



Putting It All Together: Six Steps to Understanding and Evaluating Arguments

The previous nine chapters have presented various techniques for understanding and evaluating arguments. Chapters 2 and 3 concentrated on extracting arguments from a text. Chapter 4 outlined the task of evaluating arguments, broadly describing the criteria for soundness—validity and truth of premises—and chapter 5 focused more specifically on the concept of validity. Chapter 6 considered how we might be taken in by fallacious reasoning. Chapters 7 through 9 discussed the evaluation of specific kinds of premises: definitional premises, empirical generalizations, and theory-based statements, as well as conclusions based on convergent arguments. Now we can bring these parts together in a sequence of steps illustrated by the flowchart in Figure 10.1.

Much of the earlier discussion of particular steps in reconstructing or evaluating arguments concentrated on relatively short, stylized passages in which each sentence played a role as a premise or conclusion. We will now survey the whole six-step procedure represented on the flowchart and adapt it to understanding and evaluating arguments found in longer passages, such as essays and editorials.

Preliminary step. This step directs you to read the passage in question carefully. The importance of this step should not be overlooked. One of the first things you need to determine is whether a passage does in fact put forth an argument, as opposed to describing, explaining, classifying, and so forth. Consider the context of the passage. Make use of hints such as titles or recurring themes. You can also initially determine (without fully reconstructing any arguments) whether

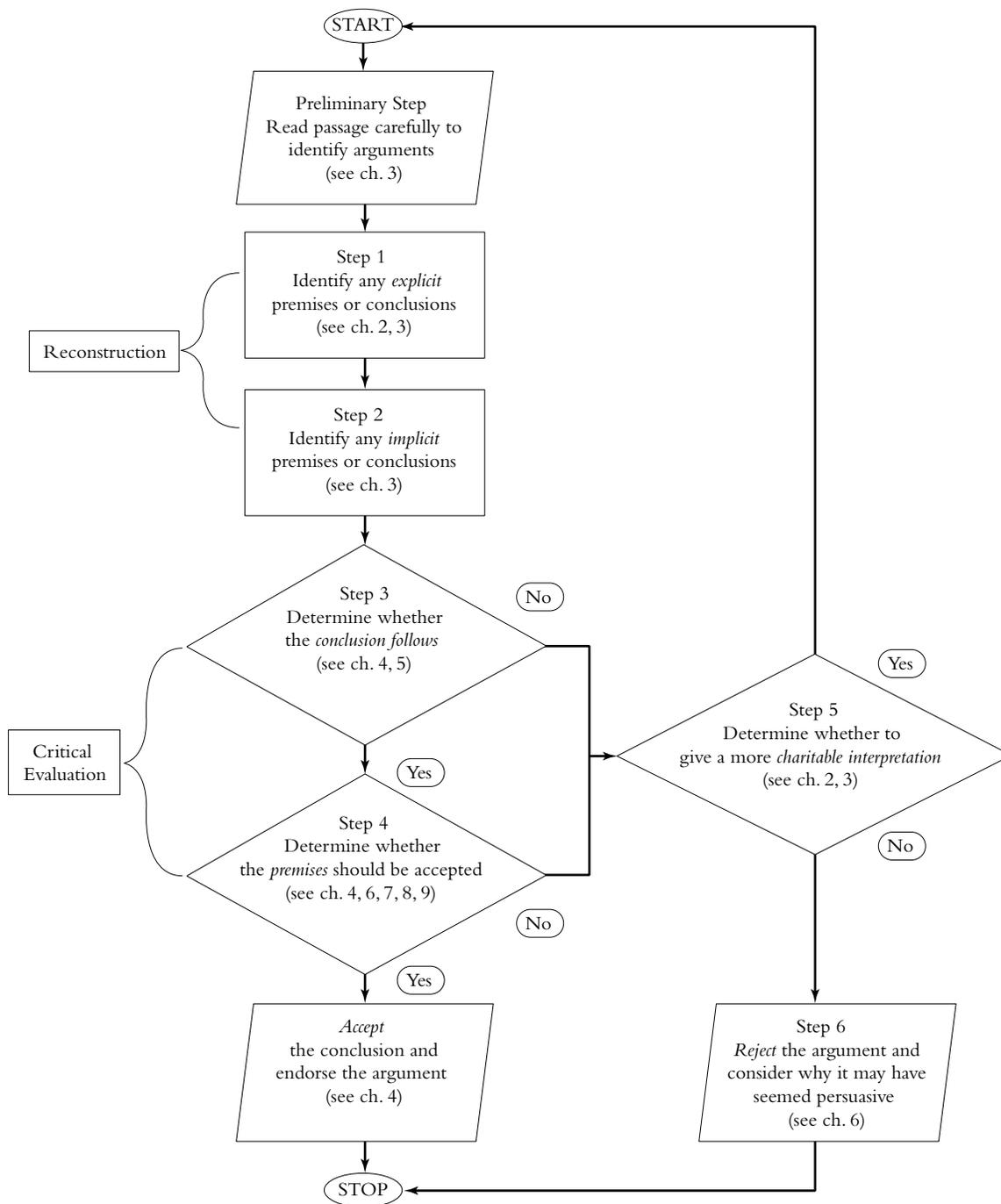


Figure 10.1 Six steps to understanding and evaluating deductive arguments

there is one argument or several and how different arguments are related. You might need to read a passage carefully *several times* before you understand it well enough to identify any arguments it contains and to begin reconstructing them.

Step 1. You should identify any *explicit* premises or conclusions, but this doesn't mean copying sentences out of a passage exactly as they are written. More likely, you will paraphrase or restate assertions made by the passage. In actual practice, the distinction between identifying explicit and implicit premises is not as sharp as in the stylized passages we dealt with, where whole sentences *could* be copied as premises. But even if no premises can be copied word for word from the passage, some premises might be strongly suggested and easily paraphrased from what is actually written. This will allow you to begin your reconstruction.

Step 2. We pointed out in chapter 3 that the step of identifying *implicit* premises typically amounts to adding any premises that are needed to make the conclusion follow (insofar as this *can* be done without radically distorting the meaning of the passage being interpreted). Adding an implicit conclusion consists of adding a conclusion that *would* follow from the interpreted premises, if the conclusion is not already stated in the passage. This will lead to a full reconstruction.

Step 3. Given what we just said about step 2, determining whether the conclusion follows will often be carried out in the process of adding implicit premises or an implicit conclusion. The premises and conclusion of the argument might have been stated so explicitly, however, that step 2 is unnecessary, and a negative answer to the question in step 3 (Does the conclusion follow?) might be unavoidable. Or (as happens more frequently), the argument might contain an unclear expression that occurs more than once. If so, you will probably make several quick loops through steps 3, 4, and 5, and back through 1 and 2, to determine whether a single meaning that makes all the premises acceptable can be assigned to this expression (see chapter 7).

Step 4. Determining whether the premises should be accepted or rejected was discussed in general in chapter 4. More detailed techniques for evaluating additional kinds of premises—particularly definitional premises and empirical generalizations—as well as convergent arguments and scientific theories were investigated in chapters 7, 8, and 9. If you decide that the premises should be accepted, then you are done with your evaluation. If you decide to reject the argument, you move to a reassessment stage at step 5. What do you do if you can neither clearly accept nor reject the argument? You have two options again. You might move to step 5 and try another interpretation, or, especially if you have tried various interpretations, you might quit and decide to remain uncommitted to the conclusion until a better argument is given.

Step 5. If you find that the conclusion of an argument does not follow or the premises are unacceptable, the flowchart directs you to consider giving a more charitable interpretation of the argument. This procedure is in keeping with the rationale for critical reasoning that has been promoted throughout this book: being presented with an argument should be taken as an opportunity to deter-

mine what is reasonable to believe, not as a contest in which the object is to defeat the person who has presented the argument.

If an argument can be interpreted in such a way that the conclusion follows and the premises are acceptable, then the flowchart calls for the conclusion to be accepted. If, on the other hand, there is no reasonable way of interpreting the argument so that it passes these tests, the argument should be rejected.

Step 6. However, if an argument is rejected, the flowchart calls for the additional step of considering why the argument may have seemed persuasive. This is a particularly helpful step in a direct exchange with someone who has offered an argument or with an audience that might have been persuaded by it. It is much more likely that you will be able to sell your negative appraisal of the argument if you can explain why the arguer or audience was tempted to accept it in the first place. For this purpose, the discussion of fallacies in chapter 6 should be helpful, since that analysis was aimed at explaining why people tend to be persuaded by certain kinds of bad arguments. Step 6 can also serve as an occasion to suggest what direction might be taken to improve the argument being examined. Often some core of reasonableness that the presenter of the argument was not able to adequately express lies behind the argument being offered. Perhaps even the Principle of Charitable Interpretation won't permit the argument to be revised radically enough to capture this reasonableness. But in applying the six-step procedure you might have developed some ideas about how a different but related argument could be constructed that *would* be acceptable.

A Sample Application of the Six-Step Procedure

It may be helpful to apply the entire six-step procedure to an argument found in a newspaper editorial. The following discussion is much more thorough than would be appropriate to present in, say, a critical essay. It explains the steps you could go through in your mind in preparing to write about or discuss the argument.

Suppose you came across the editorial included as passage 10.1 and decided to consider it carefully to understand it clearly and evaluate its main arguments. How could the six-step procedure be used to carry out this task?

The way you would proceed depends in part on the particular purpose you had in analyzing the editorial. You might intend to write a reply, discuss the editorial with someone interested in the topic of prayer in the public schools, or simply figure out whether to accept the point of view being advanced by the writer. For many purposes, the following analysis is probably more detailed than you would need to go through, but the steps you would take would be essentially the same. An example of a shorter, more tightly organized discussion that could be presented in a critical essay is given later in this chapter.

Preliminary Step: Read Passage Carefully to Identify Arguments

Even though the main points of this editorial are reasonably clear, a careful reading will lead you to see beyond some surface features that might mislead the casual reader.

Passage 10.1

A Selfish Way of Looking at the Law¹			
1	<p>In Georgia, a teacher of American government chose a poor way to deal with a law with which he disagreed. He broke it. He went right on teaching while other members of the faculty were observing a moment of silence, as required by the new law.</p>	<p>But if the teaching of American government is worthwhile, it shouldn't convey the impression that civil disobedience is the first line of attack. There should be lessons on majority rule and how it affects the making and changing of laws. The students should look at the role of political parties and special interest groups in building a consensus for change. There should be attention to the option of running for office or supporting candidates who are committed to changing the law. And finally, young people need to know that they can't always have their way. Some laws must be tolerated even though a few people might disagree with them.</p>	5
2	<p>The teacher was suspended with pay. He said he planned to sue the school system, saying the suspension violated his First Amendment rights.</p>	<p>Those approaches may lack the drama of "taking a stand." But when a dramatic, attention getting gesture is depicted as superior to working within the system and building a consensus a harmful message is delivered. This teacher's example said it's permissible to pick and choose among the laws obeying or disobeying as one sees fit. If everyone followed that selfish notion, the result would be chaos.</p>	6
3	<p>Yes, the teacher has every right to disagree with the law. Reasonable people differ over the propriety of requiring prayer, moments of silence and similar observances in public schools. But what a wonderful opportunity he had to teach his students about the responsibilities of a citizen to obey a disagreeable law while working within the system to change it. And how thoroughly he blew that opportunity.</p>		
4	<p>Certainly breaking a law is one way to protest its existence. Civil disobedience has a long history in the movements to abolish slavery, win civil rights and end unpopular wars. Civil disobedience is one way to get the question before the court. It's also a way to stir up public support for one's position.</p>		

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The first two paragraphs set out the case at issue. A Georgia schoolteacher intentionally disobeyed a new law requiring a “moment of silence” at the beginning of the school day, was suspended from teaching, and planned to appeal his suspension on constitutional grounds. The third paragraph indicates that this case involves freedom of religion, in particular “the propriety of requiring prayer, moments of silence and similar observances in public schools.” It is useful but not essential to understanding the passage to realize that the teacher’s action has taken place against a background of Supreme Court decisions apparently prohibiting prayer in the public schools. The Georgia law could be seen as an attempt to get around these decisions.

Paragraph 3 sets up an opposition between the teacher’s action, which it later characterizes as “civil disobedience,” and the alternative of working within the system. The final sentence—which says he “blew” the opportunity to work within the system—indicates the conclusion of the argument in the editorial: *the teacher should have worked within the system to change the law.*

Paragraph 4 summarizes some of the reasons why a person might want to carry out civil disobedience, and paragraph 5 sets out the alternative open to a teacher in criticizing the law without breaking it in an act of civil disobedience.

Finally, paragraph 6 argues that the teacher shouldn’t have committed civil disobedience in this case. It suggests that picking and choosing which laws to obey would result in chaos.

