Newspaper editorials and the letters to the editor they inspire are crucial factors in the development of public policy. Although many people today get their news from television, networks and television stations rarely take editorial positions on issues or offer arguments to support a particular view. Radio talk shows offer many strongly held opinions but little reasoning or evidence. The editorial boards of major newspapers take stands on issues and present arguments and evidence. They also print editorials and opinion pieces by other writers and provide a forum for citizens to respond. If students are to learn to participate in a democratic society by forming and supporting their own opinions and evaluating the opinions of others, the op-ed pages of the newspaper are an essential resource.

This assignment sequence uses three texts. “Three Ways to Persuade” presents the Aristotelian concepts of ethos, logos, and pathos in an accessible way so your students can understand and use these concepts in their own writing and rhetorical analysis. This text is used to prepare your students to analyze “A Change of Heart About Animals,” which presents summaries of a number of scientific studies of animal behavior and argues that science is showing us that animals are far more like humans than we used to think. The article presents scientific research, representing logos, in such a way that our emotions are engaged and our ethics challenged. The letters in response to the Rifkin article take opposing views and offer opportunities for further discussion.

Note: The activities for students provided in the Student Version for this module are copied here in the Teacher Version for your convenience. The shaded areas include the actual activities the students will see. The use of italics in the shaded areas generally indicates possible student responses and may be interspersed with notes to the teacher that are not shaded. If there are notes to the teacher within the shaded areas, they are indicated by italics and parentheses.
Reading Rhetorically

Prereading

Introducing Key Concepts

This module focuses on ways to persuade. Ask your students to define the term “persuade.” The first option below allows the students to be the experts as they share synonyms they know. You will then add more mature synonyms and antonyms. The second option (below) asks your students to answer questions about the concept, after which they share their answers with the whole class.

Option 1: First ask the students to come up with as many synonyms for the words as they can; write them on the white board. Add some more synonyms to the list. Your students should keep a log of these terms in their notebooks. Now ask the students to come up with antonyms for the words.

Example: persuade

<table>
<thead>
<tr>
<th>Students’ Synonyms</th>
<th>Teacher’s Synonyms</th>
<th>Antonyms</th>
</tr>
</thead>
<tbody>
<tr>
<td>convince</td>
<td>sway</td>
<td>dissuade</td>
</tr>
<tr>
<td>win over</td>
<td>affect</td>
<td>prevent</td>
</tr>
<tr>
<td>brainwash</td>
<td>convert</td>
<td>suppress</td>
</tr>
<tr>
<td>sweet-talk</td>
<td>induce</td>
<td>hinder</td>
</tr>
</tbody>
</table>

Option 2: “What Am I?” sheet:

Term: persuade

I am not . . . But I am . . .
I don't have . . . But I do have . . .
I can't . . . But I can . . .
You will not find me . . . But you will find me . . .

Getting Ready to Read

Ask the students to read “Three Ways to Persuade,” and then engage them in Activity 1. This activity is designed to achieve the following results:

• Help your students make a connection between their own personal world and the world of the text (i.e., Aristotle’s concepts).
• Help activate your students’ prior knowledge and experiences relevant to the issues contained in the text (i.e., methods of persuasion).
• Help your students share knowledge and vocabulary relevant to understanding the text.
• Help your students prepare to use the concepts presented in this text to analyze another text.
Activity 1: Getting Ready to Read

This activity focuses on ways to persuade. Your teacher will give you an opportunity to define the term “persuade.” Then read “Three Ways to Persuade” by John R. Edlund. When you finish the article, engage in the option assigned by your teacher.

**Option 1:** Think of something you tried to persuade a parent, teacher, or friend to do or believe. It might have been to buy or pay for something, to change a due date or a grade, to change a rule or decision, to go somewhere, or some other issue. What kinds of arguments did you use? Did you use logic? Did you use evidence to support your request? Did you try to present your own character in a way that would make your case more believable? Did you try to engage the emotions of your audience? Write a short description of your efforts to persuade your audience in this case.

**Sample student response 1:** I remember when I argued to my mom about not wanting to wear the school dress code any more. My first point to my mom was that everyone else was getting the waiver signed so why couldn’t I? That didn’t have much logic behind it because I couldn’t really back it up. My mom came back with the old “If your friends all jumped off a bridge, would you do it too?” That kind of shut me up, but I had another argument. I told her that I wanted the ability to express myself by wearing what I wanted to wear. The logic behind this was that I knew if I sounded like I really knew what I was talking about, she would be impressed with me and sign the waiver. Then, to push her over the edge, I used her emotions against her by giving her the puppy dog eyes that she would not be able to resist. With the use of logic and emotions I was able to convince my mom to sign the waiver.

**Sample student response 2:** It was a Saturday night and I was planning to go out with my friends to a party. I got ready and I was headed out the door. Suddenly my mom asked me where I was going. I told her I was going to a party. She asked, “With whose permission?” I forgot to ask her permission. She refused to let me go out. I started to argue that I had the right to go out. I believe I used ethos, because I told her my values. I said I deserve to go out because during the week all I do is work and go to school. I also told her I was tired of being in the house and doing nothing. I told her to put herself in my shoes. She saw my point of view, but still had a little doubt. I decided to use rhetorical reasoning: logos. Everyone who works goes out; Danny works; Danny gets to go out. She finally decided to let me go. I persuaded her to let me go, and I succeeded. I made her see my point of view, and what I personally go through.

