

THE ARGUMENTATIVE, MULTIPLE-SOURCE PAPER: COLLEGE STUDENTS READING, THINKING, AND WRITING ABOUT DIVERGENT POINTS OF VIEW

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Many college writing assignments, especially in the humanities and social sciences, call for students to use multiple—and often contradictory—sources of information. For example, a history teacher might ask students to evaluate several competing accounts of a battle in Vietnam. A psychology teacher might require students to analyze a complicated case study from the perspectives of Sigmund Freud's and Carl Jung's theories of psychology. And an English teacher might have students compare several critics' interpretations of Robert Frost's "Stopping by Woods on a Snowy Evening." This type of assignment, what I call the "argumentative,

multiple-source paper," emphasizes skills such as summarizing, quoting, paraphrasing, and documenting. It also emphasizes thinking processes such as analyzing several authors' perspectives, reaching an informed judgment about them, and justifying it to a reader. In my experience, however, college students have had much less difficulty with the skills than with the thinking processes; therefore, in an attempt to learn more about how college students intellectually approach divergent points of view, I investigated the reading, thinking, and writing of several freshmen who had taken a course I taught on argumentative, multiple-source writing. In this essay I explain the investigation and some of its pedagogical implications.

Several composition studies (e.g., Russell Durst, Mary Lynch Kennedy, Carol Sherrard) and numerous textbooks (e.g., Charles Bazerman, Laurence Behrens and Leonard J. Rosen, Mary Lynch Kennedy and Hadley Smith, Laurie G. Kirschner and Stephen R. Mandell, Robert K. Miller, Brenda Spatt) focus on the source-related skills I have mentioned. More importantly, however, a few studies in developmental psychology (e.g., William Perry, Karen Kitchener and Patricia King, Blythe Clinchy and Claire Zimmerman) focus on how college students make and justify decisions about complex topics. According to the developmentalists, as students attend classes, write papers, and participate in dormitory discussions, their implicit metaphysical and epistemological assumptions become increasingly complex to accommodate the diversity of values and opinions found in most college environments. Developmentalists further suggest that as students' assumptions about knowledge and reality grow more sophisticated, so do their ways of thinking about multiple perspectives and reaching and justifying judgments about them. Even though their theoretical models have different emphases, Perry, Kitchener and King, and Clinchy and Zimmerman agree in their description of undergraduates' conceptual development as an evolution from an early period of authority-centered and dualistic thinking, through a middle state of uncritical and sometimes skeptical thought, to a final stage of critical relativism.

Although I have argued elsewhere that schemes of intellectual development have limitations ("Applying Intellectual Development Theory to Composition"; "Encouraging Critical Thinking: A Strategy for Commenting on College Papers"), I do believe that students approach diversity of opinion from various interpretive

frameworks and that these frameworks can be described by broad categories like those used by Perry, Kitchener and King, and Clinchy and Zimmerman. In fact, I planned and conducted my investigation with these assumptions in mind, but because I was interested not only in how students think about contradictory positions towards a topic, but also in how they read and write about them, I devised my own descriptive categories, which I discuss and illustrate later.

My study involved twelve students who were taking a section of freshman composition I taught at Indiana University-Bloomington. I required students in the class to use preselected sources to write two argumentative essays on assigned topics—the “Cinderella” fairy tale and Stanley Milgram’s famous experiment on obedience to authority—and to find their own sources to write three argumentative papers on topics of their choice. The assignment on “Cinderella” asked students to summarize, analyze, and evaluate a Freudian and a feminist interpretation of the fairy tale, and the assignment on the Milgram experiment asked them to do the same with three articles that expressed different viewpoints on the experiment’s ethics and scientific validity. I chose to determine the sources for the first two papers, reasoning that if the same readings were used by all the students, I could work more closely with them on the skills and thinking processes I have already mentioned. For the last three papers, I continued to instruct students in these areas, but also introduced them to choosing their own topics and conducting research in the library. At the end of the semester, I solicited volunteers for my investigation, and twelve students (nine women and three men between the ages of seventeen and nineteen) agreed to participate. I collected all five papers from and conducted interviews with these students, using the interview transcripts to help me analyze their essays.