A careful reading leads us to an initial interpretation of the main argument along the following lines. The central conclusion is that the teacher should have worked within the legal system to change the laws. Paragraphs 3 to 5 set out the alternatives and suggest that civil disobedience should not have been carried out in this case. The final paragraph provides a reason for holding that an act of civil disobedience should not have occurred; namely, that such civil disobedience would result in chaos.

Step 1: Begin Reconstruction by Identifying Any Explicit Premises or Conclusions in Overall Argument

As we discussed in chapter 3, the distinction between explicit and implicit premises and conclusions is not sharp when you are reconstructing an argument from a complex prose passage. Nowhere in the essay is it explicitly stated that “the teacher should have worked within the legal system to change the law.” Rather, evaluative comments such as “he blew that opportunity” or the title “A Selfish Way of Looking at the Law” suggest that the editorial is arguing in favor of working within the system. Even though no “either-or sentence” is given, the two alternatives being considered—civil disobedience and working within the system—are fairly explicit in the text. This suggests the premise

- (1) *Either the teacher should have committed civil disobedience or he should have worked within the legal system to change the law.*

Paragraphs Containing Main Argument 1

- 3 Yes, the teacher has every right to disagree with the law.
Reasonable people differ over the propriety of requiring prayer, moments of silence and similar observances in public schools. But what a wonderful opportunity he had to teach his students about the responsibilities of a citizen to obey a disagreeable law while working within the system to change it. And how thoroughly he blew that opportunity.
- 4 Certainly breaking a law is one way to protest its existence. . . . But if the teaching of American government is worthwhile, it shouldn't convey the impression that civil disobedience is the first line of attack.
- 5

Step 2: Complete Reconstruction by Adding an Implicit Premise to the Main Argument On reviewing the premise as stated above and the conclusion we identified in the preliminary step, we can recognize that we have two of the three statements needed for a disjunctive argument fitting the pattern:

- (missing) (i) *A or B.*
(ii) *Not A.*
∴ *B.*

To interpret the argument in this form, we would need to add as an implicit premise: *The teacher should not have committed civil disobedience.*

First Interpretation of Passage 10.1

(suggested by paragraphs 3–5)

- (i) *Either the teacher should have committed civil disobedience or he should have worked within the legal system to change the law.*
(ii) *The teacher should not have committed civil disobedience.*
∴ *The teacher should have worked within the legal system to change the law.*

Premise (ii) in this reconstruction is itself the conclusion of a supporting argument.

Paragraph Containing Supporting Argument

- 6 But when a dramatic, attention getting gesture is depicted as superior to working within the system and building a consensus a harmful message is delivered. This teacher's example said it's permissible to pick and choose among the laws, obeying or disobeying as one sees fit. If everyone followed that selfish notion, the result would be chaos.

Applying Steps 1 and 2 to the Supporting Argument The argument in paragraph 6 supports the conclusion that *The teacher should not have committed civil disobedience* (which was the implicit premise of the main argument). And we have already identified the explicit premise that *if it is permissible for everyone to pick and choose among laws, then chaos would result*. Implicit in the argument is the assumption that *chaos shouldn't occur* and a link between the teacher's civil disobedience and the notion that it is permissible for everyone to pick and choose among laws.²

Supporting Argument

- (implicit) (1) *If the teacher should have committed civil disobedience, then it is permissible for him to pick and choose among laws.*
- (implicit) (2) *If it is permissible for him to pick and choose among laws, then it is permissible for everyone to do so.*
- (paragraph 6) (3) *If it is permissible for everyone to do so, then chaos would occur.*
- (implicit) (4) *Chaos shouldn't occur.*

∴ *The teacher should not have committed civil disobedience.*

Applying Steps 3, 4, and 5 to the Arguments As will often be the case, we have interpreted these arguments in such a way that the implicit premises we add permit the conclusions to follow from the premises. Indeed, we could have combined the main and supporting arguments into one continuous argument, as we discussed in chapter 3.

Arguments Combined into One Continuous Argument

- (suggested by paragraphs 3–5) (1) *Either the teacher should have committed civil disobedience or he should have worked within the legal system to change the law.*
- (implicit) (2) *If the teacher should have committed civil disobedience, then it is permissible for him to pick and choose among laws.*
- (implicit) (3) *If it is permissible for him to pick and choose among laws, then it is permissible for everyone to do so.*

2. The argument can be interpreted as an extended version of *modus tollens* that combines it with a chain argument, having the form:

- (1) *If A, then B.*
- (2) *If B, then C.*
- (3) *If C, then D.*
- (4) *Not D.*

∴ *Not A.*

- (paragraph 6) (4) *If it is permissible for everyone to do so, then chaos would occur.*
 (implicit) (5) *Chaos shouldn't occur.*
-

∴ *The teacher should have worked within the legal system to change the law.*

The two fairly explicit premises—1 and 4 in the continuous version of the argument—appear quite acceptable. As premise 4 suggests, if everyone were to pick and choose which laws to follow (for example, which traffic laws), then chaos would likely follow. And given that the teacher was going to respond to the law, civil disobedience or working within the system appear to be the two alternatives, as suggested in premise 1. We should note, however, that a supporter of the Georgia law would maintain that the teacher had a third course of action open, namely, following the law. Hence, the argument might contain a false dilemma fallacy.

What about the implicit premises? Are they acceptable? Premise 5 is straightforward. It is easy to agree that social chaos shouldn't occur. Premise 3 is less easy to assess. But it is plausible to maintain that if the teacher can be permitted to pick and choose which laws to obey solely on the basis of his judgment, then it must be permissible for anyone to do so.³ There is nothing special about this particular teacher.

We are left to assess premise 2: *If the teacher should have committed civil disobedience, then it is permissible for him to pick and choose among laws.* This premise can be criticized by noting that the civil disobedience in this case is limited to a controversial law that is of dubious constitutionality. Furthermore, breaking of the law does not do direct, serious harm. We can hold that civil disobedience in such cases (those involving controversial laws of dubious constitutionality in which breaking of the law does no serious harm) is justified (and permitted) without holding that the teacher (or anyone else) is permitted to break all laws. Laws against murder, driving on the wrong side of the road, and even tax evasion do not involve controversial laws of dubious constitutionality, and in the case of murder and reckless driving breaking them would likely cause serious harm.

These considerations give us grounds for rejecting premise 2 of the continuous version of the argument at step 4 in the flowchart. This leads us to consider according to step 5 whether a more charitable interpretation is possible. The title and choice of words in paragraph 6 suggest another version of the argument:

3. This premise embodies what is sometimes called the *Generalization Principle* in ethics: roughly, if it is right for someone to do something in a situation, it is also right for similar people to do similar things in similar situations.

A Second Version of the Argument in Passage 10.1

(suggested by paragraphs 3–5)

(implicit)

(implicit)

(1) *Either the teacher should have committed civil disobedience or he should have worked within the legal system to change the law.*

(2) *If the teacher should have committed civil disobedience, then it is permissible to act selfishly.*

(3) *It isn't permissible to act selfishly.*

∴ The teacher should have worked within the legal system to change the law.

Even if we accept premises 1 and 3 there are problems with premise 2. Exactly why is the teacher's act selfish? Many would hold that he is acting altruistically for what he perceives as a larger constitutional principle. Indeed, his suspension presumably caused him some amount of harm. It is true that he did what he wanted to do and believed was right to do. But this is not enough to make the act *selfish*. If anything, this version of the argument is less charitable than the first. This interpretation fails as well.

A third interpretation, which focuses on the issue of whether civil disobedience should be the first line of attack, is also suggested, particularly in paragraph 5. This interpretation of the argument acknowledges that civil disobedience might ultimately be used, but not until a person has exhausted other avenues. It notes that teachers are especially well positioned to work for change of a law they believe is bad within the system.

A Third Version of the Argument in Passage 10.1

(suggested by paragraph 5)

(suggested by paragraph 5)

(1) *If a person can work within the system to change a bad law, then that person should not commit civil disobedience (as the first line of attack).*

(2) *The teacher can work within the system to change a bad law.*

∴ The teacher should not commit civil disobedience (as the first line of attack).

As in the case of the first two interpretations, this version of the main argument has been constructed so that it is valid. It is an instance of *modus ponens*. What about the premises?

Premise 2 is certainly plausible. As paragraph 5 indicates, the teacher can work toward changing the law by teaching students lessons about democracy and about their options in working toward a change of state law within it. We can criticize premise 1 by pointing out first that even if a person can work toward something in a certain way, that doesn't mean that there is much chance of success using this route. If there is another more effective alternative, perhaps this should be carried out instead. For example, it might be the case that *if you win the lottery, you need not look for a job*. It does not follow that *if you try to win—that is, play the lottery—you need not look for a job*. So it can be true that *you play the lottery*, but false that *you*

need not look for a job. Perhaps you should do both. Similarly, teaching a few students, even galvanizing them to act, might possibly be instrumental in changing state law, but like the lottery the prospects are not very good. Just as looking for a job is a viable alternative to trying to win the lottery, civil disobedience might be a viable alternative to working within the system as a teacher.

Second, even if the teacher could be successful in overturning Georgia state law by working within the system, there is the larger question about similar laws that might be passed in other states. The teacher is described as interested in the First Amendment. He is challenging the constitutionality of the law. If the Georgia law is overturned by the federal district court or the U.S. Supreme Court, then his action would have an effect not just in Georgia but in other states as well. To raise such a constitutional issue it is necessary to have standing. By breaking the law, the Georgia teacher is in a position to appeal its constitutionality. Seen in this light, his action is actually necessary to achieving his larger aim. So, the first premise is false on these grounds as well. Even though he could (successfully) work within the system to change the Georgia law, given his larger constitutional aim he should also commit civil disobedience (as the first line of attack).

Applying Step 6 to the Arguments To conclude the application of the flowchart to the three interpretations of the editorial, we should ask why they might have seemed persuasive. In addition to the false dilemma in premise 1 that we mentioned earlier, two premises from interpretation 1 can be seen as committing the slippery slope fallacy:

- (3) *If it is permissible for him to pick and choose among laws, then it is permissible for everyone.*
- (4) *If it is permissible for everyone to do so, then chaos would occur.*

These statements suggest that his act of disobedience with respect to a newly passed law of questionable constitutionality might somehow encourage widespread law-breaking, which would then lead to chaos. A single act of civil disobedience is unlikely to produce this effect.

The second argument depends on the premises

- (2) *If the teacher should have committed civil disobedience, then it is permissible to act selfishly.*
- (3) *It isn't permissible to act selfishly.*

They contain an equivocation involving the concept of a selfish act. Premise 3 depends on the common interpretation of a selfish act as one that is done to benefit oneself at the expense of others. Premise 2 seems to assume that any act that occurs for *one's own reasons* is selfish.

Similarly, argument 3 might seem plausible because of an equivocation as well. The term *system* is used differently in the two premises.

- (1) *If a person can work within the system to change a bad law, then that person should not commit civil disobedience (as the first line of attack).*
- (2) *The teacher can work within the system to change a bad law.*

In premise 2 the “system” is the system of state laws and the political action that might change them. But as we pointed out in our analysis, the truth of premise 1 is plausible only if the “system” includes the larger system of laws and their constitutional interpretation.

If you are discussing this editorial with someone who accepted the arguments it contained, you might be more effective in promoting your negative appraisal if you helped the person understand how these arguments could have misled him or her. The discussion above suggests some possibilities.

A Second Sample Application of the Six-Step Procedure

A second example, passage 10.2 starting below, will help you understand the six-step procedure better.

Preliminary Step: Read Passage Carefully to Identify Arguments

The main points in this second editorial are reasonably clear. Although the beginning and ending attempt to defend a political economist for some remarks he made in a speech, the body develops the writer’s own arguments against the proposal of comparable worth and goes beyond assessing whether the economist’s remarks were appropriate.