**Option 2:** In a small group, discuss the strategies your friends use when they are trying to borrow a car, go to a concert, buy new clothes, or achieve some other desired result. Pick a situation and write a short skit showing those persuasive strategies in action. Each skit should employ logical, emotional, and ethical persuasion. Rehearse and perform your skit for the class.

After you have completed the option assigned, discuss the following questions:

1. Do people use Aristotle’s concepts of ethos, logos, and pathos every day, without thinking about it?
2. Do these concepts apply to politics and advertising as well as person-to-person persuasion?
3. Are there other means of persuasion that Aristotle did not discuss?

A Text-Based Grammar for Expository Reading and Writing
If you are using A Text-Based Grammar for Expository Reading and Writing with your class, begin Chapter 3 (Noun Forms and Subject-Verb Agreement) now. Do Exercise 1 (Guided Composition).

Surveying the Text
Spot reading gives students an overview of what the text is about and how it is put together. It helps them create a framework for making predictions and forming questions to guide their reading. As your students look at the text of “A Change of Heart About Animals,” by Jeremy Rifkin, ask them to complete Activity 2.

Activity 2: Surveying the Text
Look at the article “A Change of Heart About Animals” by Jeremy Rifkin. Think about the following questions:
1. Where and when was this article published?
2. Who wrote the article? Do you know anything about this writer? (Hint: Look at the end of the article.) How could you find out more?
3. What is the subtitle of the article? What does that tell you about what the article might say?
4. The article was published on the editorial page. What does that mean?

Now ask your students to do an Internet search on the author and share their findings with the class. For example, Rifkin’s site says, “Jeremy Rifkin, president of the Foundation on Economic Trends, is the author of 16 books on the impact of scientific and technological changes on the economy, the workforce, society, and the environment. His books have been translated into more than 20 languages and are used in hundreds of universities around the world” (About Jeremy Rifkin). However, another site says, “Critics of Rifkin have labeled him ‘anti-science’ and a ‘professional activist’” (Dossier: Jeremy Rifkin: Environmental Scientist). Rifkin is clearly a controversial figure.

Making Predictions and Asking Questions

As the students look at the text of “A Change of Heart About Animals,” ask them to complete Activity 3.

**Activity 3: Making Predictions and Asking Questions**

As you look at the text of “A Change of Heart About Animals,” answer and then discuss the following questions:

1. **What does it mean to have “a change of heart”?**
   
   *(A very literal-minded student might think this means a heart transplant. Most will know that in this case, “heart” stands in for “feelings.”)*

2. **What are some common ideas or feelings people have about animals?**
   
   *(The students will probably talk about a range of ideas, including love and companionship, food, work animals, and leather and fur for clothing.)*

3. **What kinds of things might cause someone to change his or her ideas or feelings about animals?**
   
   *(The students might talk about being scared by a dog as a child or other personal experiences, such as visiting a zoo.)*

4. **What are some groups of people who have strong feelings about how animals are treated? What do you know about them? What do they usually believe?**
   
   *(The students might talk about such organizations as the Humane Society or People for the Ethical Treatment of Animals.)*

5. **What is a vegetarian or a vegan? Do you know anyone who is a vegetarian? What does he or she think about eating animals?**
   
   *(Most students are familiar with these practices.)*

6. **What do you know about the author? Do you think he might be a vegetarian?**
   
   *(The students are unlikely to know about Jeremy Rifkin, but the prediction that he might be a vegan or vegetarian is logical.)*

7. **The first paragraph mentions breakthroughs in biotechnology and nanotechnology. Do you think this article is about those things? Why or why not?**
   
   *(It probably isn’t, because the clause about biotechnology and nanotechnology begins with “though” and the sentence finishes with another “quieter story.”)*

8. **This article appeared in a newspaper. What does that mean about the audience? Is this an article for scientists?**
   
   *Newspapers are for the general public, not specialists or scientists.*

9. **What do you think is the purpose of this article? Does the writer want readers to change their minds about something?**
   
   *The title implies a change in thinking or feeling of some kind.*
10. Will the article be negative or positive in relation to the topic? Why?
   An anti-animal article is a possibility, but it seems unlikely.

11. What argument about the topic might it present? What makes you think so?
   “Animals are smarter than we think,” or “Animals have rights too.”

12. Turn the title into a question (or questions) to answer after you have read the text.
   Why should we change our hearts about animals? What should we feel about animals?

Introducing Key Vocabulary

When you assign “A Change of Heart About Animals,” a good first step will be to list a few important words and phrases, and then ask your students to guess the meanings of those words and phrases from the context. “Humane,” “inhumane,” “cognitive,” “genetically wired,” and “empathy” are probably the words and phrases most crucial to understanding the text. It might be a good idea to write them on the board, define them, and discuss them before the students begin reading. Your students might find the other words on the list during their second reading, guess at meanings from context, and then look them up later. Refer back to Introducing Key Concepts for ways to teach new words and more words with synonyms and antonyms.