Because I was involved first as teacher and then as investigator, my study does not neatly fit the paradigm of scientific inquiry. I believed, however, that my involvement provided a very good opportunity to analyze students’ argumentative, multiple-source papers: because I taught the course, I understood the students’ assignments, was familiar with some of their sources, and had already read and thought about their essays. I further believed that my own involvement could lead to more humane and fruitful interviews: since I knew the participants well, they felt comfort-

able talking to me about their writing and could therefore more easily provide the rich and detailed types of responses that I hoped to receive.

Each interview consisted of three sections. For the first part, participants answered the question, "Does anything stand out in your mind about the papers you have written over the past semester?" The purpose of this opening question was to ask students to comment on what they found most salient in their own experience with writing from sources. The next two sections of the interview, however, were more structured. For the second part, participants read three abbreviated student papers—argumentative, multiple-source essays about using animals in laboratory experiments, watching soap operas, and fighting terrorism (see Appendix A)—ranked the papers, and gave reasons for their rankings. I chose these essays because they seemed to reflect the three major intellectual orientations described by developmentalists; by asking participants to respond to the papers, I hoped to learn what they liked and disliked about how students write about competing opinions. The last section of the interview required participants to read several statements about the relative/absolute nature of authors' knowledge (see Appendix B); to arrange the statements, which were typed on cards, into meaningful groups; and to explain their groupings. This exercise served as an opportunity for students to explain how they themselves evaluated the contradictory stances represented in sources. To elicit detailed explanations without over-directing participants' comments during the interview, I limited myself to responses such as "I think I see what you mean, but could you give me an example?"

Although all of the interviews and essays were different, the ways in which students read, thought, and wrote about divergent points of view tended to fall into three very broad categories—what I will call the "dogmatic," "noncommittal," and "analytical" approaches.

THE DOGMATIC APPROACH

When students took a dogmatic approach, they unreflectively reached argumentative positions before reading any sources about their topics. Responding to the opening interview question, Kathy commented, "Everyone already has set opinions" and "when I read the sources, and I see a weak argument, and then there's

a better one, I pick the [better] one, because I've already decided how I feel, what makes more sense to me." Bob responded similarly to the first question:

When we were asked to write about something we could choose, a certain topic, I, uh, chose something that I knew about, like cars or sports for instance. And I would base what I was gonna write on as to how much I knew about the subject. I would say, 'Well, can I relate this to automobiles? Yes. So, I'll write about that.' And I used a lot of the knowledge I had before. Sometimes, I knew exactly what I was gonna say, and I wrote the paper before looking at, at any sources. But then I knew where to get the sources because sometimes I have some of the magazines in my room. I'd say, 'I remember this article,' and I'd look through that and use that, document that. So I was always, well, half the time, I probably wrote a good percentage of the paper before looking at any sources.

For the open-topic assignments, Bob usually wrote his essays without reading any sources, relying on views he already had, and then "looked through" articles to find evidence to support what he had written. Kathy, on the other hand, read sources before writing her papers; but nonetheless she, too, based argumentative stances on preconceived ideas rather than on an analysis of the positions presented in her sources. Because they relied heavily on their own opinions, students who took a dogmatic approach sometimes based their evaluations on personal experience. For example, when Kathy ranked the abbreviated student essay on animal experimentation used during the second part of the interview, she thought "back to my perspective and my beliefs, what I thought originally," which she had based on her own experiences with animals:

Personally, I'm allergic to every animal. I can't even be near an animal without my eyes watering. I can't go to the circus. I can't go to the zoo. I get shots every week because I'm so allergic to them. I have no affection for them. It says right here that it was ethically and morally right, but for me there was no question in my mind to start with. I mean I've been through all these biology classes, and we cut up animals and it doesn't bother me, skin cats and look at their brains.

As Kathy's response to the animal experimentation essay suggests, when students demonstrated a dogmatic approach, they tended to think about diversity in absolutist terms—to believe that experts who agreed with their ideas were "right" and that those who disagreed with them were "wrong." Notice how she responded to the card-sorting task:

By this time in my life, I've decided what I think is right and wrong. If something will just hit me, like 'You're crazy!' you just totally think they're crazy, you're like 'No!'—then that'll start me, and I'll find anything and everything to go against them. Or if they're right, I totally agree with them and try to support them.

Like Bob, who tended first to write his papers and then to skim his sources in search of information to support what he had written, Kathy, too, read with the purpose of finding information to support the "right" viewpoint.