Passage 10.2

Pitfalls in Comparable Worth⁴	
<p>1 Some people in a largely female audience objected the other day when . . . economist William Niskanen criticized . . . the concept known as “comparable worth” or “comparable pay.” Niskanen called the idea “a truly crazy proposal.”</p>	<p>2 Perhaps that wasn’t the most diplomatic way Niskanen could have selected for disagreeing with a concept that the National Organization for Women, among other groups and individuals, insists is a matter of justice.</p>

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3	<p>But he was right to criticize the idea. . . . There is no good argument for an employer to pay less to women for doing the same job men do simply because they are women. That kind of discrimination is wrong.</p>	<p>ing conditions and other factors. The committee said there are no absolute standards for judging the worth of all jobs.</p>	
4	<p>But that isn't the issue here. The comparable worth concept says men and women in different occupations should receive the same wages if their jobs are "comparable." Advocates of the idea say such a plan is necessary to address the fact that women with full-time jobs are, on the average, paid less than men with full-time jobs.</p>	<p>Such efforts raise questions of fairness. How much weight should be given to each of the factors? How about such difficult-to-measure factors as number of interruptions in an employee's working day? Or the degree of danger involved in the job?</p>	8
5	<p>Who decides what is comparable? A study by the State University of New York suggested that a registered nurse was comparable in responsibility and education to a vocational education teacher. Another study ranked dining-hall directors with auto parts handlers and highway maintenance workers with clerk-typists.</p>	<p>Even if it were possible to devise a fair system of determining comparability, it would not be a logical basis for determining compensation.</p>	9
6	<p>Such judgments can depend on criteria that are so arbitrary that they are almost worthless. Some people might make a case for the idea that nurses have more responsibility than vocational education teachers and consequently should be paid more. Or that dining-hall directors ought to be paid more than auto parts handlers.</p>	<p>The imposition of a comparable pay plan for public employees could place a considerable burden on taxpayers. Obviously, nobody's pay would be reduced. Equalizing would mean raising.</p>	10
7	<p>A National Academy of Sciences committee conducted a comparability study based on required skills, level of experience, responsibility, effort, work-</p>	<p>A comparable worth system also could disrupt market forces that encourage people to enter occupations where more workers are needed and discourage people from entering fields where there is a surplus of workers.</p> <p>When there is a shortage of nurses, employers ought to be able to offer higher nursing salaries without causing nearby high schools to have to offer higher salaries for vocational education teachers.</p> <p>Niskanen might have been undiplomatic in calling comparable worth a "truly crazy proposal." But the term "voodoo economics" has already been used.</p>	11
			12
			13

Paragraph 4 specifies that it is not the issue of men and women getting the same pay for the same jobs that is being discussed, but rather the issue of whether “men and women . . . should receive the same wages if their jobs are ‘comparable.’” Clearly, the writer is opposed to such a policy.

What does a careful reading lead us to take as the main arguments of this essay? A major conclusion being supported is that a system of comparable worth should not be implemented. Paragraphs 5 through 8 give one set of related reasons for this conclusion, and paragraphs 10 through 12 give another set of reasons. We can interpret these as two arguments with the same conclusion.

Step 1: Begin Reconstruction by Identifying Any Explicit Premises or Conclusions

As we discussed in chapter 3, the distinction between explicit and implicit premises and conclusions is not sharp when you are reconstructing an argument from a complex prose passage. Nowhere in the essay is it explicitly stated that “a system of comparable worth should not be implemented.” But the statements that the economist “was right to criticize the idea” (paragraph 3) and “even if it were possible to devise a fair system of determining comparability, it would not be a logical basis for determining compensation” (paragraph 9) leave no room for doubt that this is what the writer intends.

Paragraphs Containing the First Argument in Passage 10.2

5 Who decides what is comparable? A study by the State University of New York suggested that a registered nurse was comparable in responsibility and education to a vocational education teacher. Another study ranked dining-hall directors with auto parts handlers and high-way maintenance workers with clerk-typists.

6 Such judgments can depend on criteria that are so arbitrary that they are almost worthless. Some people might make a case for the idea that nurses have more responsibility than vocational education teachers and consequently should be paid more. Or that dining-hall directors ought to be paid more than auto parts handlers.

7 A National Academy of Sciences committee conducted a comparability study based on required skills, level of experience, responsibility, effort, working conditions and other factors. The committee said there are no absolute standards for judging the worth of all jobs.

8 Such efforts raise questions of fairness. How much weight should be given to each of the factors? How about such difficult-to-measure factors as number of interruptions in an employee’s working day? Or the degree of danger involved in the job?

9 Even if it were possible to devise a fair system of determining comparability, it would not be a logical basis for determining compensation.

Picking out premises in the first argument (paragraphs 5 through 8) demands much more interpretation. Paragraphs 5 through 7 assert that different people would judge comparable worth differently, that criteria of comparable worth are arbitrary, and that there are no absolute standards of comparable worth. The way the writer moves from one of these assertions to the next, using the same kind of examples in support of each, would suggest that he takes all three to be roughly equivalent. When paragraph 8 moves to the claim that the (unsuccessful) efforts to judge comparable worth objectively “raise questions of fairness,” we are led to take two of the premises of the first argument to be:

- (1) *There are no objective criteria for determining comparable worth.*
- (2) *If there are no objective criteria for determining comparable worth, then comparable worth can't be determined fairly.*

When the writer states in paragraph 9 that “even if it were possible to devise a fair system of determining comparable worth, it would not be a logical basis for determining compensation,” he seems to suggest that the impossibility of determining comparable worth fairly is one consideration that would establish that comparable worth shouldn't be implemented, and now he is going to set forth another one. On this interpretation, we assume that the writer has already completed his first argument against comparable worth.

Step 2: Adding an Implicit Premise to the First Argument On reviewing the premises stated above, we can see that we need an implicit premise in order to reach the intended conclusion.

Argument 1
(suggested by
paragraphs 5–8)

(implicit)

- (1) *There are no objective criteria for determining comparable worth.*
- (2) *If there are no objective criteria for determining comparable worth, then comparable worth can't be determined fairly.*
- (3) *If comparable worth can't be determined fairly, then a system of comparable worth should not be implemented.*

∴ A system of comparable worth should not be implemented.

Applying Steps 1 and 2 to the Second Argument in Passage 10.2

The second argument is more straightforward. The writer raises two considerations against implementing comparable worth: (1) such a practice for public employees would be burdensome to taxpayers (paragraph 10), and (2) it would disrupt market forces (paragraph 11).

Paragraphs Containing the Second Argument in Passage 10.2

- 10 The imposition of a comparable pay plan for public employees could place a considerable burden on taxpayers. Obviously, nobody’s pay would be reduced. Equalizing would mean raising.
- 11 A comparable worth system also could disrupt market forces that encourage people to enter occupations where more workers are needed and discourage people from entering fields where there is a surplus of workers.
- 12 When there is a shortage of nurses, employers ought to be able to offer higher nursing salaries without causing nearby high schools to have to offer higher salaries for vocational education teachers.

The reasoning for the second consideration is interesting enough to be detailed as part of the argument: under a system of comparable worth, if offering higher salaries were necessary to counteract a shortage of workers in one field, then higher salaries would also have to be offered in comparable fields. Combining these premises with the obvious implicit premises and keeping the same conclusion as in argument 1, we would have:

Argument 2

- (paraphrase of paragraph 10)* (1) *A system of comparable worth for public employees would be burdensome to taxpayers.*
 - (paraphrase of paragraph 11)* (2) *If a system of comparable worth were implemented, then higher salaries offered to attract workers to one field would have to be matched by higher salaries in comparable fields.*
 - (implicit)* (3) *If a policy would be burdensome to taxpayers and would have the consequences for the market described in premise 2, then it shouldn’t be implemented.*
-
- ∴ A system of comparable worth shouldn’t be implemented.*

Applying Steps 3, 4, and 5 to the First Argument in Passage 10.2

As will often be the case, we have interpreted these arguments in such a way that the implicit premises we add permit the conclusions to follow from the premises. That is, the conclusions will follow unless there is a shift in the meaning of a word or expression. Noting this for our reconstruction, we can move to step 4. If in our determination of whether to accept the premises we find that their acceptability depends on the meaning of an unclear expression, we can then determine whether there are any shifts in meaning from one premise to another.

Premise 1 states that there are no objective criteria for determining comparable worth. As we noted earlier, the writer seems to interpret this in either of two ways: (1) criteria of comparable worth are arbitrary, or (2) different people would judge comparable worth differently. But it must be remembered that however we interpret this premise, we must use the same interpretation when we consider (in premise 2) whether comparable worth can be determined fairly if there are no objective criteria, if the criteria are arbitrary, or if different people would judge it differently.

With this in mind, we can reject the second interpretation of premise 1 as simply stating that different people would judge comparable worth differently; there are, in fact, many things people would judge differently but that could nevertheless be judged fairly. Different people would judge criminal guilt or innocence differently. They would judge whether a person deserved a promotion differently. They would judge the quality of a dive differently. If we maintain that these are also things that can't be judged fairly, we must remember that in premise 3 the failure to be able to judge something fairly will be taken as a reason against implementing it. Should the practices of holding criminal trials, promoting employees, and holding diving contests also be abandoned?

What we are doing at this point is following the flowchart from step 4 to step 5 and back through steps 1, 2, and 3. This is the dialogue process of interpreting and evaluating that we referred to in chapter 7. We determined that if a premise is assigned a certain meaning, this will force another premise to be false (or else the argument will become an equivocation and the conclusion will not follow). So we attempted a more charitable interpretation and determined whether this would make the premises acceptable and still allow the conclusion to follow.

In argument 1, we still need to consider the first of the two interpretations of premise 1—that is, we could interpret the claim that there are no objective criteria to mean that all criteria are arbitrary: either no defensible rationale could be given for using one set of criteria rather than another, or after some set of criteria was decided on, it would yield different results depending on who applied the criteria. The latter would run into the same difficulties as did “different people would judge comparable worth differently.” What about the former?

Could a defensible rationale be given for using one set of criteria for comparable worth rather than another? In determining this we come to some substantive issues that probably lie at the basis of the comparable worth controversy. One approach to the worth or value of a worker would simply be to point to the market for a worker's skill as a gauge of its value. How much people are willing to pay for your work is a measure of how valuable it is to them. But on this interpretation, there can be no problem of comparable worth because (if the market is allowed to operate freely) each person will get exactly what she or he is worth.

Others, however, will estimate the worth of a worker in terms of some notion of what is deserved. Such factors as effort, stress on the job, or education required for the position might be seen as indicating that a person deserves a certain wage, regardless of the market demand for his or her work.

No doubt the proponents on any side of this issue could give a defense of their criteria. But it is likely that none of them will be able to convince all, or even very many, of their opponents. In this sense we can probably accept the claim that there are no objective criteria for determining comparable worth.

Again, we must assign this same interpretation to premise 2 when we ask whether comparable worth can be determined fairly if there are no objective criteria. What if certain criteria are arrived at (by vote, say), even though no one agrees to all of them? If these criteria are applied as uniformly as possible from case to case, then won't comparable worth have been determined fairly? The determination may not satisfy everyone's criteria of accuracy, but would the determination be unfair? It may be like the diving example, in which different people might think different factors should be taken into account in judging a dive. But once a set of criteria is decided on (again by vote), it might well be claimed that the judging could be done fairly.

The implicit premise—if comparable worth can't be determined fairly, then it shouldn't be implemented—would seem to depend on how unfair the determination of comparable worth was and how grievous the injustice was that it tried to correct. If it were necessary to spend tax money obtained by a system that has some minimal unfairness in it in order to provide the right to vote to people who had been unjustly excluded from voting, then this would surely not be an overriding consideration against providing this right. The extent to which differences in wages between women and men have been the result of past injustice and the gravity of the injustice would have to be determined.

We have gone to considerable lengths to interpret and reinterpret the premises of the first argument so they will be acceptable and the conclusion will follow, but with little success. The point at which we give up this procedure (that is, give a negative answer to step 5) is somewhat arbitrary. Realistically, it depends on how much time and energy we are willing to devote to the argument.

Perhaps it would be adequate for our purposes to suggest a direction that might be taken if the process of reinterpretation were to be carried further. The difficulties raised by the writer with arriving at criteria for judging comparable worth do carry some weight as a consideration against implementing a policy of comparable worth. Perhaps the writer did not intend that this consideration alone would be compelling; but that in combination with the problems raised by the second argument, we have adequate reason to reject the idea of comparable worth. A possible direction for further revision of the argument could then be to combine argument 1 with argument 2.

Applying Step 6 to the First Argument in Passage 10.2 To conclude the application of the flowchart to argument 1, we must ask why this argument might have seemed persuasive. The argument doesn't straightforwardly commit any of the common fallacies (unless it is taken as an equivocation). There

may be an illegitimate appeal to authority in citing a National Academy of Sciences Committee as having determined that there are no absolute standards for judging comparable worth. (It is questionable whether this issue could be settled by any of the sciences.)

It is undeniable that different people will interpret comparable worth in radically different ways. And it is tempting to conclude from this that comparable worth should not be implemented. Why is this? Perhaps it seems unreasonable to enact a public policy when there is little consensus regarding the criteria on which it would be based. Perhaps the fact that there is little agreement on criteria raises the possibility that some really inappropriate criteria—ones that should have nothing to do with comparable worth—would be implemented. If this were the case, then it would really seem unjust to implement a comparable worth policy that included inappropriate criteria.