Studying word histories is also a good way to explore words. By creating word trees, with word roots at the base, and building the word bank with “apples” to place on the trees, your students will learn many more words. Remind your students that in order for words to be related by concept, they must be related by root and meaning. Teach your students to use word histories in the dictionary so they can explore words in this way.

• “Humane” and “inhumane” are clearly related to “human.” “Humane” refers to the best qualities of humanity—kindness, tenderness, mercy—while “inhumane” means the opposite. The students might think of animal shelters, which often are run by an organization called the “Humane Society.”

• “Cognitive” is the adjective form of “cognition.” The Latin root is cognoscere, to become acquainted with or to know. For example, the philosopher René Descartes is famous for saying “Cogito, ergo sum,” which in English means “I think, therefore I am.” We could say that “cognitive” means of or related to the process of thinking.

• “Genetically wired” is an interesting metaphorical phrase. “Genetic” is from “genesis,” which refers to the origin or beginnings of something (e.g., the book of Genesis in the Bible). Genes are the parts of a cell that contain coded instructions for how the cell will develop and grow; thus,
to say that a characteristic is “genetically wired” is to compare the coding in a gene with the wiring of an electronic circuit.

- “Empathy” is related to Aristotle’s Greek term for the emotions, *pathos*. To feel empathy is the quality of being able to understand feelings from another person’s point of view. This is somewhat different from “sympathy,” which is to feel sorry for someone.

Have your students complete Activity 4.

**Activity 4: Introducing Key Vocabulary**

When you read “A Change of Heart About Animals,” you will need to know the following terms to understand the text:

- humane and inhumane
- cognitive
- genetically wired
- empathy

Think about words that you know that sound similar to these words and may be related. For example, “humane” is related to “human,” and “empathy” is related to the Greek word *pathos* in “Three Ways to Persuade.”

Create a word tree based on the root of a word from the text or one listed above. Here is an example of a word tree for “cognitive.”
A Text-Based Grammar for Expository Reading and Writing

If you are using A Text-Based Grammar for Expository Reading and Writing with your class, continue with Chapter 3 (Noun Forms and Subject-Verb Agreement) now. Teach mini-lessons and assign exercises 2–7 as you move through the Reading and Postreading sections of this unit.

Reading

First Reading

The first reading is done to understand the text. This is sometimes called “reading with the grain” or “playing the believing game.” Your students should also read to confirm the predictions they made in the prereading activities.

They should begin marking up the text on the first reading, underlining the words they do not know and dialoguing with the text by making marginal notations (i.e., asking questions, expressing surprise, making connections, and elaborating).

Now ask your students to complete Activity 5.

Activity 5: First Reading

Now you are ready to read Jeremy Rifkin’s “A Change of Heart About Animals.” For the first time through, you should read to understand the text. Read as if you trust Rifkin, and focus on what he is trying to say. Try to see whether the predictions you have made about the text are true. Is the article about what you thought it would be about? Does Rifkin say what you thought he would say? When you have finished reading, answer the following questions:

1. Which predictions turned out to be true?
2. What surprised you?
3. What does Rifkin want readers to believe?
   Animals are more like humans than we think.
4. What are some of the things people believe humans can do that animals cannot? How does Rifkin challenge those beliefs?
   People think that animals do not reason or use tools, have no self-concept, do not understand death, do not use language. Rifkin uses scientific studies to argue that animals can indeed do all of these things.
5. What authorities does Rifkin use to support his case?
   Rifkin refers to scientific studies, but he is more likely to give the names of the animals than the names of the scientists.
6. What action does Rifkin want readers to take?

Rifkin does not name a particular action for the reader to take, but he clearly wants society to respect animals more than it currently does.

7. How does Rifkin organize his essay? Is it an effective organization?

Rifkin lists human characteristics that people think are not shared by animals, and then describes scientific studies that show that animals actually do possess these characteristics.

If the students have trouble answering the questions in Activity 5, try one of the following activities (see Appendix A in the Assignment Template for more details):

- “Chunking” or “reciprocal reading.”
- Think aloud activities. (One student reads a passage and vocalizes what he or she is thinking about during the process while another student takes notes. Then they reverse roles and repeat the process.)

Looking Closely at Language

Below are lists of words and phrases from the Rifkin article that your students might not know (or might be confused about), some related conceptually to the module's key concept and some that are technical. In Activity 6 you will assign a word per student or group of students to study. Ask your students to share the meaning of the assigned word and create a way to represent it visually to the class by using their work from a previous activity in the module. Your students can use its synonyms or antonyms, a “What Am I?” sheet, or a word tree. Remind the students to keep a log of new words and concepts that relate to each other. Also remind them to build their vocabularies through the study and use of synonyms and antonyms.

