

## Logical Fallacies

Margaret Stein

My experience with first-year writers has led me to believe that the students have not been trained to consider the logic behind statements that they hear from politicians, teachers, parents, and media demagogues. In my class, I incorporate a discussion about logical fallacies, so students can begin to examine the premises on which they base their assumptions, and the logic that brings them to conclusions.

I identify three steps in this introduction to fallacious arguments:

1. understanding logical fallacies
2. identifying logical fallacies
3. avoiding logical fallacies

Every teacher will find an effective way to encourage students to challenge the logic behind statements. I am including the basic exercises that I have used, as a model that others could modify. I attempted to make the exercise interactive and entertaining, as well as informative.

### 1. Understanding Logical Fallacies

I distribute a worksheet (below) that offers examples of the most common fallacies. When I print out copies for the class, I delete the title identifying each sample:

## Logical Fallacies

*The most perfidious manner of injuring a cause is to vindicate it intentionally with fallacious arguments.*

*Friedrich Nietzsche*

### 1. Erroneous Appeal to Authority

"I'm not a doctor but I play one on T.V. Use this aspirin."

### 2. Ad Hominem (name calling; irrelevant character issue; guilt by association; false analogy)

a. "The pro-life movement's Bible-thumpers want to take away our rights."

b. "Bill Clinton wants television programs to show ratings in order to protect children from adult material, a surprisingly moral position for an adulterer."

c. "Nelson Mandela's support of Quaddafi means that any support we give to South Africa endangers American lives."

d. "Traditional historians appeal to the public's feeling of nationalism just as the Nazis did."

### 3. Shifting the Issue

"Affirmative action proponents accuse me of opposing equal opportunity in the work force. I think my positions on military expenditures, education and public health speak for themselves."

### 4. Irrelevant Emotional Appeal

"How can you say you oppose higher taxes when poverty-stricken school children cannot afford to buy lunches?"

### 5. Hasty Generalizations

"Despite the women's movement in the '70s, women still do not receive equal pay for equal worth. Obviously, all such attempts to change the status quo are doomed to failure."

### 6. Card-Stacking

"We should more frequently use the death penalty because it deters crime, saves the taxpayers from supporting non rehabilitative criminals, validates our penal system, and shows our commitment to a law and order. Opposers of the death penalty are idealists on whom criminals prey for sympathy."

### 7. Bandwagon

"Since Harvard, Stanford, and Berkeley have all added a multicultural component to their graduations requirements, Notre Dame should get with the future."

### 8. Begging the Question

"We could improve the undergraduate experience with coed dorms since both men and women benefit from living with the opposite gender."

### 9. Fallacy of the General Rule

"A recent college graduate doesn't have the experience we require so let's just pass on this applicant ."

### 10. False Either/Or Situation

"We may support this petition for a Gender Studies major, or we may turn our backs on progress, reject the petition and suffer the consequences."

#### 11. False Analogy

"It is ridiculous to have a Gay and Lesbian Program and a Department for the study of African-American culture. We don't have a Straight Studies Program or a Department for Caucasian Culture."

"Some drugs are more dangerous than others. It is easier to kill oneself with heroin than aspirin. But it is also easier to kill oneself by jumping off a high building than a low one. In the case of drugs, we regard their potentiality for self-injury as justification for their prohibition; in the case of buildings, we do not."

"It should be against the law to fire a woman because she gets pregnant. They don't fire a man for fathering a child."

*Teachers can have students try to identify the flawed logic in each, and perhaps have a "prize" for the student who correctly identifies the greatest number. Or one could divide students into small groups to discuss the examples together. I have had my class in a large circle, with each student taking one and trying to work out the problem. Once the student has articulated the problem with a sentence, I give the "official" title of that example. I also ask if they can think of any times when they have heard such a fallacy employed.*

## II Identifying Logical Fallacies

Students are often very adept at coming up with their own examples, once the fallacy has been explicated. I usually ask for their personal examples after each worksheet's sample has been discussed, rather than leaving this step until all have been identified. I have included a few prime offerings from my students:

"In *Beauty and the Beast*, Gaston says 'You're either with us or against us!' That's a false either/or choice."

"Bandwagon is kind of like when you tell your mom you should get to go see some movie because everyone else in your class got to see it."