It is likely that the writer is beset by fears such as these, which are not clearly articulated, and that his argument seemed persuasive to him because it captured some of his reasoning and led to the desired conclusion—that comparable worth should not be implemented. It must be remembered that even if the particular argument he presented is not judged to warrant its conclusion, that doesn't mean the conclusion is false. Finally, as we suggested earlier, it could be that the first argument was intended only as one consideration against comparable worth, with the major consideration set forth in the second argument in passage 10.2.

Exercise 10.1 **Applying the Six-Step Procedure**

1. Carry out the remainder of the six-step procedure in evaluating the second argument from “Pitfalls in Comparable Worth” (passage 10.2).
2. In chapter 3 you applied the first two steps of the procedure to the passages in Exercise 3.3. Apply the remainder of the six-step procedure to the arguments from those passages.
3. Apply the six-step procedure to the following longer passages. (i) Supply appropriate reconstructions and sketch criticisms. (ii) (optional) Weave your presentation of the central arguments in the passages and your criticisms into short essays.
 - a. Full article by Ellen Goodman on following pages.

Gender Tests May Not Be Worth Risk of Misuse⁵

The woman beside me pats her rounded stomach and rolls her eyes to the ceiling, exclaiming, "Is she ever active today!" The "she" in this action won't be born until March. But my pregnant companion already knows the gender of this gestation.

I have grown accustomed to the attachment of a pronoun to a fetus by now. Most women I know of her age and anxiety level have had "the test" and gotten the results.

Over the past two decades, through amniocentesis and then CVS and sonograms, a generation of parents has received a prenatal exam, a genetic checkup on their offspring. They have all been given new information and sometimes new, unhappy choices.

But the "she" playing soccer in the neighboring uterus is a healthy baby. And the woman is more than pleased with both of those pieces of knowledge.

What if she were not? What if she and her husband had regarded the sex of this child as a devastating disappointment?

I wonder about this because, in the news, doctors report success on the road to developing a simple blood test on pregnant women to determine the sex of the fetus. The geneticists are excited because such a test could allow safer, widespread testing. It

could help those worried about gender-linked inherited diseases.

But this test may increase the possibility of abortion for sex selection by those who regard gender—the wrong gender—as a genetic flaw.

The repugnance to abortion-by-gender runs deep in our culture. Both pro-choice supporters who believe that abortion is a serious decision and pro-life supporters who believe it is an immoral decision unite in opposing sex selection as the most frivolous or sexist of motives.

It is the rare person who defends it on the grounds of population control or pure parental choice. It is a rarer American who chooses it. Indeed, the only countries in which sex selection occurs in discernible numbers have been those such as India or Korea where daughters have long been unwanted. It is almost always female fetuses that are aborted. But gender testing and the capacity for gender choosing—before and after conception—is an ethical issue in this country, too. This is the first, but hardly the last time, that the new technology will be available to produce designer babies. Today, genetic testing is valued in America because it leads to the diagnosis of diseases that cause

5. Ellen Goodman, *New York Times*. © 1992 by The Boston Globe Newspaper Company/Washington Post Writers Group. Reprinted with permission.

pain and death and disability. Eventually it may lead to their cure. But in the future, we also are likely to have access to much more information about genes than we need medically. We may be able to identify the gene for height, hair color, eye color, perhaps even athletic ability or intelligence.

There will always be parents who, out of ego, or some perverse view of children as a perfect product, want to pick and choose genes according to a master plan. Should society encourage or allow that? Must doctors perform tests and turn over information to patients to do with as they will?

John Fletcher, an ethicist at the University of Virginia, suggests a line to be drawn around our right to know. "Any kind of genetic knowledge that isn't related to a genuine disease," he says, "is on the other side of the line."

Because gender, like hair color, is not a disease, he believes that the medical profession can refuse testing and disclosing for

two reasons. To prevent abortion-by-gender and, in a wider moral context, to keep genetic research on the right track.

Americans haven't yet learned how to say "no" to knowledge. Doctors may feel uncomfortable, even paternalistic, withholding information from people about their own bodies, genes, fetuses. Pennsylvania has banned abortion for sex selection in a bill that goes into effect this month. Such a ban is not only impossible to enforce but says nothing about the future dilemmas of reproductive knowledge.

At the moment, the moral consensus against sex selection is holding. The medical profession should at least state, in public and in unity, a strong position against gender selection and a moral prohibition against genetic eugenics. But in the longer run, the rest of us may be called upon to ask whether our curiosity about gender is worth the risk that others will misuse that information. It may be wiser to learn if the baby is a "he" or a "she" the old-fashioned way.

b.

Stop Subsidizing the Future Rich⁶

by John R. Lott, Jr.

College Station, Texas—The basic problem with government subsidized student loans is that they are a subsidy to future high income people. The loans students receive carry interest rates far below what even the most stable corporations pay.

While students, especially those from relatively poor families, do not have a high standard of living during college, they enjoy above-average earnings soon after receiving their degrees. Since the loans are slowly paid off after graduation, during a period of high earnings, subsidized interest rates seem unjustified. Why should factory-workers and secretaries be taxed so would-be managers, lawyers, and doctors can be subsidized?

And subsidized federal loans are only a small part of our educational subsidies. Here at Texas A & M, each student pays only a small percentage of the \$10,000—plus it annually costs the state of Texas. The great majority of these students come from relatively well-to-do families. In the cases of those few who do not, the argument about transfers to future high-income earners applies. It is important to distinguish loans *per se* from the currently heavily subsidized loans.

While subsidized loans are unjustified, a weak case can be made for government loan guarantees or possibly loans at unsubsidized rates. This is because of the problems created by current bankruptcy laws, which in some cases have allowed students to rid themselves of educational debt by simply declaring bankruptcy after graduation. Banks may therefore consider student loans too risky.

Unfortunately, these bankruptcy laws probably hurt children from poor families the most. For a student from a poor family, the parents' co-signature does not appreciably reduce the riskiness of the loan, since they do not own enough assets.

The simplest and best solution is to alter the bankruptcy laws to get rid of this problem. Private banks could then handle student loans entirely, with no role played by the federal government.

Evidence provided by Sam Peltzman of the University of Chicago suggests that abolishing subsidized loans will have little effect on the number of people attending higher education. The primary effect will be to end the unjustified taxing of people to subsidize the future wealthy of this country.

6. Copyright 1985 USA TODAY. Reprinted with permission. John R. Lott, Jr. was a visiting assistant professor of economics at Texas A&M University when he wrote this passage.

c.

Don't Roll Back "Roe"⁷

by John R. Silber

Boston—The public debate over abortion, already bitter, is likely to become even more so. Indeed, with state legislatures debating new restrictions made possible by the Supreme Court's decision in *Webster v. Reproductive Health Services*, consensus looks further away every day.

This bitter debate grows out of widespread confusion between legal issues and moral ones, between religious issues and political ones. We cannot develop a clear understanding of these difficult issues without considering legal and ethical points of view.

I would oppose any law prohibiting abortion in the first two trimesters. That is, I believe that the states should retain the standard set by the Supreme Court in *Roe v. Wade* even though *Webster* allows them to restrict it.

It is very doubtful, considering past experience, that restrictive legislation would do more than make presently legal abortions illegal. Some of these abortions, involving technologies that enable laymen to perform abortions safely, would be different from current abortions only in their illegality. Others, performed with coat hangers in back alleys,

will be fatal. I could not in conscience recommend legislation having these effects.

But this is not the same as the "pro-choice" position. It is possible to believe that abortion ought to be legal without believing that it is an unconditional right, or even that it is morally justified in more than a limited number of cases.

Nor is the belief that many abortions are immoral the same as the "pro-life" position. There are instances when the taking of human life is justifiable, legally and morally. Homicide is not equivalent to murder. Some homicides are entirely justified, especially those involving self-defense. A woman whose life is threatened by a pregnancy is justified in terminating the pregnancy that might kill or severely injure her.

So, too, when a woman is raped she is under no obligation morally, and should be under no obligation legally, to accept the consequences of an act of sexual intercourse in which she did not voluntarily participate. She has a right to protect herself from the consequences of assault.

But this does not lead me to conclude that abortions are morally justified when the

7. Copyright © 1990 by the New York Times Company. Reprinted with permission. John R. Silber was president of Boston University.

pregnancy does not threaten the life of the mother and follows from sexual intercourse in which she voluntarily participated. Indiscriminate use of abortion is wrong because the indiscriminate taking of human life is wrong.

If abortion were not a supercharged issue, it would be apparent to all parties that a fertilized ovum is, in fact, a living human. Obviously it is not a complete human being. But neither is a fetus in the third trimester or, for that matter, a newborn infant or a child of one or two years of age. The value of the life of an infant is based on its potential to become a fulfilled human being, and that potential exists from the time of conception.

Believing firmly as I do in this moral view of abortion, I think it would be a disastrous error to write it into the statute book.

A free society cannot maintain its unity and order unless there is toleration of diverse opinions on which consensus has not been achieved. Without

religious toleration, for example, the unity of the 13 Colonies would have been torn asunder by religious wars of the sort that plagued Europe for centuries. The abortion issue is for many individuals a religious issue, and on such issues we should scrupulously observe the separation of church and state.

By tolerating contrary views, we accept an important fact that is too often overlooked. The instruments of the state and its legal institutions are far too crude and inexact to be used in deciding highly complex issues of personal morality on which persons of good will fundamentally disagree. It is proper to leave such important moral and religious issues to individual moral agents and religious believers.

On the issue of abortion, there is no political, philosophical, moral or religious consensus. I believe abortion is, in general, morally wrong. But I also believe the state should not enact laws to restrict abortion further. This is an issue that cries out for toleration.

Application of the Six-Step Procedure to Passages Containing Theoretical Statements

In the previous sections we have examined the passages containing deductive arguments without direct appeal to definitions, empirical generalizations, or theories. Consider the following passage that focuses on the theoretical underpinning of an argument.

Premise 1

The millionaires are a product of natural selection acting on the whole body of men to pick out those who can meet the requirement of certain work to be done. . . . It is because they are thus selected that wealth—both their own and that entrusted to them—aggregates under their hands. . . . They may fairly be regarded as the naturally selected agents of society for certain work. They get high wages and live in luxury, but the bargain is a good one for society.

Premise 2

Premise 4

There is the most intense competition for their place and occupation. This assures us that all who are competent for this function will be employed in it, so that the cost of it will be reduced to the lowest terms.⁸

Although the major focus of the passage is to provide an account of why millionaires are especially competent, a preliminary reading of this passage suggests an argument justifying the rewards given to millionaires in American society.

Reconstruction of the Argument in the Passage

Theory-Based
Premises

- (1) Millionaires are naturally selected for certain work.
- (2) If millionaires are naturally selected, then millionaires are especially competent (fit) for their environment.
- (implicit) (3) If millionaires are especially competent (fit) for their environment, they provide great benefits for society.
- (4) If millionaires provide a great benefit for society, then they deserve their riches.
- (implicit) ∴ Millionaires deserve their riches.

As in previous examples, we have reconstructed the argument to make it valid (steps 1 to 3). Central to evaluating the argument according to step 4, however, is a consideration of the underlying theory of natural selection, which the author of the passage puts forward fairly directly in support of the second premise. Although the theory of natural selection is not developed in the passage, it can be presumed to contain a theoretical statement along these lines:

T_1 : Natural selection produces organisms that are especially fit for their environmental niche.

Some version of this statement has backing from evolutionary biology (though modern versions of biology are more likely to hold that organisms are *adequately* suited to their environmental niche). If natural selection applies to millionaires, then T_1 would support the view that millionaires are suited to their

8. William Sumner, *Earth-Hunger and Other Essays* (New Haven, CT: Yale University Press, 1913), 3.

environment. But it is unclear whether the concept of “natural selection” as used in a testable biological theory (that is, in T_1) is used in this sense in premises 1 and 2. Crucial to the biological theory is that some inheritable trait (a trait passed down genetically from parents to offspring) is naturally selected if it improves the likelihood that the organisms having it will live to pass on the gene responsible for the trait. It is not obvious that the traits that make individuals millionaires are inheritable or that they improve the likelihood that organisms possessing them will reproduce. Indeed, some millionaires receive their wealth from their parents, not because their parents transmitted it biologically, but more directly, by having money willed to them when their parents died. Even if parents had traits of character that suited them to earn wealth, their children need not have them. Furthermore, even if there are such traits, they don’t enable millionaires to reproduce more. Indeed, the wealthy tend to have fewer—not more—offspring than the poor. As we pointed out in chapter 7 in our discussion of misleading definition, an argument is faulty if it uses different definitions of a term in different premises. We have here an extension of this case. The sense of *natural selection* in biological theory doesn’t seem to apply to the notion as it occurs in premises 1 and 2. As a consequence, premise 2 is not really supported by natural selection theory.