Previously Introduced Words

- humane/inhumane: kind, merciful, respectful/not kind . . .
- cognitive (paragraph 6): thinking
- genetically wired (paragraph 14): a behavior or ability that is programmed by genes, thus instinctive, unlearned
- empathy (paragraph 17): experiencing the feelings of others

Technical and Scientific Words

- biotechnology (paragraph 1): altering genes to produce more useful or desirable organisms
- nanotechnology (paragraph 1): microscopic machines that work at the molecular level
- stimuli (paragraph 4): sensory input, sensations; related to “stimulate”
- dopamine (paragraph 12): a chemical found in the brain
• neurochemical (paragraph 12): a chemical that stimulates activity in nerves
• anatomy (paragraph 13): the physical structure of a living thing

Helpful Words for this Module
• activists (paragraph 3): people who work for a cause
• human consumption (paragraph 15): eaten by humans
• goslings (paragraph 14): baby geese
• groom (paragraph 10): comb or brush
• instinct (paragraph 14): a behavior or ability that is not learned
• crave (paragraph 4): strongly desire or need
• purveyors (paragraph 3): sellers or providers
• kin (paragraph 11): relatives
• mortality (paragraph 11): death
• fashioned (paragraph 7): made

General Academic Vocabulary
• esoteric (paragraph 1): known only to a few experts
• deterioration (paragraph 4): worsening, decline
• isolating (paragraph 5): causing to be alone
• conceptual (paragraph 7): having to do with ideas
• distinguishes (paragraph 11): differentiates
• striking (paragraph 13): shocking or surprising
• portend (paragraph 15): indicate or predict
• subjected (paragraph 15): forced to experience

Words the Students Probably Know
• dominant (paragraph 7): most powerful, opposite of subservient
• sophisticated (paragraph 9): complex
• individualism (paragraph 10): sense of self
• comprehend (paragraph 11): understand

Activity 6: Looking Closely at Language
Create a visual representation of “your” word, study its origin or history, and be prepared to share it (and its synonyms and antonyms) with the class. You might choose to construct a tree, chart, or table from Activity 4.

Rereading the Text
In the second reading, your students will read to question the text. This is sometimes called “reading against the grain” or “playing the disbelieving or doubting game.” Discuss strategies for analyzing claims, arguments, and evidence, and then have your students move on to Activity 7.
Activity 7: Rereading the Text

You should question the text in your second reading, “reading against the grain” and playing the disbelieving (or doubting) game. As you read, look for claims and assertions made by Rifkin. Does he back them up? Do you agree with them?

As you read, do the following:

• Underline (with a double underline) or highlight in one color the thesis and major claims or assertions made in the article.
• Underline (with a single underline) or highlight in a second color the evidence in support of the claims and assertions.
• Write your comments and questions in the margins.

After reading the article again, answer the following questions:
1. What is the thesis of Rifkin’s article?
2. Are there any claims made by Rifkin that you disagree with? What are they?
3. Are there any claims that lack support?

Analyzing Stylistic Choices

This particular line of questioning is offered to help your students see that the linguistic choices writers make create certain effects for their readers.

Word Choice

• What are the denotative and connotative meanings of key words? How do the specific words the author chooses affect your response to the article?
• Which words or synonyms are repeated? Why?
• What figurative language does the author use? What does it imply?

Sentence Structure

• Is the sentence structure varied?
• What effects do the author’s choices for sentence structure and length have on the reader?

Activity 8: Analyzing Stylistic Choices

Loaded Words: Language That Puts a Slant on Reality

Part A:

Reread Rifkin’s article, looking for “loaded” words—words Rifkin uses to evoke a positive or negative emotional response from the reader. List at least five words and explain whether each has a positive or negative connotation. What neutral word might Rifkin have used instead that has the same meaning but not the same emotional impact?
<table>
<thead>
<tr>
<th>Rifkin’s Word</th>
<th>Positive/Negative Connotation</th>
<th>Neutral Word/General Denotation</th>
</tr>
</thead>
</table>

Part B:

Answer the following questions about the Rifkin article:

   
   (Although students may perceive this article as formal compared to what they are used to reading, it is written in a fairly informal journalistic style with short paragraphs, no formal documentation, no scientific jargon, and no fully developed arguments.)

2. What is the effect of giving the names of most of the animals involved in the experiments, but not the names of the scientists?
   
   (In the conclusion, Rifkin argues that the history of mankind is about the extension of “empathy to broader and more inclusive domains.” Knowing the names of the animals helps us empathize with their achievements, while making the scientists anonymous and faceless allows Rifkin to use their research without taking the focus away from the animals.)

3. Throughout most of the article, Rifkin refers to “researchers” and “scientists.” In paragraph 13, however, he directly quotes Stephen M. Siviy, whom he refers to as “a behavioral scientist at Gettysburg College in Pennsylvania.” What is the effect of this sudden specificity?
   
   (Siviy is saying exactly what Rifkin wants to say: that animals have feelings that are closely related to human feelings. When this scientist speaks, it sounds like he is speaking for the whole anonymous scientific community that Rifkin has referred to in the previous sections.)

4. What is the effect of all the rhetorical questions in paragraph 15, followed by “such questions are being raised” in the next paragraph?
   
   (Rifkin wants us to answer these questions for ourselves but hopes that the arguments he has already presented will make the “correct” answers obvious. This causes the reader to buy into the arguments and evidence already presented and relieves Rifkin of the responsibility for actually making these further arguments.)
Considering the Structure of the Text

Now that your students have read and discussed the Rifkin essay, they are ready to begin analyzing the organizational structure. Have them complete Activity 9.