The reading and writing strategies associated with the dogmatic approach sometimes led students to misunderstand sources and to misrepresent them in their papers. As Bob mentioned during his interview, he chose to write about cars and sports in the open-topic papers; and in one of these essays, a paper on trends in the automobile industry, Bob misrepresented several authors' arguments. Describing "flush-mounted glass in relation to body sheet metal, lower and more sloped hoods, spoilers located on the trunk or underneath bumpers and also new aerodynamic headlights," he argued, "The only reason for designing aerodynamic cars is to reduce the amount of fuel used." To support his assertion, Bob cited a specific article, paraphrasing its author as saying, "The aerodynamic cars give far better fuel efficiency than those of the seventies." The article to which he referred, however, actually attributes the recent changes in automobile bodies not to a demand for fuel economy but to the public's taste in styling and the industry's desire to sell cars. Furthermore, Bob suggested that the search for fuel efficiency has led automobile makers to use new materials such as aluminum, plastic, and high-strength steel for making engine parts, but the source to which he attributed this information credits the development of these new materials to a desire not only for better mileage but also for engines with stronger parts, lower weight, better heat tolerance, reduced noise level, and especially lower manufacturing cost. Although we might

assume that Bob purposely—even maliciously—misrepresented his sources, I question whether this was the case. If Bob were eager to find information to back up what he had already written, he might well have misinterpreted some of the information in his sources unintentionally.

In some essays that reflected the dogmatic approach, students represented alternative perspectives accurately, but in these cases the absolutist thinking associated with the approach seemed to lead them to dismiss the viewpoints prematurely. For example, in a paper about the fifty-five-mile-per-hour speed limit, Bob acknowledged an alternative position but then immediately dismissed it without explaining why. In this essay, in which he argued that “there is no justifiable reason to keep the speed limit,” Bob claimed that it “simply wastes time and money.” To support his assertion, he paraphrased an expert who favors raising the limit as saying, “The average American spends seven additional hours per year in his car as a result of the 55 [mile-per-hour limit].” Bob then admitted that “the government says the 55 [mile limit] is still in effect to save lives,” but without analyzing this view, he labeled it “ludicrous,” concluding, “What I suggest, since Congress seems to keep the states’ holding on to the 55 [mile limit], is that everyone vote with their right foot”:

Many states’ legislatures are now seeing the point, and trying to pass bills which abolish the 55 [mile-per-hour speed limit]. They are seeing an increase in motorists not obeying it and people speaking up for what’s right, and Congress now knows it has an issue on its hands which has to be decided. Naturally, they will go with what the people want; no 55 [mile-per-hour limit].

Perhaps Bob represented opinions accurately in this second paper because the expert to which he referred agrees that the speed limit wastes time. If Bob read his sources to find evidence to support his argument and therefore tended to interpret them as reflecting his own stance, when authors did in fact agree with him Bob would have less chance of misunderstanding them. Furthermore, the alternative perspective to which he referred—that the speed limit reduces the number of automobile injuries and deaths—is common knowledge, and therefore Bob would have had less tendency to misinterpret it. But even though Bob represented the government’s viewpoint correctly, he unreflectively assumed that

it was "wrong" and that he was "right." In fact, he even believed that "everyone" would agree with him, again illustrating the absolutist thinking that typified the dogmatic approach.

THE NONCOMMITAL APPROACH

When students took a noncommittal approach, they read sources to explore rather than to judge divergent points of view. Responding to the opening question, Roberta commented:

We used a variety of sources, a wide variety. . . . You get more knowledge. You get more than one person's point of view. It gives you a better understanding of the topic you're trying to talk about. I could get a better understanding of different points of view. Basically, it just seemed to, it just helped me understand that, that there wasn't just one set thing, that what one guy said wasn't gospel.

Unlike Bob and Kathy, who read sources in search of evidence to support their own opinions, Roberta valued multiplicity, reading about different perspectives in order to understand her topic more fully. Moreover, the first two students assumed that the experts who agreed with them were "right," but Roberta did not believe that any one authority had access to the truth.

Because students who demonstrated a noncommittal approach accepted diversity, they typically ranked the abbreviated student paper on soap operas highest. James, for example, explained, "I kinda like, like that one article I read, let's see, about, what was that, where they left it up—soap operas. Yeah, I wouldn't mind writing an article like that, where you know, you don't have to agree to an issue." Whereas Kathy preferred the paper on animal experimentation because it took the same stance she did, James liked the essay about soap operas because it was nonjudgmental. But while explaining his preference for this paper, James also commented that college teachers often expect students to make a judgment, comparing his freshman composition course to a debate class:

It's just like I remember in high school. We had to do speeches, and we had to take sides, you know. We did them in the auditorium, and like the whole school would come and sit down for different periods. It was kinda hard, 'cause I didn't really, I kinda didn't want to take sides, ya know.