The argument is open to further criticism. Premise 3 asserts that if millionaires are suited to their environments, then they will produce great benefits for society. It is not obvious that all, or even most, activity of millionaires (say those who play the financial markets) will benefit society as a whole. Even if some millionaires (for example, Bill Gates of Microsoft or other entrepreneurs in the computer industry) do benefit society by the activities that make them rich, it is not obvious this is always or even usually the case in other areas.

Exercise 10.2
Criticizing Arguments Based on Theories and Generalizations

Apply the six-step procedure to the following more complicated passages. Be sure to reconstruct any arguments and identify relevant theoretical statements.

1.

<p>Are girls really being insidiously damaged by our school systems? That question actually remains to be investigated. Everyone knows we need to improve our schools, but are the girls worse off than</p>	<p>the boys? If one does insist on focusing on who is worse off, then it doesn’t take long to see that, educationally speaking, boys are the weaker gender. Consider that today 55 percent of college</p>
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students are female. In 1971 women received 43 percent of the bachelor's degrees, 40 percent of the master's degrees, and 14 percent of the doctorates. By 1989 the figures grew to 52 percent for B.A.'s, 52 percent for M.A.'s, and 36 percent for doc-

toral degrees. Women are still behind men in earning doctorates, but according to the U.S. Department of Education, the number of doctorates awarded to women has increased by 185 percent since 1971.⁹

2. (Hint: Clearly distinguish between the argument and theory attributed to the Wellesley Report and Sommers's own argument and theory.)

The Wellesley Report ["How Schools Shortchange Girls"¹⁰] is correct when it points out that American girls are trailing boys in math and science. The gap is small but real, and the report is right to suggest that schools must make every effort to "dispel myths about math and science as 'inappropriate' fields for women." Unfortunately, that sound suggestion is accompanied by more than twenty questionable and distressing recommendations that would, if acted upon, create a nightmarish "gender equity" bureaucracy with plenty of time and money on its hands—just the sort of recommendation anyone who cares about the well-being of American Schools should fear and loathe: "The U.S. Department of Education's Office of Education Research

and Improvement (OERI) should establish an advisory panel of gender equity experts to work with OERI to develop a research and dissemination agenda to foster gender-equitable education in the nation's classrooms."

Who would be training the gender experts? Who would monitor the nation's schools on how well they conform to the ideals of a correct sexual politics? More generally, who would benefit most from the millions being requested for the Gender Equity in Education Act? Would it not be those who insist that gender equity is our foremost educational problem? Our system cannot handle much more pressure from these muddled but determined women with their multistage theories and their metaphors about

9. Reprinted with the permission of Simon & Schuster. Christina Hoff Sommers, *Who Stole Feminism: How Women Have Betrayed Women* (New York: Simon & Schuster, 1995), 160. Copyright 1994 by Christina Sommers. Reprinted with permission.

10. *The AAUW Report: How Schools Shortchange Girls* (Washington, D.C.: AAUW Educational Foundation, 1992).

windows, mirrors, and voices, their workshops, and above all the constant alarms about the state of male-female relations in American society.

Which leads us back to what is most wrongheaded about the Wellesley Report: its exploitation of America's very real problem as a nation educationally at risk. Despite its suggestion that solving the "problem of gender equity" will somehow help us to bridge the gap between American children and the educationally superior children of other countries—what the education researcher Harold Stevenson aptly calls the "learning gap"—the report never says how. The reason for the omission is obvious: the authors have no plausible solution to offer.

In 1992, the Mathematical Association of America published a translation of the math section of Japan's 1990 college entrance exam. American mathematicians were startled by what they saw. Professor Richard Askey, a mathematician at the University of Wisconsin, spoke for many American scientists and mathematicians when he said, "The level at which [Japanese] students perform on these [exams] is just incredible." . . .

American educators sometimes explain away the discrepancies by pointing out that only the best students in Japan take the test. In 1987, for example, 31 percent of American college-age students took the SAT; in Japan

the figure was 14 percent for the Japanese equivalent of the SAT. But even our very best students had a hard time matching the *average* score of the Japanese students. Studies by Professor Jerry Becker, of Southern Illinois University, and by Floyd Mattheis, of East Carolina University, tell the same story. Becker reports that the problem is not simply that Japanese students as a whole outperform our students but the "*average* students in Japan show greater achievement than the top five percent of U.S. students" (his emphasis). Mattheis compared junior high students in Japan and North Carolina. Reporting on his study, *Science* magazine says, "It shows Japanese students out front at every age group in a test that measures six logical thinking operations." . . . What of the gender gap between American boys and girls in math? As noted earlier, the Educational Testing Service (in its International Assessment of Mathematics and Science) found that although thirteen-year-old American girls lag a point behind the boys, the gap is insignificant compared to the one between American children and foreign children. Recall that the disparity between our boys and Taiwanese and Korean *girls* was 16 points.

Some theorists speculate that Asian children do better at math because their languages are so complex and abstract, providing better preparation in the cogni-

tive skills required for math and science. That does not help to explain why American children lag behind European and Canadian students too. Girls in French-speaking Quebec outperform our boys by 12 points on the IAEP math test. In fact

American boys lag behind girls in such countries as Ireland, Italy, and Hungary. In science the results, although not quite so dismaying, continue the pattern: American boys trail significantly behind the foreign girls.¹¹

3.

The Closing of the American Mind: How Higher Education Has Failed Democracy and Impoverished the Souls of Today's Students¹²

Introduction: Our Virtue

When I was a young teacher at Cornell, I once had a debate about education with a professor of psychology. He said that it was his function to get rid of prejudices in his students. He knocked them down like tenpins. I began to wonder what he replaced those prejudices with. He did not seem to have much of an idea of what the opposite of a prejudice might be. He reminded me of the little boy who gravely informed me when I was four that there is no Santa Claus, who wanted me to bathe in the brilliant light of truth. Did this professor know what those prejudices meant for the students and what effect being deprived of them would have? Did he

believe that there are truths that could guide their lives as did their prejudices? Had he considered how to give students the love of the truth necessary to seek unprejudiced beliefs, or would he render them passive, disconsolate, indifferent, and subject to authorities like himself, or the best of contemporary thought? My informant about Santa Claus was just showing off, proving his superiority to me. He had not created the Santa Claus that had to be there in order to be refuted. Think of all we learn about the world from men's belief in Santa Clauses, and all that we learn about the soul from those who believe in them.

By contrast, merely methodological excision from the soul

11. Sommers, *Who Stole Feminism*, 178–180.

12. Allan Bloom, *The Closing of the American Mind: How Higher Education Has Failed Democracy and Impoverished the Souls of Today's Students* (New York: Simon & Schuster, 1987). Copyright © 1987 by Allan Bloom. Reprinted by permission of Simon & Schuster, Inc.

of the imagination that projects Gods and heroes onto the wall of the cave does not promote knowledge of the soul; it only lobotomizes it, cripples its powers.

I found myself responding to the professor of psychology that I personally tried to teach my students prejudices, since nowadays with the general success of his method they had learned to doubt beliefs even before they believed in anything. Without people like me, he would be out of business. Descartes had a whole wonderful world of old beliefs, of prescientific experience and articulations of the order of things, beliefs firmly and even fanatically held, before he even began his systematic and radical doubt. One has to have the experience of really believing before one can have the thrill of liberation. So I proposed a division of labor in which I would help to grow the flowers in the field and he could mow them down.

Prejudices, strong prejudices, are visions about the way things are. They are divinations of the order of the whole of things, and hence the road to a knowledge of that whole is by way of erroneous opinions about it. Error is indeed our enemy, but it alone points to the truth and therefore deserves our respectful treatment. The mind that has no prejudices at the outset is empty. It can only have been constituted by a method that is unaware of how difficult it is to recognize that a prejudice is a prejudice. Only

Socrates knew, after a lifetime of unceasing labor, that he was ignorant. Now every high-school student knows that. How did it become so easy? What accounts for our amazing progress? Could it be that our experience has been so impoverished by our various methods, of which openness is only the latest, that there is nothing substantial enough left there to resist criticism, and we therefore have no world left of which to be really ignorant? Have we so simplified the soul that it is no longer difficult to explain? To an eye of dogmatic skepticism, nature herself, in her lush profusion of expressions, might appear to be a prejudice. In her place we put a gray network of critical concepts, which were invented to interpret nature's phenomena but which strangled them and therewith destroyed their own *raison d'être*. Perhaps it is our first task to resuscitate those phenomena so that we may again have a world to which we can put our questions and be able to philosophize. This seems to me to be our educational challenge. . . .

*The Student and the University:
Liberal Education*

What image does a first-rank college or university present today to a teenager leaving home for the first time, off to the adventure of a liberal education? He has four years of freedom to discover himself—a space between the intellectual wasteland he has left behind and the

inevitable dreary professional training that awaits him after the baccalaureate. In this short time he must learn that there is a great world beyond the little one he knows, experience the exhilaration of it, and digest enough of it to sustain himself in the intellectual deserts he is destined to traverse. He must do this, that is, if he is to have any hope of a higher life. These are the charmed years when he can, if he so chooses, become anything he wishes and when he has the opportunity to survey his alternatives, not merely those current in his time or provided by careers, but those available to him as a human being. The importance of these years for an American cannot be overestimated. They are civilization's only chance to get to him.

In looking at him we are forced to reflect on what he should learn if he is to be called educated; we must speculate on what the human potential to be fulfilled is. In the specialties we can avoid such speculation, and the avoidance of them is one of specialization's charms. But here it is a simple duty. What are we to teach this person? The answer may not be evident, but to attempt to answer the question is already to philosophize and to begin to educate. Such a concern in itself poses the question of the unity of man and the unity of the sciences. It is childishness to say, as some do, that everyone must be allowed to develop freely, that it is authoritarian to

impose a point of view on the student. In that case, why have a university? If the response is "to provide an atmosphere for learning," we come back to our original questions at the second remove. Which atmosphere? Choices and reflection on the reasons for those choices are unavoidable. The university has to stand for something. The practical effects of unwillingness to think positively about the contents of a liberal education are, on the one hand, to ensure that all the vulgarities of the world outside the university will flourish within it, and, on the other, to impose a much harsher and more illiberal necessity on the student—the one given by the imperial and imperious demands of the specialized disciplines unfiltered by unifying thought.

The university now offers no distinctive visage to the young person. He finds a democracy of the disciplines—which are there either because they are autochthonous or because they wandered in recently to perform some job that was demanded of the university. This democracy is really an anarchy, because there are no recognized rules for citizenship and no legitimate titles to rule. In short there is no vision, nor is there a set of competing visions, of what an educated human being is. The question has disappeared, for to pose it would be a threat to the peace. There is no organization of the sciences, no tree of knowledge. Out of chaos

emerges dispiritedness, because it is impossible to make a reasonable choice. Better to give up on liberal education and get on with a specialty in which there is at least a prescribed curriculum and a prospective career. On the way the student can pick up in elective courses a little of whatever is thought to make one cultured. The student gets no intimation that great mysteries might be revealed to him, that new and higher motives of action might be discovered within him, that a different and more human way of life can be harmoniously constructed by what he is going to learn.

Simply, the university is not distinctive. Equality for us seems to culminate in the unwillingness and incapacity to make claims of superiority, particularly in the domains in which such claims have always been made—art, religion and philosophy. When Weber found that he could not choose between certain high opposites—reason vs. revelation, Buddha vs. Jesus—he did not conclude that all things are equally good, that the distinction between high and low disappears. As a matter of fact he intended to revitalize the consideration of these great alternatives in showing the gravity and danger involved in choosing among them; they were to be heightened in contrast to the trivial considerations of modern life that threatened to overgrow and render indistinguishable the profound problems the confronta-

tion with which makes the bow of the soul taut. The serious intellectual life was for him the battleground of the great decisions, all of which are spiritual or “value” choices. One can no longer present this or that particular view of the educated or civilized man as authoritative; therefore one must say that education consists in knowing, really knowing, the small number of such views in their integrity. This distinction between profound and superficial—which takes the place of good and bad, true and false—provided a focus for serious study, but it hardly held out against the naturally relaxed democratic tendency to say, “Oh, what’s the use?” The first university disruptions at Berkeley were explicitly directed against the multiversity smorgasbord and, I must confess, momentarily and partially engaged my sympathies. It may have even been the case that there was some small element of longing for an education in the motivation of those students. But nothing was done to guide or inform their energy, and the result was merely to add multi-life-styles to multidisciplines, the diversity of perversity to the diversity of specialization. What we see so often happening in general happened here too; the insistent demand for greater community ended in greater isolation. Old agreements, old habits, old traditions were not so easily replaced.