**Activity 9: Considering the Structure of the Text**

Now that you have read and discussed the content of the Rifkin essay, you are ready to begin analyzing the organizational structure. First, divide the text into sections:

- Draw a line across the page where the introduction ends. Is the line after the first paragraph, or are there more introductory paragraphs?
- Divide the body of the essay into sections on the basis of the topics addressed.
- Draw a line where the conclusion begins. Is it the last paragraph, or does it begin before that?

You are now ready to begin a process called “descriptive outlining”:

- Write brief statements describing the rhetorical function and content of each paragraph or section.
  - What does each section do for the reader? What is the writer trying to accomplish?
  - What does each section say? What is the content?
- After making the descriptive outline, ask questions about the article’s organizational structure:
  - Which section is the most developed?
  - Which section is the least developed? Does it need more development?
  - Which section is the most persuasive? The least?

From your work charting the text, what do you think is the essay’s main argument? Is it explicit or is it implicit?

*An example of a descriptive outline of “A Change of Heart About Animals” follows:*

1. Though much of big science has centered on breakthroughs in biotechnology, nanotechnology, and more esoteric questions like the age of our universe, a quieter story has been unfolding behind the scenes in laboratories around the world—one whose effect on human perception and our understanding of life is likely to be profound.

2. What these researchers are finding is that many of our fellow creatures are more like us than we had ever imagined. They feel pain, suffer and experience stress, affection, excitement, and even love—and these findings are changing how we view animals.
Introduction

• Places the thesis in context
• States the thesis (thesis is underlined)

3 Strangely enough, some of the research sponsors are fast-food purveyors, such as McDonald’s, Burger King, and KFC. Pressured by animal-rights activists and by growing public support for the humane treatment of animals, these companies have financed research into, among other things, the emotional, mental, and behavioral states of our fellow creatures.

4 Studies on pigs’ social behavior funded by McDonald’s at Purdue University, for example, have found that they crave affection and are easily depressed if isolated or denied playtime with each other. The lack of mental and physical stimuli can result in deterioration of health.

5 The European Union has taken such studies to heart and outlawed the use of isolating pig stalls by 2012. In Germany, the government is encouraging pig farmers to give each pig 20 seconds of human contact each day and to provide them with toys to prevent them from fighting.

Body

• Describes research funded by fast-food companies into the emotional and mental states of pigs
  – Pigs crave affection.
  – Pigs need playtime and enjoy toys.
  – Pigs get depressed.

6 Other funding sources have fueled the growing field of study into animal emotions and cognitive abilities.

7 Researchers were stunned recently by findings (published in the journal *Science*) on the conceptual abilities of New Caledonian crows. In controlled experiments, scientists at Oxford University reported that two birds named Betty and Abel were given a choice between using two tools, one a straight wire, the other a hooked wire, to snag a piece of meat from inside a tube. Both chose the hooked wire. Abel, the more dominant male, then stole Betty’s hook, leaving her with only a straight wire. Betty then used her beak to wedge the straight wire in a crack and bent it with her beak to produce a hook. She then snagged the food from inside the tube. Researchers repeated the experiment, and she fashioned a hook out of the wire nine of out of 10 times.

8 Equally impressive is Koko, the 300-pound gorilla at the Gorilla Foundation in Northern California, who was taught sign language and has mastered more than 1,000 signs and understands several thousand English words. On human IQ tests, she scores between 70 and 95.
• Makes a transition to other studies of animal emotions and cognitive abilities
  – Birds can make and use tools.
  – Gorillas can understand words and use sign language.

9 Toolmaking and the development of sophisticated language skills are just two of the many attributes we thought were exclusive to our species. Self-awareness is another.

10 Some philosophers and animal behaviorists have long argued that other animals are not capable of self-awareness because they lack a sense of individualism. Not so, according to new studies. At the Washington National Zoo, orangutans given mirrors explore parts of their bodies they can't otherwise see, showing a sense of self. An orangutan named Chantek who lives at the Atlanta Zoo used a mirror to groom his teeth and adjust his sunglasses.

• Makes a transition to research disproving the belief that animals have no sense of individual self
  – Orangutans use mirrors to groom themselves.

11 Of course, when it comes to the ultimate test of what distinguishes humans from the other creatures, scientists have long believed that mourning for the dead represents the real divide. It’s commonly believed that other animals have no sense of their mortality and are unable to comprehend the concept of their own death. Not necessarily so. Animals, it appears, experience grief. Elephants will often stand next to their dead kin for days, occasionally touching their bodies with their trunks.

• Discusses research that shows that animals have a sense of mortality
  – Elephants mourn their dead kin.

12 We also know that animals play, especially when young. Recent studies in the brain chemistry of rats show that when they play, their brains release large amounts of dopamine, a neurochemical associated with pleasure and excitement in human beings.