Capital punishment was the other one, that's the one we had to do, abortion, and euthanasia. I didn't really want to, but she like wanted us to take a side. Like for capital punishment, I remember there was a lot of different things for each side.

James found it difficult, even painful, to take a stand because, at least in some cases, he thought two competing positions could both be valid.

Doug responded somewhat similarly to the abbreviated papers. Initially, he ranked the essay on soap operas above the one on animal experimentation, saying, "I'd probably put the soap opera paper ahead just because, uh, the amount of information for each side is equal." Critiquing the paper on animal experimentation, he explained:

It just seems like it would be biased [because] it says, 'The antivivisectionists, who say that using animals in experimentation is wrong, apparently do not have enough information to understand the issue,' which basically, you know, is saying that they're wrong.

But then he commented that because "'soap operas' leaves it up to you, it doesn't make a point really" and that the paper on animal experimentation "made a point." Doug liked the essay about soap operas because, unlike the other papers, it presented conflicting perspectives in a balanced, nonjudgmental fashion. Yet he was troubled that the soap opera essay did not argue a point, apparently realizing that academic writing often has an argumentative edge. Doug's confusion surfaced even more when he puzzled to himself about how to evaluate multiple viewpoints:

Two different people are going to have two different views, or are more than likely going to have two different views on something, so it just depends on, like it would depend on my point of view to decide which is right, when more than likely they are both right.

Doug believed contradictory opinions could be equally "right," but he, like James, was also concerned about the conventions of argumentative, multiple-source writing, according to which a paper should take a stand.

Essays that reflected the nonjudgmental thinking associated with this approach typically presented but did not evaluate different arguments. For example, in response to the "Cinderella" assignment, Roberta first summarized the feminist interpretation of Cinderella's role:

In Kolbenschlag's article, she claims that Cinderella is placed in what used to be considered a 'woman's' world of menial work. She also claims that in the past it was believed that Cinderella spent her time grieving the loss of her loving mother and did not mind the work. It was also thought that if Cinderella was allowed any free time, she would learn to enjoy it and not want to return to her work.

Then, explaining that "the Freudians view Cinderella's place as natural," Roberta stated their perspective on her role:

Bettelheim claims children, when growing, go through the oedipal complex. In this complex, the child wants the parent of the same sex to die in order to have a sexual relationship with the other parent. Because of this complex, Cinderella feels inferior to her siblings and thinks she is supposed to do all the work. Cinderella believes she is being punished because of the 'dirty' thoughts she has.

After this balanced presentation, Roberta summarized the feminist and the Freudian positions toward several other elements of the fairy tale, similarly reporting but not evaluating the critics' opinions. Finally, she concluded with "The fairy tale 'Cinderella' can be considered universal because of the many different meanings associated with the major motifs used in the tale," a nonjudgmental statement reflecting the appreciation of diversity that characterizes the noncommittal approach and differentiates it from the dogmatic approach.

Although most papers suggestive of the noncommittal approach concluded after explaining different points of view, some writers presented various arguments and then, apparently out of a concern for the conventions of academic writing, made a perfunctory judgment about them. For example, in his essay on the Milgram experiment, Doug first focused on the moral debate, stating Diana Baumrind "feels that the experiment was unethical because people were hurt":

In her response to Milgram's experiment, she says, 'I am not speaking of physical discomfort, inconvenience, or experimental deception *per se*, but of permanent harm, however slight.' She feels that the experiment was harmful because 'it could easily affect an alteration in the subject's self-image or ability to trust adult authorities in the future.'

"On the other hand," he then wrote, "Stanley Milgram . . . believes that the experiment is totally ethical":

After the experiment was completed, everyone was told what had happened. The person also got to meet the unharmed 'subject.' In addition, a survey was handed out after the experiment to all participants involved. Eighty-four percent of the subjects were glad to be in the experiment, fifteen percent were neutral, and 1.3 percent wished that they had not participated.