Thus, when a student arrives at the university, he finds a bewildering variety of departments

and a bewildering variety of courses. And there is no official guidance, no university-wide agreement, about what he should study. Nor does he usually find readily available examples, either among students or professors, of a unified use of the university's resources. It is easiest simply to make a career choice and go about getting prepared for that career. The programs designed for those having made such a choice render their students immune to charms that might lead them out of the conventionally respectable. The sirens sing sotto voce these days, and the young already have enough wax in their ears to pass them by without danger. These specialties can provide enough courses to take up most of their time for four years in preparation for the inevitable graduate study. With the few remaining courses they can do what they please, taking a bit of this and a bit of that. No public career these days—not doctor nor lawyer nor politician nor journalist nor businessman nor entertainer—has much to do

with humane learning. An education, other than purely professional or technical, can even seem to be an impediment. That is why a countervailing atmosphere in the university would be necessary for the students to gain a taste for intellectual pleasures and learn that they are viable.

The real problem is those students who come hoping to find out what career they want to have, or are simply looking for an adventure with themselves. There are plenty of things for them to do—courses and disciplines enough to spend many a lifetime on. Each department or great division of the university makes a pitch for itself, and each offers a course of study that will make the student an initiate. But how to choose among them? How do they relate to one another? The fact is they do not address one another. They are competing and contradictory, without being aware of it. The problem of the whole is urgently indicated by the very existence of the specialties, but it is never systematically posed.

Putting Convergent Arguments into the Picture

We have concentrated in this chapter and in the book as a whole largely on linked arguments either to illuminate the structure for a whole passage or to provide arguments that support particular premises. But as we mentioned in chapter 8, it is often useful to display a complex passage as having the structure of a convergent argument. In this section we will look at an example in which a conver-

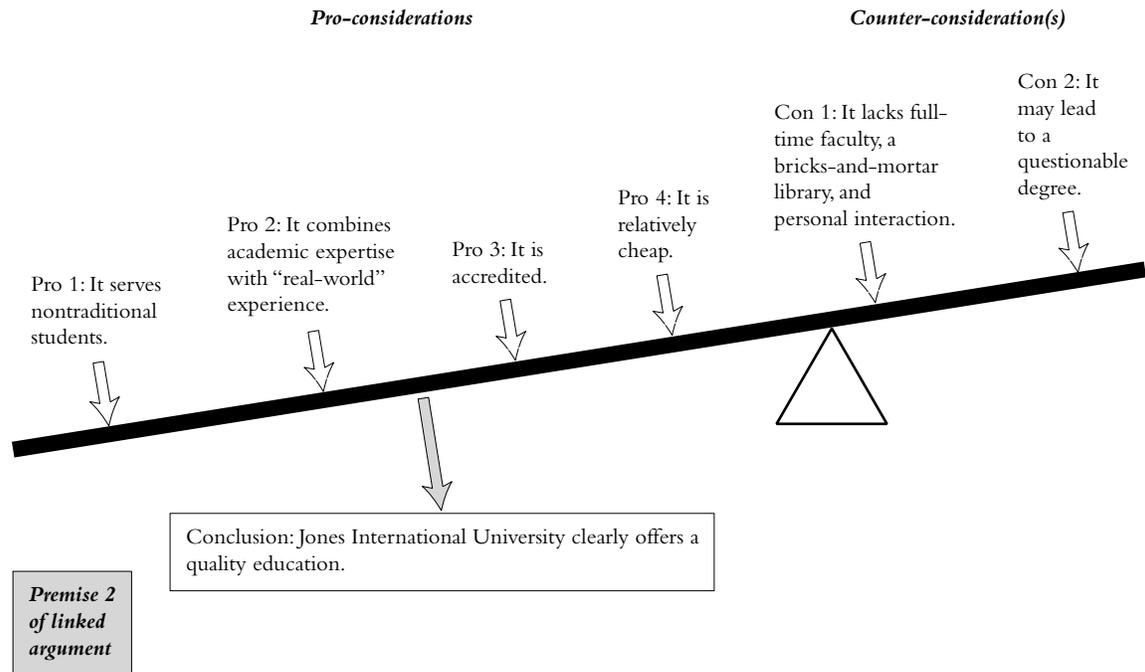
gent argument is used to support a premise for a larger, embracing linked argument. Passage 10.3, which begins on the next page, provides an example.

The headline *Teachers assault online college, put self-interest over education* suggests an embracing linked argument along these lines.

- (implicit)** (1) *If Jones International University clearly offers a quality education, then teachers' harsh criticism of it puts self-interest over education.*
- (supported by a convergent argument)** (2) *Jones International University clearly offers a quality education.*
-
- \therefore *Teacher's harsh criticism of Jones International University puts self-interest over education.*

At the center of this passage is a convergent argument in support of premise 2. It has the following form:

Diagram of Convergent Argument with Counter-Consideration in Passage 10.3



Today's debate: Higher education on the Web
Teachers assault online college,
put self-interest over education¹³

by Grant Jarding

Our View: Why fight learning at home—particularly when it is accredited?

The courses are taught on the Web. Students and faculty meet via e-mail. The library is digital, and the five students who earned degrees last spring got them at a cybergraduation. Now, Jones International University, the first college to function entirely in cyberspace, has acquired one crucial trapping of tradition—a seal of approval from a respected accrediting group.

That prize, awarded this spring after a four-year effort, marks a coming of age not only for Jones but also for students seeking a college education on this new frontier. It opens the way for Jones students to apply for federal aid not available at unaccredited colleges. And provides at least some assurance that a Jones degree will be worth something.

With all of that progress, professors should be cheering. Instead, Jones' accreditation is under fire by members of several national teachers associations who see it an affront to quality.

They focus on what's missing at an e-university: a traditional full-time faculty, a bricks-and-mortar library, personal interaction between professors and students. With students able to get federal loans, crit-

Cybercollege

Jones International University, the first all-cyber college, offers a degree at about half the cost of a traditional college, when living and transportation are factored in.

Yearly costs	Jones International	Four-year public college
Tuition and fees	\$3,908	\$3,356
Books and supplies	\$625	\$681
Estimated Internet service	\$300	0
Room, board, transportation	0	\$4,730
Total	\$4,833	\$8,767

Source: Jones International University; The College Board

ics say, the unwary could end up with nothing more than a questionable degree and huge debts.

Certainly the pioneering cyber-universities are different, but that's just their point. They offer education to students who need to sign on from kitchens or home offices, during pre-dawn hours or breaks at work. Most of the 600 students at Jones, for instance, are over age 28, with full-time jobs.

Working at an individual pace, students talk with faculty and each

13. *USA TODAY*, 5 February 1999.

other in chat rooms or by e-mail. During one recent online forum, experts signed on from various locations and chatted with students in several countries, a more personal education encounter than a lecture to 500.

Jones' courses are developed by professors at well-known schools and taught by separate Jones faculty members, prompting a gripe that such duties shouldn't be divided. But Jones' professors often work in the fields they're teaching, adding real-world zest to the curriculum.

As to the fear that these may be little more than expensive diploma mills, that's a risk at any new college and a concern that accreditation is designed to ally.

Many top universities have joined the online rush, offering single courses or specialty degrees. What makes Jones different is its

all-cyber existence, save for some business offices in Colorado. What makes it threatening to traditional colleges is its ability to offer courses for an accredited bachelor's degree at around \$4,800 a year, about half the tuition, room and board costs at public colleges.

For now, Jones is a fledgling experiment. Most students drop in for a course or two, with only about 100 seeking degrees.

Accreditation may help it thrive.

More important is what accreditation means to prospective students. Experts say cyber-diploma scams are growing fast, with a few e-schools moving offshore and paying foreign governments in an attempt to buy legitimacy.

Accreditation proves a needed yardstick to measure quality. In the new world of virtual colleges, it's good to know that real, live educators are checking them out.

As the summary box indicates, we can criticize a convergent argument by showing that some considerations are doubtful. For example, we could challenge the claim that *Jones International University is relatively cheap* by pointing out that the chart contained in the passage itself shows that most of the difference in costs arise because the four-year college total contains cost of room and board and Jones International does not. But of course students using the cybercollege will still be paying for food and shelter—perhaps even more than college students living on campus.

Criticizing Convergent Arguments (from chapter 8)

1. Adding further considerations
2. Eliminating doubtful considerations
3. Blunting or promoting considerations

Even if we eliminate this pro-consideration, the article cites three other pro elements. The question is then whether the remaining pros outweigh the cons. We can criticize the weighting in the article in two ways: *blunting* the

pro-considerations or promoting the con-considerations. For example, the article stresses that Jones International University is accredited, but a critic could point out that mere accreditation need not assure “quality” in education. The accrediting organizations determine only that an institution has met a minimum standard. This in itself does not give much support to the conclusion that it offers a “quality” education, only that it is not unacceptably bad education. Alternatively, a critic might try to *promote* the counter consideration that the cybercollege, at least at this point in time, offers a degree of questionable value for the students, both in terms of employment or graduate education and that is of central importance. Sustained criticism of either of these types could shift the balance against the conclusion.

Exercise 10.3 Criticizing Linked and Convergent Arguments

1. The following passages contain arguments that could be interpreted as convergent or linked or a hybrid of both. Reconstruct and criticize them.
 - a.

We have now recognized the necessity to the mental well-being of mankind (on which all their other well-being depends) of freedom of opinion, and freedom of the expression of opinion, on four distinct grounds, which we will now briefly recapitulate:

First, if any opinion is compelled to silence, that opinion may, for aught we can certainly know, be true. To deny this is to assume our own infallibility.

Secondly, though the silenced opinion be an error, it may, and very commonly does, contain a portion of truth; and since the general or prevailing opinion on any subject is rarely or never the whole truth, it is only by the collision of adverse opinions that the remainder of the truth has any chance of

being supplied.

Thirdly, even if the received opinion be not only true, but the whole truth; unless it is suffered to be, and actually is, vigorously and earnestly contested, it will, be most of those who received it, be held in the manner of a prejudice, with little comprehension or feeling of its rational grounds. And not only this, but, fourthly, the meaning of the doctrine itself will be in danger of being lost or enfeebled, and deprived of its vital effect on the character and conduct: the dogma becoming a mere formal profession, in efficacious for good, but cumbering the ground and preventing the growth of any real and heart-felt conviction from reason or personal experience.¹⁴

14. John Stuart Mill, *On Liberty* (Cambridge: Hackett Publishing Company, Inc., 1978), 50.

b.

The splitting of the atom and the unraveling of the DNA double helix represent the two premier scientific accomplishments of the twentieth century, the first a tour de force of physics, the second of biology. . . . If the century just passing was the age of physics and nuclear technology its crown jewel, then the century just coming into view will belong to biology and its premier technology will be genetic engineering. . . . While the twenty-first century will be the Age of Biology, the technological application of the knowledge we gain can take a variety of forms. To believe that genetic engineering is the only way to apply our newfound knowledge of biology and the life sciences is limiting and keeps us from entertaining other options which might prove even more effective in addressing the needs and fulfilling the dreams of current and future generations. . . . the question is what kind of biotechnologies will we choose in the coming Biotech Century? Will we use our new insights into the working of plants and animal genomes to create genetically engineered “super crops” and transgenic animals, or new techniques for advancing ecological agri-

culture and more humane animal husbandry practices? Will we use the information we’re collecting on the human genome to alter our genetic makeup or to pursue new sophisticated health prevention practices? . . . Since it is impossible to be clairvoyant and know all of the potential ramifications and consequences that might accompany the many new technologies we might want to introduce, we should attempt to minimize regrets and keep open as many options as possible for those who come after us—including our fellow creatures. This means that when choosing among alternative technological applications, we are best served by taking the less radical, more conservative approach—the one least likely to create disruptions and externalities. “First, do no harm” is a well established and long revered principle in medicine. . . . Which of the two competing visions of biotechnology—genetic engineering or ecological practices and preventive health—is more radical and adventurous and most likely to cause disequilibrium and which is the more conservative approach and least likely to cause unanticipated harm down the line? The answer, I believe is obvious.¹⁵

15. Jeremy Rifkin, *The Biotech Century: Harnessing the Gene and Remaking the World* (New York: Tarcher/Putnam, 1998), 231–234.

c.

The Price of This Beauty Is Too High¹⁶

A Web site auctioning the eggs of fashion models promotes an unhealthy idea. It encourages parents to fixate on their child's physical appearance.

Ron Harris, a fashion photographer, organized the auction. Bids start at \$15,000 and can go as high as \$150,000. Harris characterizes the sale of models' eggs as "Darwin at his very best." American society is obsessed with celebrity beauty, Harris says in trying to justify the sale. At the Web site, he writes: "If you could increase the chance of reproducing beautiful children, and thus giving them an advantage in society, would you?"

He also states: "It is not my intention to suggest we make a super society of only beautiful people. This site simply mirrors our current society in that beauty always goes to the highest bidder.

The commercial aspect of Harris' enterprise isn't so unusual. Sperm has been available essentially as a commodity for years now. The most notorious example is the genius sperm bank which included donations from William Shockley, a Nobel Prize-winning scientist. Harris says,

in fact, that he plans an online auction of sperm in the future.