"Richard Gere campaigned for the Democrats in one election. What the [heck] does he know about politics?" [erroneous appeal to authority]

"I'm pro-life myself, but the activists on campus keep showing the pictures of murdered fetuses, which seems an irrelevant emotional appeal. . .but I guess not from their perspective."

"Rush Limbaugh calls feminists 'feminazis.' Since feminists are from a group with no power, and the Nazis had the power, linking them together is a false analogy." [other student] "And, sort of, guilt by association." [third student] "And name-calling."

*When we have completed the worksheet, I inform the students that they will be given an opportunity to identify as many logical fallacies as they can in a short film clip from the movie *Lone Star*. This exercise has worked beautifully in class, and the students become very competitive, and surprisingly analytical, once they have been given the vocabulary with which to identify logic problems.*

*The clip, about 20 minutes into the movie, shows a PTA debate about the "proper" way for a high school teacher to present history. The movie is set in a Texas town on the Mexican border; the town is 90% Hispanic. Some parents object to a "multicultural," revisionist method of presenting history, while the Hispanic contingent supports presenting historical perspectives other than that of the whites. The clip runs about 4 minutes. (The scene occurs just after the shooting at Otis' bar.)*

*After watching the clip, the students try to find logical fallacies that the characters employ in their (heated) discussion. I have compiled a list of possible answers:*

- "You call it history, I call it propaganda"---ad hominem
- "The men who founded this state needed slavery to be legal so they could make a fortune in the cotton industry" --hasty generalization
- "I was on the textbook committee. . ."--erroneous appeal to authority

- "Are you running this meeting now?" --shifting the issue "men who fought and died for this country" --irrelevant emotional appeal
- "as the majority of this town, we have the right. . ." --bandwagon
- "yeah and you lost buddy, winners get bragging rights" --false either/or
- "who are you calling ignorant?" --ad hominem
- basic argument of the blonde nasty lady is that they should teach history the traditional way because that's the way they decided to teach it--begging the question

*After discussing the characters' logic problems, I ask them to analyze the director's "argument." Which side are we, the audience, supposed to endorse? Are the other perspectives portrayed fairly?*

- The group the director supports the least is that of the angry whites.

Though the red-haired teacher and principal are white, the loudest and most talkative whites are those endorsing traditional approaches. Their main spokespeople are:

- a. the blonde lady: grating voice, pinched face, ugly clothes, bossy, pushy, "ignorant," and says offensive things like "you people," and a complete picture is "what's got to stop!"
  - b. the blue-shirted man: a bully who shouts down the opposition, giving him less credibility
- The director seems more in sympathy with the Hispanic contingent. The attractive teacher is obviously part Mexican, giving that group a visual endorsement. Also, unlike the other men (especially the blue-shirted man), the Hispanic man sitting at the table shows some educational expertise, is dressed nicely in a dress shirt and tie, and is frankly pretty darn good-looking.
  - The director wants us to endorse the teachers, who argue for a middle-of-the-road approach to history, "cultures coming together in both positive and negative ways. . ." These characters are rational, conciliatory, and try to negotiate and quiet everyone down.

*I use the director's decisions to suggest that this slanted presentation is a kind of "card-stacking," deliberately presenting characters and arguments in order to influence audiences to adopt his side of the argument. It is effective and persuasive, but not logically sound, and leads us to a question of ethics.*

### **III Avoiding Logical Fallacies**

At this point I ask the students to put Nietzsche's quote in their own words, to explain what it means to them. This exercise usually leads to a discussion of ethics, and whether it is ethical to present even an ethical, moral, and just argument through logical fallacies.

Once the question of ethics is covered, I stress the vulnerability of arguments relying on fallacies. I use a George Will editorial in which he exposes Democrats' fallacies, but slips in a few of his own. Time permitting, I use an editorial from the South Bend Tribune that argues a position by discussing opponents' false analogy.

The key to teaching logical fallacies, according to my experience, is to get the students as actively involved in the exercises as possible. Since they are not used to thinking premises and logic through, they need to jump-start that part of their brain, and usually become both fascinated and enthusiastic with the new way of applying critical thinking skills.

These exercises gives you and your students a shared vocabulary with which to discuss their arguments in their papers. It's also a lot of fun.