13 Noting the striking similarities in brain anatomy and chemistry of humans and other animals, Stephen M. Siviy, a behavioral scientist at Gettysburg College in Pennsylvania, asks a question increasingly on the minds of other researchers. “If you believe in evolution by natural selection, how can you believe that feelings suddenly appeared, out of the blue, with human beings?”
• Discusses research that shows animals play and that play releases in animals the same neurochemicals as in humans
  – Rat brains and human brains both release dopamine.
  – If feelings evolved, how could they be present in humans but not in animals?

14 Until very recently, scientists were still advancing the idea that most creatures behaved by sheer instinct and that what appeared to be learned behavior was merely genetically wired activity. Now we know that geese have to teach their goslings their migration routes. In fact, we are finding that learning is passed on from parent to offspring far more often than not and that most animals engage in all kinds of learned experience brought on by continued experimentation.

• Discusses research in learned behavior among animals
  – Geese must teach goslings their migration routes.

15 So what does all of this portend for the way we treat our fellow creatures? And for the thousands of animals subjected each year to painful laboratory experiments? Or the millions of domestic animals raised under the most inhumane conditions and destined for slaughter and human consumption? Should we discourage the sale and purchase of fur coats? What about fox hunting in the English countryside, bull fighting in Spain? Should wild lions be caged in zoos?

16 Such questions are being raised. Harvard and 25 other U.S. law schools have introduced law courses on animal rights, and an increasing number of animal-rights lawsuits are being filed. Germany recently became the first nation to guarantee animal rights in its constitution.

• Discusses the meaning of all of this research for animal rights
  – Do animals have a right to humane treatment?
  – Should fur coats be illegal?
  – Are fox hunting and bull fighting wrong?

17 The human journey is, at its core, about the extension of empathy to broader and more inclusive domains. At first, the empathy extended only to kin and tribe. Eventually it was extended to people of like-minded values. In the nineteenth century, the first animal humane societies were established. The current studies open up a new phase, allowing us to expand and deepen our empathy to include the broader community of creatures with whom we share the Earth.

Conclusion
• Concludes by arguing that through history, humans have progressed by extending empathy to a broader and broader range of creatures
To make the concept of analytical thinking explicit, have your students work in pairs or small groups to discuss and negotiate how they have charted the essay (or have the whole class discuss and negotiate how to chart the essay). Emphasize to your students that the goal is to look for talking points, not a single “right” way to chart the text.

Postreading

Summarizing and Responding

For Activity 10, ask your students to use the marginal comments they made in the “Descriptive Outlining” activity to write a concise summary of the Rifkin article.

Activity 10: Summarizing and Responding

Use the marginal comments you made in the “Considering the Structure of the Text” activity to write a concise summary of the Rifkin article.

Thinking Critically

At this point, the concepts of ethos, logos, and pathos come back into play. In Activity 11, your students will analyze the logic and support of the arguments, the character and intentions of the author, and the emotional effects on the reader of the language used and the details provided.

Activity 11: Thinking Critically

At this point, the concepts of ethos, logos, and pathos come back into play. From the analysis you have done so far, you should be well-prepared to analyze the logic and support of the arguments, the character and intentions of the author, and the emotional effects on the reader of the language used and the details provided.

Questions about Logic (Logos)

1. Locate major claims and assertions you have identified in your previous analysis and ask yourself: Do I agree with Rifkin’s claim that . . . ?
   (Rifkin tends to avoid making strong claims. He lets summaries of scientific studies speak for him, so students will sometimes react to implied claims, such as “pigs need toys.” One strong claim is near the end: “The human journey is, at its core, about the extension of empathy to broader and more inclusive domains.”)

2. Look at support for major claims and ask yourself: Is there any claim that appears to be weak or unsupported? Which one and why?
   (Paragraph 15 contains a series of questions about the ill treatment of animals. These questions are based on assertions that are not supported in the article.)
3. Can you think of counterarguments that the author does not deal with? (Students often argue that it is wrong to give pigs toys when some human children do not have them.)

4. Do you think Rifkin has left something out on purpose? Why or why not? Rifkin never states directly that people should change their behavior toward animals. His thesis is implied.

Questions about the Writer (Ethos)

1. Who is Rifkin? If you have not done so already, do an Internet search to find out something about him. What is his profession? What does he usually write about? Does everybody agree with him? Do the facts you find about his life, his credentials, and his interests make him more credible to you? Less credible? (Students will find that he is a controversial figure, especially among scientists.)

2. Pick one of the studies Rifkin mentions and try to find out more. Is Rifkin’s description of the study accurate? (A Google search on “crows use tools” yields this Web site: http://users.ox.ac.uk/~kgroup/tools/introduction.shtml, with lots of information about Abel and Betty and about other research as well. A search on “Koko sign language” leads to many sites, both pro and con.)

3. Does Rifkin have the right background to speak with authority on this subject? Rifkin is not a scientist.

4. What does the author’s style and language tell you about him? (The style is clear and engaging, and your students might like that. However, the fact that he does not state his positions directly may be off-putting to some students.)

5. Do you trust this author? Do you think this author is deceptive? Why or why not? (Students often react negatively to the appeals to pathos in this article. They tend to feel manipulated.)