It's also true that women who donate their eggs deserve monetary compensation for inconvenience and discomfort they experience as a result of hormone treatments and physical removal of the eggs. A payment in range of \$2,500 to \$5,000 is most common.

The last thing American society needs, however, is the shallow beauty worship Harris promotes. Harris is encouraging parents to engineer a desired appearance for their child—hardly a healthy philosophy around which to build a family. There's no guarantee, after all, that the children produced through Harris' project will meet the parent's expected standards of beauty. If the parents wind up with a boy or girl they considered an ugly duckling, the child could be weighed down by horrible burden.

Harris' beauty-obsessed rhetoric would have the world imagine that people with less-than-perfect features are somehow inferior. But modest physical attributes needn't stop individuals from achieving greatness. Consider the great good accomplished by

16. Editorial, *Omaha World-Herald*, 27 October 1999. Reprinted with permission.

Abraham Lincoln, whose physical appearance was such that his political foes derided him as an “ape.” Albert Einstein had puffy hair, yet he turned modern science inside-out with his revolutionary thinking. Golda Meir may not have been a beauty queen, but she proved to be a strong leader of Israel.

Parents often discover that their child falls short in one

regard or another, or that their child has developed interests far different from what the parents had expected—and yet the parents’ love remains undiminished.

Harris urges parents to look on their children as physical objects. Well-adjusted parents, however, regard their offspring as individuals—precious yet imperfect individuals. And they love them for what they are.

d.

The Fight’s Not Over¹⁷

“The so-called zero-tolerance policy is without mercy and without sensitivity,” the Reverend Jesse Jackson declared last week, protesting the Decatur, Illinois, school board’s decision to expel six students for inciting a melee at a football game. Jackson is not alone in his view. The American Civil Liberties Union, civil rights leaders, and others on the left also want zero-tolerance laws abolished. Illinois Representative Bobby Rush is calling for congressional hearings on their legality; he’s even asked U.S. Attorney General Janet Reno for an investigation.

And it’s true that zero-tolerance laws are sometimes flawed in design or execution.

It’s also true that they effectively combat perhaps the greatest crisis in public education today: the crisis of violence. To call them inherently racist is to imply that a strictly disciplined school, a school where students learn without fear, serves only the interests of whites. And it is that proposition, it seems to us, that represents racism of the most debilitating kind.

In fact, zero tolerance has a liberal pedigree; it was originally the brainchild of the late Albert Shanker’s American Federation of Teachers (AFT). In Cincinnati in 1990, the AFT discovered that local teachers were spending enormous amounts of time dealing with drugs, guns, assaults, and brawls.

17. Editorial, *The New Republic*, 6 December 1999. Reprinted by permission of The New Republic, Inc.

“In basically half the classrooms in the city, the teachers couldn’t teach effectively,” said Tom Mooney, vice president of the union. In 1991, Cincinnati responded but establishing automatic penalties for students who commit violent acts or are caught with drugs, alcohol, or weapons. Texas followed suit two years later. In 1994, Congress required states to pass zero-tolerance laws or forfeit federal money.

Since then, counties and cities have extended the list of zero-tolerance violations. And while these statutes have led to occasional excesses—such as the eighth-grade honors student in Georgia suspended for bringing his French teacher a bottle of vintage wine as a Christmas present—in most cases the laws are working. In Texas, a survey found that from 1993 to 1998, the percentage of teachers who viewed assaults on students as a “significant problem” dropped from 53 to 31. In Baltimore, where schools had been rife with violence, an aggressive zero-tolerance law adopted last spring has produced a 30 percent drop in student assaults on other students and a 50 percent decrease in student assaults on teachers and other staff.

But, for the critics, the evidence that zero tolerance makes schools safer is beside the point. The victims of school violence are not the ones over whom they lose

sleep. What, they ask, do such laws do for the students who get suspended or expelled? Ruth Zweifler, executive director of the Michigan Student Advocacy Center, says that her state’s zero-tolerance law “erodes our commitment to public education. Underneath it is the message that we no longer believe we need to educate all children.” No; the message is that we will not, in the name of educating all children, force the vast majority to live under conditions that make education impossible. Shanker, a holdover from an age of grittier, less therapeutic liberalism, understood this. “Some people,” he said in 1995, “think of schools as sort of custodial institutions. . . . Or they think the school’s job is socialization. . . . The central role of the schools . . . is academic achievement. We have to be tough because basically we are defending the right of children to an education.”

Behind the other objections, of course, lies one central one: that zero-tolerance laws are racist. The NAACP cites statistics showing that black students are more likely than white students to be suspended or expelled. To be sure, when a particular school singles out blacks and coddles whites, school boards should conduct a careful review. But, in most cases, the racial disparity in expulsions is smaller than the racial disparity in arrests for

violent crimes. That African American students may be statistically more likely than other students to commit violent acts is a grave problem that demands serious government attention to the conditions under which African American children grow up. But to use that disparity as a reason to tolerate acts of violence is to condemn innocent children, many of them black, to regimes of terror. To call such a policy compassionate is a profound linguistic and moral distortion.

Not so long ago, it was common place for liberals to sanction such distortions.

Thankfully, and with great effort (some of it expended on these pages), liberalism has largely rid itself of its propensity to equate moral decency with the indulgence of immoral behavior. Liberals, by and large, no longer assume that compassion means light sentences for criminals or allowing the able-bodied to claim government money absent a day's work. As Decatur shows, however, the battle is not completely won. Permissive liberalism, like all dying creeds, has its last bastion. How unfortunate that it is the American school.

Application to Writing

The six-step procedure can be adapted to assist in the writing of a critical essay. The format we recommend can be used to present a critical assessment of almost any discourse that contains an argument—a speech, essay, editorial, letter to the editor, or even a portion of a conversation.

It is often effective to arrange a critical essay into four parts: an introduction, a reconstruction of the argument to be criticized, a critical assessment of the argument, and a conclusion. Although this structure is not a formula to follow blindly, it is a model that can be adapted to a variety of writing tasks.

The *introduction* should convey the importance of the critical discussion to follow. A good way of doing this is to relate the particular essay, speech, or whatever to some broader issue on which the argument at hand has some bearing. One way of unifying your essay is to move in the introduction from a broad topic of concern to the particular issue at hand, and then to move back to the broad area of concern in your conclusion.

The *reconstruction of the argument* should begin with a paraphrase (or quotation) conveying the argument in unreconstructed form. This paraphrase should be done as succinctly as possible to avoid losing the flow of the essay at this point. Then you should introduce any necessary implicit statements and give the

complete argument. For purposes of the essay assigned at the end of this section, you may use technical terms such as *standard form* or *implicit premise*. But in general, suit your terminology to the audience for whom you are writing.

The *critical assessment* should begin with a statement of whether the conclusion of the argument follows from the premises. If it doesn't, demonstrate this to the reader as clearly as possible. (Refer to chapter 4 for tips on showing invalidity.) If the argument can be made valid by adding more premises, discuss this in either the reconstruction or the critical portion. Next, discuss whether the premises are acceptable. Remember to criticize specific premises, one at a time. If you decide that the premises are acceptable, you should still try to raise criticisms you think might be made by an intelligent reader and reply to these criticisms on behalf of the argument. If a vague or ambiguous term occurs in more than one place in the argument, use the techniques described in chapter 7 to explain how different interpretations of the meaning of this term will affect the argument.

The conclusion should restate briefly your final assessment of the argument. If you reject the argument, you could attempt to explain here why the arguer might have been persuaded by it even though it is a bad argument. You could also return in your conclusion to the broader concerns you raised in your introduction—the importance of the issue, what position now seems reasonable in regard to it, and so forth.

To get a better idea of how this format can be used, read the following excerpt from a speech on the subject of crime and its causes and the sample critical essay that follows it. The sample essay criticizes an argument from the speech.

OUR PERMISSIVE SYSTEM OF CRIMINAL JUSTICE

Violence is no longer the manufactured melodrama of the theatrical arts. It has become part of our everyday life—gruesome tragedies, perpetrated against our next-door neighbor, our family and our friends, personally touching each of us. Mathematically, one out of every five families will have a major crime committed against some member of that family.

Crime is the product of flesh and blood individuals—individuals who choose to satisfy their carnal, fiscal and physical desires by denying the rights of others . . . individuals who willfully choose to assault the person or take over the property of other human beings.

Aided, I might add, by accomplices. Accomplices who have contributed to the rise in crime. These friends of the felon are the professional apologists, the excuse makers, the contemporary environmentalists, the behaviorists . . . those people who are more interested in bleeding hearts than bleeding victims. They are the ones who blame everybody and everything, except the responsible individual.

Advocates of this philosophy reside in the present Department of Corrections, including its Division of Parole, and also within the probation departments of our counties. It is taught in our universities and colleges as modern penology and

promoted as fact, not theory. This social philosophy is especially attractive to those who dislike the competition of the American way of life—the kind of life where a man is responsible for his own actions. The concept that man controls his own destiny and is accountable is anathema to the Socialist mind.

One point that apologists rarely explain away is why, for every criminal who comes from a slum area, are there thousands from the same area who hold jobs? Why, for every under-educated criminal, are there thousands of successful individuals who made it with less education? Why, for every unemployed criminal, are there thousands who never had to resort to crime as a means of survival?

I was raised in a factory town on the south side of Chicago, a tough neighborhood, what some would call an economically deprived area by today's standards. I dropped out of high school after only two years and joined the Navy to fight for my country in the Second World War. I also came from a broken home. So, I was a high school drop-out, from an economically deprived area and a broken home. I must assume that all those with the same background will grow up to be senators.

It isn't society nor environment that commits crimes. Criminals commit crimes . . . individuals. Criminal individuals commit crimes.¹⁸

IS THE ENVIRONMENT THE CAUSE OF CRIME?

In his speech "Our Permissive System of Criminal Justice," Senator H. L. Richardson expresses his anger toward those who claim that the environment, rather than the individual criminal, is responsible for crime. He believes not only that this theory is false, but also that people who propose it have aided criminals and helped crime to flourish. It can be questioned whether this theory has really contributed to a rise in crime, but I will limit this essay to the question of whether Richardson has given us grounds for believing that the environment is not the cause of crime.

Richardson's argument is essentially that not everyone from a "slum area" is a criminal, so it is not the slum area that is the cause of crime. This argument contains the implicit premise that if slum areas did cause crime, then everyone from a slum area would be a criminal. If we add this premise, the argument can be stated as follows:

18. Excerpts from a speech by California Senator H. L. Richardson, "Time to Reaffirm Basic Truths About Crime," *Human Events*, 31 August 1974, 18–19. Reprinted with permission of the publisher.

1. If slum areas caused crime, then everyone from a slum area would be a criminal.
 2. Not everyone from a slum area is a criminal.
- ∴ Slum areas do not cause crime.

Supposedly, Richardson would make this same argument about other environments besides slum areas that might be thought to cause crime. Otherwise, he could not come to his general conclusion that the environment does not cause crime. If we put his argument in a more general way, it would look like this:

1. Given any environment, if that environment caused crime, then everyone from that environment would be a criminal.
 2. Given any environment, not everyone from that environment is a criminal.
- ∴ No environment causes crime.

Both of these arguments are valid, but it is doubtful that all their premises are true. Consider premise 1 of either argument—that if slum areas (or some other environment) caused crime, then everyone from that area would be a criminal. There is a sense of cause in which we would say that one thing caused another even if it did not *always* produce this effect. For example, we say that drunken driving causes accidents even though people sometimes drive while drunk without having an accident. Similarly, those who say that slum areas cause crime might mean that these areas tend to produce criminals, and are therefore at least partially responsible for crime. It would not follow that everyone from a slum area must be a criminal.

As was stated earlier, Richardson must make his argument a general one about any environment if he wishes to come to the general conclusion that no environment causes crime. The second premise of this general argument is: Given any environment, not everyone from that environment is a criminal. It is not at all obvious that this premise is true. Suppose we take a poor neighborhood as an example of an environment. Many people from this environment

will not be criminals. But suppose we narrow down the environment further by considering only the homes of male teenagers who have friends who commit crimes regularly. Now a larger percentage of the people from this environment will be criminals like their friends. And we could continue to narrow down the environment to include only teenagers who had been treated brutally as young children, and so on. It is at least possible that we would end up describing an environment that always produced criminals.

The issue of whether the environment is the cause of crime is an important one. The attitude we take regarding it affects the course of action we would recommend in combating crime. There may be grounds, other than those that Richardson provides, for believing that the environment is not responsible for crime. It is also possible, as our first criticism suggests, that Richardson has presented us (and himself) with a false dilemma in assuming that either the environment is wholly responsible or the individual is wholly responsible. Perhaps it was his eagerness not to let individual criminals "off the hook" that prompted him to argue that the environment has no causal role in producing criminals. This essay has shown that whatever his motive for advancing it, Richardson has not given us sufficient reason to accept his conclusion.

