Fallacies are common errors in reasoning that will undermine the logic of an argument.

Fallacies can be either false arguments or irrelevant points. They are often identified because they lack evidence that supports the claim. Avoid these common fallacies in your own arguments and watch for them in the arguments of others.

Slippery Slope	This is a conclusion based on the premise that if A happens, then eventually through a series of small steps, through B, C,..., X, Y, Z will happen, too, basically equating A and Z. So, if we don't want Z to occur, A must not be allowed to occur either.	If we don't fund IDEA at the full level, kids with disabilities will not get an education and will end up in prison.
Hasty Generalization	This is a conclusion based on insufficient or biased evidence. In other words, you are rushing to a conclusion before you have all the relevant facts.	We already know that the current government will cut federal funding and schools will have to make up the difference.
Post hoc ergo propter hoc (also referred to as correlation does not imply causation)	This is a conclusion that assumes that if 'A' occurred after 'B' then 'B' must have caused 'A.'	More kids have been referred to special education classes after costs increased. So we must be referring more kids because it costs more.
Circular Argument	This restates the argument rather than actually proving it.	Special Education costs have risen because it costs more to educate students in Special Education classes.

Either/or:	This is a conclusion that oversimplifies the argument by reducing it to only two sides or choices.	We can either fund Special Education or have a strong military.
Ad hominem	This is an attack on the character of a person rather than his or her opinions or arguments.	Only uncaring people would argue that we should not educate students regardless of their disability.
Ad populum	This is an emotional appeal that speaks to positive (such as patriotism, religion, democracy) or negative (such as terrorism or fascism) concepts rather than the real issue at hand.	The School-to-Prison pipeline is not a problem, because we are only locking up crimials and thugs who are preying on the rest of us.
Red Herring	This is a diversionary tactic that avoids the key issues, often by avoiding opposing arguments rather than addressing them.	Maybe we should fund this more, but what about all the veteran soldiers who aren't being taken care of?
Straw Man	This move oversimplifies an opponent's viewpoint and then attacks that hollow argument.	You are saying we should spend trillions of dollars on educating a small group of kids, and not educating the kids who don't need those services. As a country, we shouldn't make that decision.
Moral Equivalence	This fallacy compares minor misdeeds with major atrocities.	The School-to Prison Pipeline is just like slavery.

Logical Fallacies

Summary:

This resource covers using logic within writing—logical vocabulary, logical fallacies, and other types of logos-based reasoning.

Contributors: Ryan Weber, Allen Brizee

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Slippery Slope: This is a conclusion based on the premise that if A happens, then eventually through a series of small steps, through B, C,..., X, Y, Z will happen, too, basically equating A and Z. So, if we don't want Z to occur, A must not be allowed to occur either. Example:

> If we ban Hummers because they are bad for the environment eventually the government will ban all cars, so we should not ban Hummers.

In this example, the author is equating banning Hummers with banning all cars, which is not the same thing.

Hasty Generalization: This is a conclusion based on insufficient or biased evidence. In other words, you are rushing to a conclusion before you have all the relevant facts. Example:

> Even though it's only the first day, I can tell this is going to be a boring course.

In this example, the author is basing his evaluation of the entire course on only the first day, which is notoriously boring and full of housekeeping tasks for most courses. To make a fair and reasonable evaluation the author must attend not one but several classes, and possibly even examine the textbook, talk to the professor, or talk to others who have previously finished the course in order to have sufficient evidence to base a conclusion on.

Post hoc ergo propter hoc: This is a conclusion that assumes that if 'A' occurred after 'B' then 'B' must have caused 'A.' Example:

> I drank bottled water and now I am sick, so the water must have made me sick.

In this example, the author assumes that if one event chronologically follows another the first event must have caused the second. But the illness could have been caused by the burrito the night before, a flu bug that had been working on the body for days, or a chemical spill across campus. There is no reason, without more evidence, to assume the water caused the person to be sick.

Genetic Fallacy: This conclusion is based on an argument that the origins of a person, idea, institute, or theory determine its character, nature, or worth. Example:

> The Volkswagen Beetle is an evil car because it was originally designed by Hitler's army.

In this example the author is equating the character of a car with the character of the people who built the car. However, the two are not inherently related.

Begging the Claim: The conclusion that the writer should prove is validated within the claim. Example:

> Filthy and polluting coal should be banned.

Arguing that coal pollutes the earth and thus should be banned would be logical. But the very conclusion that should be proved, that coal causes enough pollution to warrant banning its use, is already assumed in the claim by referring to it as "filthy and polluting."

Circular Argument: This restates the argument rather than actually proving it. Example:

> George Bush is a good communicator because he speaks effectively.

In this example, the conclusion that Bush is a "good communicator" and the evidence used to prove it "he speaks effectively" are basically the same idea. Specific evidence such as using everyday language, breaking down complex problems, or illustrating his points with humorous stories would be needed to prove either half of the sentence.

Either/or: This is a conclusion that oversimplifies the argument by reducing it to only two sides or choices. Example:

> We can either stop using cars or destroy the earth.

In this example, the two choices are presented as the only options, yet the author ignores a range of choices in between such as developing cleaner technology, car-sharing systems for necessities and emergencies, or better community planning to discourage daily driving.

Ad hominem: This is an attack on the character of a person rather than his or her opinions or arguments. Example:

> Green Peace's strategies aren't effective because they are all dirty, lazy hippies.

In this example, the author doesn't even name particular strategies Green Peace has suggested, much less evaluate those strategies on their merits. Instead, the author attacks the characters of the individuals in the group.

Ad populum: This is an emotional appeal that speaks to positive (such as patriotism, religion, democracy) or negative (such as terrorism or fascism) concepts rather than the real issue at hand. Example:

> If you were a true American you would support the rights of people to choose whatever vehicle they want.

In this example, the author equates being a "true American," a concept that people want to be associated with, particularly in a time of war, with allowing people to buy any vehicle they want even though there is no inherent connection between the two.

Red Herring: This is a diversionary tactic that avoids the key issues, often by avoiding opposing arguments rather than addressing them. Example:

> The level of mercury in seafood may be unsafe, but what will fishers do to support their families?

In this example, the author switches the discussion away from the safety of the food and talks instead about an economic issue, the livelihood of those catching fish. While one issue may affect the other it does not mean we should ignore possible safety issues because of possible economic consequences to a few individuals.

Straw Man: This move oversimplifies an opponent's viewpoint and then attacks that hollow argument.

> People who don't support the proposed state minimum wage increase hate the poor.

In this example, the author attributes the worst possible motive to an opponent's position. In reality, however, the opposition probably has more complex and sympathetic arguments to support their point. By not addressing those arguments, the author is not treating the opposition with respect or refuting their position.

Moral Equivalence: This fallacy compares minor misdeeds with major atrocities.

> That parking attendant who gave me a ticket is as bad as Hitler.

In this example, the author is comparing the relatively harmless actions of a person doing their job with the horrific actions of Hitler. This comparison is unfair and inaccurate.