Questions about Emotions (Pathos)

1. Rifkin says that Germany is encouraging farmers to give pigs human contact and toys. Does this fact have an emotional impact on the reader? If so, what triggers it? What are some other passages that have an emotional effect? (This particular section creates a strong reaction. Most students resent the implication that pigs need toys and affection because it makes pigs sound too much like human children.)

2. Rifkin calls his essay “A Change of Heart About Animals.” Does this imply that the scientific discoveries he summarizes here should change how we feel about animals?
(This question invokes the conflict between heart and mind. Clearly, how we feel about something is important. Clearly, how we think about something can change how we feel about it. Some students may want to argue that logos should always prevail.)

3. Does this piece affect you emotionally? Which parts?
   (Your students may go back to the pigs and toys, but they may also identify with the accomplishments of some of the other animals, such as the tool-making crows.)

4. Do you think Rifkin is trying to manipulate your emotions? How?
   (By this point, most students will probably feel that Rifkin is using scientific studies to play on the reader's emotions.)

5. Do your emotions conflict with your logical interpretation of the arguments? In what ways?
   (The issue here is whether logical appeals are always superior to emotional appeals. Spock and Bones in the original Star Trek have this argument in almost every episode. Clearly, emotions can cloud logic. However, the students may not agree that one should always follow logic.)

Connecting Reading to Writing

Writing to Learn

Although the writing process can be divided into stages, writing, like reading, is essentially a recursive process that continually revisits different stages. Much of the prewriting stage has already been accomplished at this point because students have been “writing to learn” while reading. They have been using writing to take notes, make marginal notations, map the text, make predictions, and ask questions. Now they are ready to use what they have learned to produce more formal assignments.

Using the Words of Others

One of the most important features of academic writing is the use of the words and ideas from written sources to support the writer’s own points. Activity 12 will familiarize your students with the ways in which writers use the words of others and the documentation required.

Activity 12: Using the Words of Others

One of the most important features of academic writing is the use of the words and ideas from written sources to support the writer’s own points. There are essentially three ways to incorporate words and ideas from sources:

- **Direct quotation.** Jeremy Rifkin says, “Studies on pigs' social behavior funded by McDonald’s at Purdue University, for example, have found...
that they crave affection and are easily depressed if isolated or denied playtime with each other” (15).

- **Paraphrase.** In “A Change of Heart About Animals,” Jeremy Rifkin notes that McDonald’s has funded studies on pigs that show that they need affection and playtime with one another (15).
- **Summary.** In “A Change of Heart About Animals,” Jeremy Rifkin cites study after study to show that animals and humans are more alike than we think. He shows that animals feel, reason, make and use tools, learn and use language, and mourn their dead. One study even shows that pigs need affection and playtime with one another and enjoy playing with toys (15).

**Documentation.** You will also need to learn to take notes with full citation information. For print material, you will need to record, at a minimum, the author, title, city of publication, publisher, date of publication, and page number. The two most common documentation formats used are Modern Language Association (MLA), which is used mainly by English departments, and the American Psychological Association format (APA).

**MLA Format**

**Books.** Here is the Works Cited format for a typical book in MLA style:


**Newspapers.** Here is the bibliographic information for the article quoted above. The fact that it was published in a newspaper changes the format and the information given somewhat:


**Web Sites.** To document a Web site, you will need to give the name of the author (if known), the title of the site (or a description, such as “Homepage,” if no title is available), the date of publication or update (if known), the name of the organization that sponsors the site, the date of access, and the Web address (URL) in angle brackets. For example:


The author for the above site is unknown, so no author name is given. This entry would appear in the Works Cited section alphabetized by “university.”

**In-Text Documentation.** MLA style also requires in-text documentation for every direct quotation, indirect quotation, paraphrase, or summary. Many students are confused about this, believing that documentation is necessary only for direct quotations. If the author is given in the text, the page number should be given in parentheses at the end of the sentence containing the material. For example, here is a paraphrase of material from the Rifkin article (because the author is not named in the text, his last name goes in the parentheses):
It is well-established that animals can learn to use sign language. A long-term study at the Gorilla Foundation in Northern California shows that Koko, a 300-pound gorilla, can use more than 1,000 signs to communicate with her keepers and can understand several thousand English words. She also scores between 70 and 95 on human IQ tests (Rifkin 15).

An academic paper is most often a dialogue between the writer and his or her sources. When you learn to quote, paraphrase, summarize, and document sources correctly, you are well on your way to college-level writing.

This short discussion presents only the basic concepts of MLA documentation. You will also need access to the MLA Handbook, which covers the system in detail.

Practice with Sources. Choose three passages from the Rifkin article you might be able to use in an essay. You may want to choose passages you strongly agree or disagree with.

- First, write each passage down as a correctly punctuated and cited direct quotation.
- Second, paraphrase the material in your own words with the correct citation.
- Third, respond to the idea expressed in the passage by agreeing or disagreeing with it and explaining why, again with the correct citation.

It will be easy to see whether your students understand the material when you look at their paraphrases. Later, they can use this material in an essay.

A Text-Based Grammar for Expository Reading and Writing
Chapter 8 in A Text-Based Grammar for Expository Reading and Writing provides extensive practice in the process of incorporating the words of others into one’s own writing. Although it is based on module 8, Into the Wild, you might want to adapt some of the instruction and activities to use with your students at this point in this module.