Exercise 10.4 Writing a Critical Essay

Using the recommended format, write an essay criticizing one of the following selections (or another appropriate editorial or essay). A number of arguments are presented here, but most of the premises and conclusions are unstated or not clearly stated. Read the editorial carefully several times before you attempt to reconstruct an argument from it.

1.

Legal Drugs Unlikely to Foster Nation of Zombies¹⁹

by Stephen Chapman

There is good news and bad news about cocaine. The bad news is that captive monkeys given unlimited access to the stuff will spurn everything else to get high, until they die of starvation.

The good news is you're not a monkey. In a society of lower primates, which are incapable of prudent restraint in the use of mind-altering substances, legalizing cocaine and other illicit drugs would probably be a bad idea. When it comes to humans, the issue looks a bit different.

We know that a 20-year government effort to stamp out illicit drug use has been a colossal failure. We know it has swallowed vast amounts of money, prison space and police time. We know it has spawned epidemics of violent crime in the inner city, much as Prohibition sparked gangland wars.

What we don't know is what would happen if drugs were legal. Would we become a nation of zombies—a "citizenry that is perpetually in a drug-induced haze," as drug czar William Bennett predicts?

Bennett says we don't have to try legalization to know how horrible it would be: "We have just undergone a kind of cruel national experiment in

which drugs became cheap and widely available: That experiment is called the crack epidemic."

But what keeps clean-living citizens like Bennett from becoming crackheads? Is it the fear of jail? If crack were sold at a legal outlet around the corner, would he pick up a case? Would Miss America?

Would you? Not likely. A poll sponsored by the Drug Policy Foundation asked Americans if they would try illicit drugs if they were legal. Of those who had never tried marijuana before, only 4.2 percent of those questioned said they would try it. Fewer than 1 percent of those who had never used cocaine said they'd take it out for a test drive.

That 1 percent can be mightily grateful to Bill Bennett for deterring them. The other 99 percent gain essentially nothing from the drug war. In fact, if they live in the inner city, the drug war puts them in danger every day by reserving the business for violent people with lots of guns and ammo.

The poll confirms the few experiments with drug tolerance. After the Netherlands practically legalized marijuana in 1976, its use declined. In the various U.S. states that decriminalized marijuana in the 1970s, pot grew less popular.

19. Copyright 1990 by Stephen Chapman. Reprinted by permission.

Even if everyone were tempted to sample the newly legal drugs, very few would imitate monkeys. The government's National Institute on Drug Abuse says 22 million Americans have used cocaine at least once. Of these, 8.2 million have used it in the last year. Just 862,000 use it every week. That doesn't sound like a ferociously addictive drug.

When it comes to crack, a smokable form of cocaine which is allegedly more tenacious in its hold, no one knows exactly how many addicts there are. But NIDA says fewer than one in every five of the 2.5 million people who have tried it are regular users, blasting off at least once a month. Bennett's "epidemic" has afflicted no more than one American in every 500.

Crack is supposed to be uniquely destructive because of the severe damage it does to fetuses. Propagandists for the drug war claim that 375,000 "crack babies" are born every year, requiring billions of dollars in extra medical care. But the government says there are fewer than half a million people who smoke crack regularly. Apparently we're supposed to believe that four out of every five of them give birth each year.

In fact, despite being cheap and widely available, crack hasn't produced mass addiction. Why not?

The best explanation comes from Dartmouth neuroscientist Michael Gazzaniga in a recent interview in *National Review* magazine. Only a small portion of the population is inclined to abuse drugs (including alcohol), and these people will systematically wreck themselves with whatever is at hand, he says. But those who aren't prone to abuse won't become addicts regardless of what drugs are legally available.

"In our culture alone," said Gazzaniga, "70 percent to 80 percent of us use alcohol, and the abuse rate is now estimated at 5 percent to 6 percent. We see at work here a major feature of the human response to drug availability, namely, the inclination to moderation." People allowed to make free choices generally make sound ones.

But a recognition that humans can use freedom wisely is not one of the distinguishing traits of those behind the drug war who can imagine all sorts of costs from legalization but can't see the real ones from prohibition. If the citizenry ever emerges from the haze produced by the drug war, it may realize that the greatest harms are the ones we've already got.

2.

Drug Legalization: Asking for Trouble²⁰

by Robert L. DuPont and Ronald L. Goldfarb

The world's most reasonable-sounding but dumb idea is the one that advocates solving the country's drug problem by legalizing drugs.

Its fundamental flaw is the premise that the drug problem is not one of drug use but of drug prohibition. The reality is otherwise: drug use is the core drug problem. Legalization cures the problem of prohibition at the cost of more drug use.

Legalization advocates emphasize the high cost of maintaining the prohibition of such drugs as marijuana, cocaine, PCP and heroin. The costs of prohibition are high and rising. But the debates about legalization generally overlook the costs attributed to drug use itself in the lost potential and the lost lives. A few people die now in America because they cannot get drugs cheaply. Far more die and suffer because they can, despite prohibition. Fourteen million Americans now pay \$100 billion a year for illicit drugs. How many more Americans would consume how much more if drug prices were cut by 90 percent or more as the legalization advocates propose?

The litmus test of any legalization plan is what to do with

dangerous drugs such as crack and PCP. Crack, or smokable cocaine, is the only drug problem that is getting worse in the United States. Legalizing limited use of small quantities of marijuana or giving IV drug users sterile needles will not dent the crack problem.

Watch what happens when you ask advocates of legalization how their scheme would work: they turn silent, or they talk about how bad prohibition is. Which drugs would be legalized, in what forms, at what potencies and for whom? Imagine your junior high school- or college-age son or daughter, or your neighbor, dropping into the local, government-run package store. "A packet of crack, please, some PCP for my date and a little heroin for the weekend."

"Yes, sir. Will that be cash or charge?"

Some legalizers have talked about doctors writing prescriptions for legalized cocaine, heroin or other drugs. This idea is ridiculous. Doctors don't and shouldn't write prescriptions for chemical parties.

Drug abuse treatment, both public and private, is expensive and a growth industry because of the national drug epidemic,

20. © *The Washington Post*, 1990. Robert L. DuPont, a psychiatrist, has directed the National Institute on Drug Abuse. Ronald L. Goldfarb is a former Justice Department prosecutor.

not because of drug prohibition. Using drugs such as methadone in the treatment of heroin addiction is a far cry from legalization, because methadone is only available in tightly controlled settings and only for therapeutic purposes. This fits with the long-standing U.S. approach, which allows dependence-producing substances to be used in medical practice to treat diseases but not outside medical settings and not for recreational purposes.

Advocates of legalization point to the “failure” of Prohibition. But during Prohibition—of manufacture, not use, of alcohol—consumption did decline drastically, and alcohol-related arrests dropped by half. Thus, laws do cut drug consumption, prevent new users and decrease casualties. Correctly or not, society seems to have made a costly, special deal with recreational drinking.

The most recent National Institute on Drug Abuse survey of Americans over the age of 12 showed that in 1988 there were 106 million alcohol users, 57 million cigarette smokers, but only 12 million users of marijuana and 3 million users of cocaine. All four numbers were down from 1985 levels. Alcohol use dropped 6 percent, cigarette use dropped 5 percent, marijuana use dropped 33 percent, and cocaine use dropped 50 percent. It is not easy to look at these numbers and conclude that prohibition of illegal drugs is not working to reduce use or that we are losing the war on drugs.

The best way to cut the drug market is to decrease society’s tolerance for illicit drug use. That means creating painful consequences for illicit drug use to help the non-user stay clean. There need to be more and better programs to help the current drug users get clean. This country needs less debate on the legalization of drugs and more discussion about how best to deter drug users and provide drug treatment.

Law enforcement aimed at the supply of drugs is an important but small part of the solution. We do not believe that the drug problem will be solved by criminal sanction. No social problems are. We agree with the Harlem barbershop owner who said the idea that jails stop drugs is “like saying cemeteries stop death.” Along with deterring use and punishing sales, we also must learn more about causes and prevention of drug use.

The battle to end the drug abuse epidemic is likely to be won or lost in families and neighborhoods, in workplaces and schools. Do we, individually and collectively, tolerate or do we reject illicit drug use? The debate about legalization simply delays the important commitment to reject the use of illicit drugs. It also demoralizes the people most committed to ending the drug problem by raising questions about national support for their vital efforts.

Debating legalization is a dangerous delusion. Why now,

when only a few months ago the federal government released new statistics that showed a 37 percent decline in the regular use of illicit drugs in America, a fall that included every region in the nation, all races, both sexes and all social classes? With that sort of progress in the war on drugs, this is a particularly odd time to give up a battle.

The problem with drugs is drug use. Every proposed reform that makes drugs more available or acceptable is going to increase drug use. It would also increase the suffering and unhappiness that flows from drug use for both users and non-users of drugs.

Exercise 10.5 **Putting It Together in the Classroom:
“Fishbowl” Discussions and Critical Exchanges**

1. “Fishbowl” Discussions: Modeling Critical Reasoning

This is a group exercise for the classroom. Its objective is to provide practice for using critical reasoning techniques in everyday discussions.

First, generate a short list of topics that students have actually been discussing recently with their peers, outside of class. From this list, pick a topic of interest to the class. Next, a few students who have discussed this issue should describe how the discussions have gone, recounting as much detail as possible.

At this point, arrange the chairs in the classroom so that all chairs face the middle of the room, with two chairs in the center, facing each other. This is where the students in the “fishbowl” will sit. Two students should be selected to act out one of the discussions that have been described.

The next step is for those who have observed the discussion to comment on to what extent the dialogue represented good critical reasoning. Students who have ideas about how the dialogue might have been improved can now take the places of those in the fishbowl, with each participant initially taking the position of the person he or she has replaced. This process of replacing participants can be repeated.

The exercise can be concluded with comments from the observers concerning which strategies appeared to be most helpful in facilitating the discussion.

2. Participating in a Critical Exchange

A good exercise for displaying your reasoning skills orally, rather than in writing, is a structured, critical exchange on an important issue such as whether a

woman should have the right to have an abortion, whether capital punishment is ever justified, whether casual sexual relationships are worth pursuing, whether a woman should take her husband's name when she marries, or whether drugs should be legalized.

A structured, critical exchange is similar to a formal debate, except for a few crucial features. Most important, the object is not to win but to join with those participating in the exchange to determine what position is most reasonable to hold regarding the issue in question. To build this goal into the structure of the exchange, a period of time should be allowed, after the participants take an advocacy role on one side of the issue or the other, for each person to explain where she or he really stands on the issue, having considered all the arguments and criticisms raised.

In addition, the arguments presented should be developed cooperatively in advance of the presentation of the exchange, so that the participants representing each side can help make all the arguments (including those they will be criticizing) as strong and worthy of consideration as possible.

Here is a format for a critical exchange involving four people that can be used in an hour-long class period and that allows time for questions and comments from the audience. The format incorporates the features mentioned above, which are aimed at minimizing competition and maximizing insight.

Preparation for the Exchange

1. Meet as a four-person team to decide on a topic. (You can use any of those listed above or another of interest to the team.)
2. Decide which two members will take the affirmative side and which two the negative side in presenting arguments on the issue. It is not necessary to take the side you feel initially inclined to support. Sometimes it is a better learning experience to argue for the other side.
3. After some brainstorming and background reading, the team should develop two arguments on the affirmative side and two arguments on the negative side. The arguments should be briefly stated and tightly structured, so that they can be written on the chalkboard or on a handout sheet for the audience.
4. As a team, discuss possible criticisms of the arguments. Obvious flaws in the arguments can be spotted at this time, and the arguments can be rewritten.

Presentation of the Exchange

1. *Affirmative team.* Each member takes about three minutes to present one argument in favor of the proposition being discussed. (An example of an argument might be: "A woman has the right to do whatever she wants

with her body. A fetus is a part of a pregnant woman's body. Therefore a woman has the right to have an abortion if she wants.")

Explain what is meant by each premise and why it is reasonable to believe that premise.

2. *Negative team.* Each member takes about three minutes to criticize the arguments that have been presented, applying the techniques of criticism learned in class.
3. *Negative team.* Each member presents an argument opposing the proposition in question (three minutes each).
4. *Affirmative team.* Each member criticizes the negative team's arguments (three minutes each).
5. *Concluding presentations.* Having considered all arguments and criticisms, each member states where she or he really stands on the issue. Replies to criticisms and additional reasons can be brought up at this time.
6. *Class comments.* Class members who have been listening to the exchange are allowed to make comments or address questions to the participants.

