicultural," "human rights," "family values," "justice," "empowerment," "freedom," "liberty," "rights," and "choice" tend to evoke an emotional response. Persuasive writing may make us feel as well as think, but when it makes us feel instead of think, it is dishonest.

Is the author's evidence relevant to the issue? No matter how comprehensive and authoritative evidence may be, if it has no bearing on the issue under discussion, it does not deserve our consideration.

Did the author omit any significant evidence? Often, the weakness in an argument lies in what the author does not say. For example, let's say an author stated that several years ago, an American engineer and his wife visited the Congo, trying to find evidence of a dinosaurlike creature reportedly living there, and also that they returned with a picture that they said documented their sighting of the creature. Everything in the statement is correct.⁶ However, one important detail is missing: the picture was severely underexposed and therefore worthless as documentation.

Are the author's examples and cases typical and comprehensive? The author's citation of some examples and cases does not necessarily establish the argument's validity. If the cases are extraordinary—exceptions rather than typical instances—they are worth very little. Similarly, if they represent one narrow aspect of the issue, they may not adequately support the author's argument.

If the author cites a scientific study, has it been replicated? The practice of the scientific community is to withhold endorsement of any researcher's findings until they have been independently confirmed. This is a wise approach, for some studies are proven to be "flukes."

If the author cites a survey, what organization designed and administered it? How large was the sample? Was it random? A survey that does not conform to established statistical principles is worthless as evidence.

Are the sources of information cited by the author still current? There is nothing necessarily wrong with old sources. Something written in 1800 may still be valid today. But later findings may have discredited older views.

Are the experts cited by the author authoritative and reliable? The fact of being well-known does not make one an authority. A Nobel Prize winner in physics may be totally incompetent in psychology or government. And even if a person cited is an authority in the field in question, her view is open to question if she has been guilty of unreliability (professional dishonesty, for example) in the past.

Do other experts agree with the experts cited by the author? In controversial matters, there is seldom any more agreement among experts than among nonexperts. A little investigation may reveal that the experts cited by the author hold the minority view!

What criticisms and counterarguments would someone who holds a different position make about this book or article? Nothing reveals the flaws on one side of an issue better than hearing the other side.

Does the author commit any errors in logic? For example, does the author overgeneralize, oversimplify, or assume facts not in evidence?

Is the author's conclusion about the evidence the most reasonable one, or is another conclusion more reasonable? Like the rest of us, authors sometimes yield to their biases and interpret evidence in a way that flatters their prior opinions. In such cases an objective assessment of the evidence may produce a different conclusion.

As you no doubt realize, the answers to many of these questions are not likely to be found either in the book or article you are evaluating or in your own head. To answer them will require further investigation on your part. Be sure to conduct whatever investigation is necessary before making your final judgment.

Expressing Your Judgment

One mistake readers commonly make in evaluating a book or article is to assume that they must agree completely or disagree completely with the author. More often than not, the most reasonable response is to accept some parts of an author's argument, reject others, and perhaps be uncertain about still others. The following guidelines will assist you in expressing your judgment: