

DOCUMENT RESUME

ED 284 311

CS 505 646

AUTHOR Dyrud, Marilyn A.
TITLE Teaching Logic.
PUB DATE Apr 84
NOTE 13p.; Paper presented at the Annual Meeting of the Oregon Council of Teachers of English Spring Conference (Bend, OR, April 6-7, 1984).
PUB TYPE Speeches/Conference Papers (150) -- Guides -- Classroom Use - Guides (For Teachers) (052)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Assignments; Expository Writing; Higher Education; *Letters (Correspondence); *Logic; *Logical Thinking; Persuasive Discourse; Speech Communication; *Speech Instruction; Student Motivation; Teacher Student Relationship; *Teaching Methods; *Writing Instruction
IDENTIFIERS Fallacies; *Letters to the Editor

ABSTRACT

To make introducing logic to college students in speech and expository writing classes more interesting, letters to the editor can be used to teach logical fallacies. Letters to the editor are particularly useful because they give students a sense of the community they live in (issues, concerns, and the spectrum of opinion), they are easily available, they contain obvious logical fallacies, and they stimulate lively and interesting class discussions. To use these letters in class, the teacher first introduces the syllogism and why fallacies should be avoided. Some of the most prevalent types of fallacies are then introduced, and these fallacies are located in a sample letter to the editor. Some types of fallacies, such as ad hominem and hasty generalizations are easy for students to locate, while others, such as begging the question fallacies, are more subtle and thus more difficult to discern. Using letters to the editor teaches students that many people who express opinions openly in local newspapers do so on the basis of little knowledge, and that the credibility factor in writing is crucial--one logical flaw can ruin any argument. In addition, creative teachers can arrange several assignments around letters to the editor, including group projects, analytical papers, rebuttal writing and preparing speeches. (Four examples of letters to the editor and analysis for logical fallacies are included.) (SKC)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

ED284311

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

☒ This document has been reproduced as
received from the person or organization
originating it.

☐ Minor changes have been made to improve
reproduction quality.

• Points of view or opinions stated in this docu-
ment do not necessarily represent official
OERI position or policy.

TEACHING LOGIC

by

Marilyn A. Dyrud

Associate Professor

Communications Department
Oregon Institute of Technology
3201 Campus Drive
Klamath Falls, Oregon 97601-8801

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

Marilyn A. Dyrud

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

CS505646

TEACHING LOGIC

How many of us are greeted with yawns and glazed eyeballs from our students when we introduce logic in class? How many of us react similarly when we approach the topic?

Granted the logic is a difficult topic to "teach," I will argue that it can also be very exciting and challenging for instructors and students alike.

In my speech and expository writing classes, I have experimented with a different method, using letters to the editor to teach logical fallacies. I find that this approach is effective for two reasons. First, it gives students a sense of the community they live in: the issues, concerns, and spectrum of opinion. Too many college students tend to live in a vacuum; they view themselves as transients and disassociate themselves from community issues. Yet many students register to vote in that community, and their ignorance of local concerns becomes apparent as election day approaches.

Secondly, letters to the editor are easily available, the fallacies employed are obvious, and they aptly illustrate the problems with emotional arguments. Furthermore, students tend to be very interested and discussions can be quite lively.

I have found that most freshman college students have had virtually no background in logic, except perhaps a brief encounter in high school with Clyde Miller's now-standard

article detailing the seven propaganda devices used in the Nazi propaganda blitz. Because of this, I usually spend a minimum of discussion of logic.

I start with a brief introduction to the syllogism: what it is, what form it takes, and how violations of form can result in logical problems. I explain what fallacies are and why one should avoid them: because they can undercut or invalidate an argument and undermine the authority and credibility of a writer or speaker. Because there are literally hundreds of fallacies and students cannot assimilate that much information, I tend to concentrate on those which I consider most prevalent, not only in letters to the editor but in advertising and political rhetoric as well. These include ad hominem, hasty generalization, begging the question, faulty analogy, oversimplification, post hoc, hypostatization, red herring, and ad ignorantium.

The real meat of the material on logic is looking at letters from the local newspaper and examining how writers manipulate (probably unconsciously) fallacies to stimulate reader agreement with their position. Four examples follow.

Example 1

I would like to know why it is these protesting slobs only protest the weapons development of the United States, not Russia: the United States missile deployment, not the Russian missile deployment; and, finally, the United States liberation of Grenada, not the Russian invasion of Afghanistan.

Since they seem to feel so sympathetic toward the Communist doctrine, they should move to Russia and protest to their heart's desire.

I wonder if the Federal Bureau of Investigation still keeps records on the subversive groups and individuals? Maybe someday they'll have a big roundup. [Herald and News, Klamath Falls, Oregon, November 1, 1983].

Although very short, the letter illustrates at least five major fallacies:

Ad hominem: "protesting slobs," "they"

Hasty generalization: "Only protest the weapons development of the United States, not Russia"

Ad ignorantium: "the United States liberation of Grenada, not the Russian invasion of Afghanistan"

Oversimplification: "Since they seem to feel so sympathetic toward the Communist doctrine, they should move to Russia and protest to their heart's desire."

Begging the question: "sympathetic," "subversive," "liberation," "invasion"

Most students tend to pick up on ad hominem rather quickly. "Protesting slobs" is obvious, but the use of "they" requires some explanation. It is a tactic frequently used in political rhetoric, when a speaker wishes to align himself with a particular group. All others are delegated to "they," which means that they are opposed to the concerns of the speaker. The word can also be used as a racial/ethnic slur, as a following letter will illustrate.

The hasty generalization can usually be recognized by signal words, including "only," "always," and "never." These terms

allow for no exceptions, and hence the statement becomes an opinionated generalization, rather than a specific statement of fact.

The writer's lack of knowledge about the subject (ad ignoratium) is revealed by his comment that the Russian "invasion" of Afghanistan was not protested. The writer has .pa evidently disregarded the U.S. boycott of the Moscow Olympics, a direct response to that action.

Oversimplification is apparent in paragraph two and is a version of the "love it or leave it" bumper-sticker syndrome so popular in recent years. This fallacy manipulates cause/effect relationships and displays the writer's facile response to a complex situation.

Students seem to experience the most difficulty in recognizing the begging the question fallacy, probably because it is a fairly subtle technique. It assumes a conclusion in the syllogism's premise and usually involves the use of "loaded" terminology. In this letter, the writer assumes that people who protest against the government are "subversive"; he assumes that they are Communist sympathizers. Perhaps the best example is his use of derogatory language when describing the "Russian invasion of Afghanistan." A parallel action by the U.S. is complimented by "liberation," which, ironically, is the term used by the Soviet Union when referring to the "liberation" of Eastern Bloc countries following World War II.

The final irony of the entire letter is that the writer himself is a protester, thus unconsciously aligning himself with

the people he complains about. Furthermore, the patriotic stance of the letter is fairly transparent, although emotionally persuasive. The writer attacks a basic freedom guaranteed by the Constitution, the freedom of speech.

Example 2

Well, Jane Fonda and her jerk husband have found another cause to raise hell about.

First in the sixties, she was doing her best to get people to donate blood for the commies in Hanoi who she said were victims of a political war. Such treasonous acts should have resulted in her citizenship being revoked!

Time has passed and now she's running nuclear power plants into the ground. With the proper safeguards, nuclear power will be an immense benefit to mankind. If Jane Fonda cannot come forward with any positive suggestions since she thinks she's so damned smart, then she ought to go back to Hanoi and stay there. I'm sure Hanoi will give her asylum. [Herald and News, October 24, 1979.]

The letter is similar to Example 1 in both tone and content, although one individual is singled out as the object of complaint. The writer also employs the same fallacies: ad hominem, begging the question, hasty generalization, oversimplification, and adds a post hoc for good measure.

Post hoc, or false cause, is similar to oversimplification in that they both manipulate cause/effect relationships. Post hoc, however implies that a specific cause is fallaciously related to a specific effect. In this writer's mind, the "treasonous act" of asking people to donate blood deserves that "her citizenship [be] revoked."

Example 3

There have been some recent articles in the paper and news broadcasts that disturb me.

They concern these people who have come to town to promote legislation for the gay liberation movement.

They are on record as to their feelings, now I would like to go on record as to mine.

Homosexuality is a mental illness as well as a moral one and there isn't any law or legislation that can alter that fact! As I see it, any legislation that would grant special privileges to these people would be nothing short of contributing to the moral decline of this country. As in any mental disease, I certainly don't want anybody so pre-occupied by this so-called sexual preference, in any position of authority, such as school teacher, judge, law officer, etc.

If they get the legislation they are seeking, it will put them in a position to legally seek out and hold these types of jobs. Heaven forbid!

It is time we heed the lessons of history. It was this same kind of moral decline that finally led to the fall of the Roman Empire.

We have reached our hour of decision here in America and what we decide may well determine whether we remain a great nation of definite moral values or take the Roman road to ruin.

Which is your preference? [Herald and News, October 16, 1977.]

Major fallacies include the following:

Ad hominem: "these people," "they"

Hasty generalization: "Homosexuality is a mental illness as well as a moral one and there isn't any law or legislation that can alter that fact"; "any legislation that would grant special privileges to these people would be nothing short of contributing to the moral decline of this country"; "I certainly don't want anybody so pre-occupied by this so-called sexual preference, in any position of authority, such as a school teacher, judge, law officer, etc."

Begging the question: "promote," "moral," "that fact," "special privileges," "moral decline," "legally," "our hour of decision"

Hypostatization: "It is time we heed the lessons of history."

Faulty analogy: "It was this same kind of moral decline that finally led to the fall of the Roman Empire"; "take the Roman road to ruin"

False dilemma: "what we decide may well determine whether we remain a great nation of definite moral values or take the Roman road to ruin"

This letter was evidently written in the heat of emotion and predicts dire consequences for those who oppose the writer's position. Although the writer uses many of the fallacies found in Examples 1 and 2, she is more adept at masquerading opinion as fact and hence more persuasive. But her definition of homosexuality as a "mental illness," which forms the basis for the argument following, is not based on fact but mere hearsay. Furthermore, the writer assumes that sexuality is the driving force in a gay person's life, to the extent that she is unable to function in a job because of that "preoccupation." She also assumes that a specific notion of "morality" is commonly shared and experienced, and that "normal" people function within its conventions. Gays do not adhere to that definition, so they are the outsiders: "they," "these people."