After evenly presenting Baumrind's and Milgram's positions, Doug took a stand and attempted to justify it, claiming, "The experiment was ethical for the reasons just mentioned." At the conclusion of this discussion, his paper turned to the issue of scientific validity, one paragraph reporting Baumrind's perspective, another explaining Milgram's. After he summarized the authors' views, Doug again asserted and attempted to justify his own stance: "In my opinion the experiment was valid because of the points mentioned above." Doug did not analyze the scientists' arguments or express an authentic commitment to either one of them, but he tried to make his paper comply with the conventions of academic writing by using phrases—"because of the points mentioned above" and "for the reasons just stated"—that suggest a sense of logical inquiry and evaluation. Despite the fact that Doug made a judgment, in tone and organization his paper resembled Roberta's noncommittal essay much more than it did Bob's dogmatic papers.

THE ANALYTICAL APPROACH

When students took an analytical approach, they based evaluations on an analysis of divergent perspectives. Responding to the abbreviated student essays, Toni explained that the terrorism paper, which she ranked highest, states that "the two [proposals] together would be good, and military retaliation should not be

used, so they, you know, thought it out, and they had the advantages and disadvantages" of each proposal, whereas "other papers did not comment on what was there." Toni preferred the essay on terrorism because, unlike the other two papers, it analyzed different positions and thus justified its argument.

In her response to the card-sorting task, Toni specified that evaluations should be based on comparison, suggesting, "If you wanna form an opinion on it . . . you have to look at a situation from different people's point of view. You can't just have your own and say, 'Mine's right.' You gotta look at their point of view and look at your point of view." According to Toni, students who use comparison to evaluate sources "don't say what is right but what is the most, um, likely to be or what they feel now is most likely to be the way why it is that way." Clarifying her point, she summed up, "You're saying that one [perspective] is better but not that one is right and one is wrong." Unlike students who took a dogmatic approach, Toni relied on comparison to make relativistic judgments—that is, to determine which perspectives are probably better, rather than which ones are "right."

Some student papers illustrated this relativistic type of evaluation to which Toni referred in her interview. For example, in one of her open-topic essays, Paula considered the "6 million illegal immigrants in the U.S.," analyzing proposals that address this issue. Pointing out that "the solutions to the problem vary," she wrote, "Some [experts] believe that we should stabilize the migration flow by stiffening the border control," and "others feel that we should allow the immigrant traffic to continue and just accept the fact that we need the cheap labor." But according to Paula's paper, a disadvantage of the first proposal is that it would sacrifice the United States' "good foreign relationship with our neighbor Mexico," and a disadvantage of the second is that "the American job market will be adversely affected by the increasing number of illegal aliens holding jobs." Suggesting a reasonable compromise that addresses both of these drawbacks, Paula argued for passing a bill that would grant citizenship to aliens who arrived in the United States before 1983 and deport those who arrived after that date. She reasoned, "We cannot afford the \$3 billion the aliens send home, to educate their children," but "it is a good idea to legalize those aliens already in the country since they have established homes." Thus, Paula compared different viewpoints, analytically

reaching and persuasively justifying a moderate, rather than absolutist, position.

The papers that suggested an analytical approach always compared various experts' arguments, but in some of these essays, students also compared statements made by the same author. For example, in her essay on the Milgram experiment, Toni asserted, "After analyzing both sides of the argument whether experiments such as Stanley Milgram's should continue, I have concluded, as Diana Baumrind does, that . . . Milgram's experiment was unethical." To justify her position, Toni compared the account of the experiment that Milgram gives in his initial report to that which he provides in his response to Baumrind's critique, arguing that the two versions contradict each other:

Milgram states in his response to Baumrind's article that there were no 'injurious effects resulting from participation.' He states that the experiment would have been terminated 'at once' if the subjects were harming themselves in any way. This contradicts Milgram's study of the experiment that reports people having 'seizures' from 'nervous laughter' and 'digging their fingers into their flesh.'

After pointing out the inconsistency of Milgram's own accounts of the experiment, Toni summarized, analyzed, and finally evaluated additional comments that he and two other scientists make about the psychological harm subjects might have experienced. Proponents of the experiment, she explained, argue that the harm was only short-term:

Robert Hernstein, a supporter of Milgram's experiment, believes that the 'temporary' discomfort of the subjects is worth the information that it provides us. Milgram describes this discomfort as 'momentary excitement' and he believes that it is worth the knowledge gained.

