Argumentative Essay: Beware Of Logical Fallacies

An argumentative essay is a student's chance to present their point of view in a clear and coherent manner (see the BU Writing Centre *Argumentative Essays* handout). A credible argumentative essay is well researched with claims supported by current statistical evidence, textual or research examples, expert opinion, and factual information. The more detail a student provides, the stronger their arguments will be. In addition, sources should be unbiased, accurate, reliable (the source is consistent with other sources), and valid (the study measures what it claims to measure).

When building arguments, students should always assure that their arguments follow a logical line of reasoning. Be careful not to accept or craft support with faulty logic.

What is a logical fallacy?

Logical fallacies are errors of reasoning or thought that, upon analysis, weaken arguments. They are found everywhere, often in the advertising and political worlds. These logical fallacies often seem like valid arguments until scrutinized rationally. For example, well-known actors often pitch remedies for different ailments using the **appeal to authority** fallacy. (Does that star have any medical credentials?   Do they even have the condition that the remedy purports to cure?) Politicians often denigrate their opponents on a personal level rather than on their policies using the **ad hominem attack** fallacy. (When a policy is acceptable, is the proponent of that policy the only thing left to criticize?)

Students need to be aware of these fallacies not only when they are crafting arguments, but also when they are evaluating their sources. A source is only as good as the information it presents.

Numerous other logical fallacies exist; a few are presented here:
- ***Post hoc***: Events related only by sequence are assumed to be causative.
  Example: When Julie went for a walk, the mail arrived. Therefore, if Julie wants her mail, she should go for a walk.
  > Did the mail arrive because Julie went for a walk?

- **False cause***: A causative relationship is assumed with little or weak evidence.
  Example: Many people who caught COVID were up to date on their vaccines; therefore, the vaccines must have caused their COVID.
  > Does any study support this conclusion? Are there other probable causes?

- **False dilemma (either/or)**: Only two outcomes are presented, one usually extreme, without considering the complexities of an issue.
  Example: We need to offer more ESL courses at Bishop's. If we don't, none of our international students will be able to speak English fluently.
  > Is it possible that the international students could learn or could have learned English without taking BU ESL courses?

- **Straw figure**: A concept is misinterpreted to make it easier to argue against.
  Example: The American Democrats would like everyone to have unlimited access to health care. That is socialism, pure and simple. which would lead to the end of American democracy.
  > Is it easier to argue against universal health care or socialism when living in the United States?

- **Loaded words**: An author's choice of words reveals their prejudice.
  Example: I hope that our beloved football warriors beat those losers on the other side.
  > Is there any question about which team the author of this sentence wants to win?

- **The bandwagon**: If many people believe something or are doing something, it must be correct. (It might be correct, but arguments require evidence.)
  Example: Most climatologists believe that climate change is happening now. Therefore, I do too.
  > Why do most scientists believe in current climate change? Does evidence support the conclusion of most scientists?

- **Red herring**: The author diverts attention from the main argument by discussing a related, but different, claim.
  Example: People are arguing against the use of AI in academic writing, but have you seen how many students fail their CEGEP writing exams?
  > Is failing the CEGEP writing exam related to the use of AI in academic writing? Or does this subject divert attention from AI?

How to avoid logical fallacies
- Evaluate your sources: Are they current? unbiased? accurate? reliable? valid?
- Logically analyze every claim in both your sources and your own writing. (Learn to question claims, as in the examples above.)
- Do not use loaded or biased words when writing and reject sources that do use them.
- Make sure that issues are presented in their full complexity, not as black and white.
- Do not make or accept conclusions that are hinted at, but not justified, by the data.
- Make sure that you are arguing for or against the claims made in your paper, not related issues or diversions.
- Do not confuse cause with correlation or sequence.