The final three paragraphs of the letter warrant special attention, as the writer employs fallacies not used in Examples 1 and 2: hypostatization, faulty analogy, and false dilemma.

Hypostatization involves lumping together all facets of a particular discipline under one heading, such as "psychology," without recognizing variations of theory. The statement "It is time we heed the lessons of history" does just that. The writer

accepts the notion that history repeats itself and ignores other theories of historical progression. And there are others. Czech novelist Milan Kundera, for example, explains in his Book of Laughter and Forgetting that history is a process of forgetting: with the advent of a new historical upheaval, the previous one is forgotten.

The writer also employs a faulty analogy for emotional impact. The fallacy compares two things that are superficially similar but ignores crucial differences. Comparing the "decadence" of contemporary American society to that of ancient Rome is commonly found in letters to the editor. The writers, however, ignore important differences like the quality of leadership (Caligula et al.), bread and circuses, the structure of the societies. The analogy falls short when the reader delves deeper than the surface.

Finally, the writer uses the false dilemma (also called "either/or" and "black/white") to underscore the necessity of decision. False dilemma is similar to the hasty generalization in that both fallacies do not allow for exceptions. Here the reader is given only two alternatives: morality or decadence. Because nearly a decade has passed since the letter was written, evidently the decision was not as crucial as the writer thought.

Example 4

I think that the organization calling itself "Women's Lib" should make that "ad-libbers," for surely they "improvise words and music not in the original script."

Not until God had created the earth, firmament, waters, fish, fowl, animals, etc., did God create Adam and give him

dominion over all created things. (Eve wasn't created yet, so how did she get into the area of management?) God created Eve to be a "help-mate" as opposed to "boss" for Adam.

It was Eve that tempted Adam to bite the apple, thereby getting them both expelled from Eden.

If the ad-libbers would leave the management of the affairs of the USA to the men and return to their God-given privilege of rearing their children as they should be reared, we might have fewer teenage "problems" and "delinquencies," including teenage and pre-teenage pregnancies, drug addiction, alcoholism, and murders. Their method of dealing with premarital sex to provide them with "the Pill." And if "the worst" occurs, there are both welfare workers and abortionists ready (for a price, in the case of abortionists) to lend an assist at the expense of the taxpayers, of course.

Many of the "rights" demanded by the ad-libbers have now been enacted into law. Many violate one or more of the Ten Commandments, and God's law supersedes that of man. I doubt that God would have given consent to the substitution.

How "wise" have these ad-libbers shown themselves to be? Was it wisdom that prompted the use of thalidomide which resulted in mentally and physically deformed babies? [Herald and News, November 29, 1977.]

Although this letter--the gem of my collection--introduces only one new fallacy from the ones in previous examples, she (yes, a woman wrote this) gives new meaning to the faulty analogy and the post hoc fallacies.

The writer introduces the analogy in the second paragraph, when she details creation, and continues it through the following paragraph. It re-emerges at the end of the letter with the discussion of rights. What the writer basically does is to set up an implied comparison between Biblical times and contemporary America. The reason the analogy is fallacious is because 2,000+ years have intervened between the societies, and what was valid then perhaps is no longer so.

The Biblical argument is a common one in student papers, and one that is emotionally based rather than empirically verifiable. Although religion is a tricky and sometimes tension-fraught topic to address in class, I usually try to make the distinction that religion is based on faith and hence is a matter of the heart rather than logic.

Besides the analogy, the letter is a real jewel for cause/effect relationships. According to the writer, women are the cause of teenage pregnancies and drug addiction because mothers are not raising their children the "right" way. This is a logical problem, and it ignores evidence concerning genetic predisposition and a whole host of other theories besides environmentalism. Besides that, her argument rests on question-begging, the assumption that there is a particular way to raise children--a "God-given privilege."

The new fallacy the writer introduces in the last paragraph is the red herring, an evasion technique distinguished by bringing in a totally unrelated topic to divert the argument. In this case, the writer refers to thalidomide, which appeared long before women's lib made an appreciable dent in American society. And the drug wasn't even distributed in the U.S.!

Other fallacies such as name-calling and generalizations are readily apparent.

What do students learn from studying logic by this approach? They learn that many people who openly express their view in the local newspaper do so on the basis of little knowledge. They learn that the credibility factor in writing and speaking is crucial--one logical flaw can destroy the most carefully constructed argument. They learn that an audience makes judgments about character based on what a person writes or says. And they learn that argumentation is a delicate process, one that requires work and thought.

Letters to the editor provide a fruitful ground for teaching logic. They are readily available and of interest to most students. Creative instructors can arrange several assignments around them, including group projects, analytical papers dissecting them, writing rebuttals that are logically sound, preparing persuasive speeches. The possibilities are limited only by the instructor's imagination.