But Baumrind, Toni wrote, "is more concerned about the potentially permanent harm that may have resulted from this experiment":

Baumrind believes that the subjects experience a 'loss of dignity' after participating in the experiment. She also believes that the emotional trauma of the experiment could diminish the trust that one has with adults in control.

To evaluate these conflicting opinions, Toni again analyzed Milgram's response to Baumrind's critique, explaining that he "give[s] the results of a psychiatrist's examination of the subjects that were 'most likely to have suffered consequences from participation.'" Although she acknowledged that the results showed no indication of long-term harm, Toni claimed:

This particular statement confirms my assumption of Milgram's uncertainty of the long term effects of the experiment. If there was even a chance that someone could have 'suffered consequences,' Milgram should have discontinued the experiment.

Reasoning that if Milgram could identify the participants who were "most likely to have suffered consequences," then he must have been at least somewhat unsure of their well-being, Toni concluded, "Because of the uncertainty of the long-term effects of the experiment on its subjects, I feel experiments such as this one should not be conducted." Both Paula and Toni relied on comparison for their analysis, but Toni compared specific statements made by the same author as well as the more general views expressed by different experts.

PEDAGOGICAL IMPLICATIONS

When students in this investigation demonstrated a dogmatic approach to writing argumentative, multiple-source papers, they unreflectively took stances towards their topics before reading any sources. Because these students assumed they were absolutely "right," they read with the purpose of finding information to support their own views and did not accommodate diversity of opinion in their essays. As we saw in Bob's interview statements and papers, the dogmatic approach can be associated with problems in interpreting, representing, and evaluating divergent perspectives. It seems very important, therefore, to have students identify and examine their own points of view on the topics about which they are writing. Before my students even begin researching or reading sources for a particular paper, I ask them to write informal, exploratory answers to a series of simple, but very challenging, questions designed to help them probe assumptions and biases:

What is your current position towards the topic of your paper?

How did you reach this position?

Does it reflect your religious beliefs, political affiliation, or personal experiences?

Does it reflect what you have heard your family or friends say, what you have read, or what you have seen on television?

Students cannot, and should not, will their beliefs and values out of existence; but if they explicitly acknowledge their preconceptions about a topic, they have a better chance of recognizing and understanding arguments that challenge their opinions.

Students in the study who demonstrated a noncommittal approach did not read sources to find evidence for their own opinions, but rather to explore various positions. As Roberta's interview comments and paper suggested, these students read empathetically—that is, with a sense of receptivity and a spirit of good will—and therefore were more successful at understanding and representing different interpretations. Therefore, it seems reasonable to have students read their sources initially with the purpose of acknowledging, even appreciating, authors' viewpoints. To help my students read with empathy, I teach them to annotate texts in a nonjudgmental fashion. Students do not have to make annotations such as “I don’t believe this” or “the writer contradicts himself here” to read actively. I believe they can more fully engage themselves with a text, in fact, by using underlinings and marginal annotations that focus on questions such as:

What is the author’s primary argument?

What are his or her supporting points and ideas?

What key terms and definitions does the writer use?

When students read with these nonevaluative questions and an awareness of their own preconceptions in mind, they find it easier to understand their sources fully and to represent them accurately.

The participants who demonstrated an analytical approach not only understood but also successfully analyzed and evaluated sources. As Toni’s interview comments and essay suggested, these students relied on comparison to reach and justify their own relativistic stances. After students have read and annotated their sources empathetically, we can help them compare several authors’ reasoning, evidence, and expertise, by leading them through a series of evaluative questions:

- If the authors present original research, what are the differences in the designs and executions of their studies?
- What facts do the writers present?
- How authoritative are the experts to whom authors refer?
- Do some writers claim more than their evidence can support?
- Can you find contradictions in any of their arguments?
- Do some authors make you choose between two extreme positions? If so, why?
- Do any of the writers use ambiguous or “loaded” terms that could lead you to make incorrect assumptions?
- What are the writers’ professional experiences?
- In what fields are their educational degrees?
- What other articles or books, if any, have they published on your topic?
- What are the authors’ biases and assumptions?

These questions can help students thoughtfully evaluate which argumentative positions are more rational and fully supported than others.

Something this investigation indicates, then, is that we need to help students balance ambiguity with certainty—that is, the need to explore, understand, and appreciate different points of view with the need to compare, analyze, and judge them. But because argumentative, multiple-source writing ultimately calls for a critical response, composition teachers typically tend to focus only on the latter set of thinking processes. To argue that teachers should emphasize empathetic reading and critical analysis equally might even seem counterproductive, for as Peter Elbow asserts in *Writing Without Teachers*, the tradition of Western rationalism privileges the “doubting game” over the “believing game.” Elbow adds, however, that “the believing game needs to be legitimized if only for the sake of the doubting game” (150).

APPENDIX A

USING ANIMALS FOR LABORATORY TESTING

There is much disagreement about the use of lab animals in research. Anti-vivisectionists feel that animals should not be used for testing because it is cruel

and inhumane, whereas scientists and theologians feel that animals must be used in order to make medical advances.

Animal welfare groups suggest that scientific experiments "inflict pain on research animals." The president of one of these antivivisectionist groups explains that "animals are burned, injected with heroin, and forced to incur diseases ranging from pneumonic plague to cancer." Furthermore, says the president, "There is little evidence to indicate that a single animal experiment has been of benefit to humans."

All of these tests, however, benefit mankind. One scientist indicates that he used experiments with cats and monkeys to show that "vision involves a hierarchy of brain cells." A theologian says these tests are performed for the benefit of mankind and should, therefore, be performed. "Animals were put forth on earth by God in order to serve man," says the scholar of theology.

To sum up, as scientists and theologians indicate, using animals in laboratory experiments is ethically and morally right since all of these experiments benefit mankind. The antivivisectionists, who insist that using animals in experimentation is wrong, do not have enough information to understand the issue.

SOAP OPERAS

Some authorities believe that watching soaps is detrimental, and other experts think it is beneficial.

One expert who argues against watching soap operas suggests that teenagers "are likely to misjudge the amount of sex between unmarried partners and married partners." He indicates that "the major concern with college students watching soap operas is that they tend to overestimate significantly the number of unfaithful spouses, divorces, illegitimate children, and abortions in the real world." Even adults have trouble distinguishing reality from fantasy; once, when a character was kidnapped on a daytime soap, an older viewer "placed a long distance telephone call to the network station and told them where they could find the missing character."

On the other hand, some studies have shown that it may be beneficial to watch soaps. It has been concluded by one authority that "teens who watch soaps tend to take fewer drugs because the soaps serve as the same kind of an escape as drugs do." Some older viewers, in fact, "may even be prescribed to watch a soap opera if there is a character dealing with the same problem the patient is." One psychologist believes, "It gives the person another way of thinking about the problem, and in most cases, the more alternatives one has for solutions, the easier the problem will be to solve."

In conclusion, whether you should watch soap operas or not seems left up to your own judgment. I think it all depends on your own view of soap operas.

TERRORISM: PROTECTING U.S. EMBASSIES AND DIPLOMATICS

Experts set forth three different solutions to the problem of terrorist attacks against U.S. embassies and diplomats abroad—increased security, increased intelligence, and military retaliation.

Increasing security by using "less glass and fewer windows, blast-resistant walls, and better electronic monitoring systems," says one expert, will help em-

bassies and ambassadors' homes "become better able to resist substantial damage from terrorist attacks." The problem with increasing security, however, is that this plan will not curtail the attacks themselves. If intelligence is increased, suggests another expert, "as information about a terrorist attack is obtained, the U.S. can activate such preventive strikes as arresting terrorists before they can attack or moving military forces to the threatened area." The drawback of this measure, however, is that although increased intelligence reduces the number of terrorist attacks, it cannot curtail the effects of attacks when they do happen.

Some officials argue that military force is "the only solution," but other experts point out that such retaliation will cause many problems. One such problem is that U.S. retaliation will fuel anti-Americanism and thus result in even more terrorist attacks against U.S. embassies.

Therefore, to better defend U.S. embassies abroad, increased intelligence must be used in conjunction with better security, and military retaliation, which has risks, should not be used.

APPENDIX B

Although the authors of scholarly books sometimes argue, we can count on the qualified experts to agree.

In articles about literature, critics often interpret the same poem differently, but one point of view isn't necessarily better than another.

When two articles contradict each other, they can't both be right.

When authors of newspaper articles disagree about something, one author's point of view is better than the other's.

Since events in the past either happened or didn't happen as a historian recorded them, historical accounts of the past are either right or wrong.

I wouldn't say that one author's argument is right and one author's argument is wrong, but I might like one argument better than another.

We will never have total knowledge in areas like psychology, and in these areas one author's point of view is as valid as another's.

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