Writing Rhetorically

Prewriting

Reading the Assignment

Your students are now ready to review the writing assignment in Activity 13.
Activity 13: Reading the Assignment

A common way to respond to an editorial is to write a letter to the editor. Now that you have worked extensively with this text, you are ready to write a well-informed response to Rifkin’s ideas.

Writing Assignment

After thinking about your reading, discussion, and analysis of Rifkin’s article and the letters in response to it, what do you personally think about Rifkin’s point? Do you think it is true, as Rifkin says, that “many of our fellow creatures are more like us than we had ever imagined”? Do you think we need to change the way we treat the animals around us? Or do you think Rifkin is wrong? Write a letter expressing your viewpoint to the editor of the newspaper.

If you like, you may start out with “Dear Editor:”

An on-demand writing assignment is also provided at the end of this module. Use the English Placement Test (EPT) Scoring Guide in Appendix G of the Assignment Template to evaluate essays written on the on-demand prompt.

Getting Ready to Write

Before your students write their own letters in response to Rifkin, have them read and discuss the two letters to the editor provided in the module. These were written in response to “A Change of Heart About Animals,” as called for in Activity 14.

Activity 14: Getting Ready to Write

Before you write your own letter in response to Rifkin, look at the two sample letters to the editor written in response to “A Change of Heart About Animals.” Then discuss the following questions:

1. Bob Stevens disagrees with Rifkin and makes several points. Does Stevens refute Rifkin’s arguments?

   (Rifkin cites studies that call into question many of the assertions made by Stevens. For example, Rifkin argues that Koko, the gorilla that uses sign language, does communicate with signs, while Stevens argues that animals are capable of mimicry only.)

2. In his first paragraph, Stevens argues that because a predator (such as a hawk) does not feel empathy for its prey, humans do not need to feel empathy for the animals they eat and that such feelings would be unnatural. Do you agree?

   (Rifkin’s argument that human history is the story of an expanding concept of empathy implies that humanity is progressing beyond nature. The students may wonder if they should feel sorry for the cow that became a hamburger.)
3. Stevens notes that some animals can mimic human speech but argues that they do not understand what they are saying. What would Rifkin say to this?
   (See note under question 1.)

4. Stevens implies that it would be a waste of resources to give toys to pigs, especially when some human children do not have them. Do we respond logically or emotionally to this argument? Is this argument fair to Rifkin?
   (The students will probably respond very strongly—perhaps negatively—to the image of pigs as toddlers playing with toys. Rifkin certainly wants us to respond to this image. On the other hand, the image of children without toys provokes an equally powerful emotional response. Rifkin started pushing these emotional buttons, so the turnabout seems to be fair play.)

5. Is it true, as Stevens argues, that Rifkin wants animals to have more rights than humans?
   (This seems to overstate the case, although Rifkin certainly wants animals to have more rights than they currently do.)

6. Lois Frazier says that pet owners know that animals have feelings and abilities not too different from humans. Do some pet owners treat their pets like people? Is this a good thing? Why or why not?
   (The students will probably have many stories to tell and many opinions about this question. Many pets become like members of the family.)

7. Frazier argues that Rifkin needs to take his argument further and promote a vegetarian lifestyle with no animal products. Is this a reasonable conclusion to draw from Rifkin's arguments? Do you agree with him?
   (This certainly seems to follow from Rifkin's presentation of the science. Why he does not draw this conclusion himself is an interesting rhetorical question, but it is probably because he doesn't feel that he needs to. Readers such as Frazier will draw it for him.)

Some things to note before writing your letter to the editor are as follows:

- A good letter to the editor is focused and concise. It should make your point, but no words should be wasted. It is sometimes best to write a longer draft, and then cut out everything that is not essential.
- Newspaper editors often cut letters to fit the available space or to make a letter more focused. If your letter is published unedited, you are very lucky.
- Some letters respond to the thesis of the editorial, either in support or disagreement, and provide further arguments or further evidence. Other letters focus on one point made by the original author and support it, question it, or refute it.
- These days, most letters are e-mailed to the newspaper. To get a letter published in a major newspaper, you must write it quickly and send it within a day or two of the publication date of the editorial to which you are responding.
If the newspaper wants to publish your letter, you will normally receive a call or an e-mail to get permission and to verify that you really are who you say you are.

Newspapers are interested in a wide range of viewpoints from diverse citizens. If your letter is a good expression of a particular viewpoint, brings up new information or arguments, or has some particularly good phrases, it has a good chance of being published.

Writing

Composing a Draft

After reading and discussing the Rifkin article and the letters in response to it, your students are now ready to write their own letters to the editor. Have them complete Activity 15.

Activity 15: Composing a Draft

Writing the first draft of your letter to the editor is a chance for you to organize your thoughts and get your ideas down on paper. Use any notes you made as you read and discussed the Rifkin article. Consider the suggestions about writing letters to the editor from Activity 14, and write your first draft.

Revising and Editing

Revising the Draft

In Activity 16, your students will work on the organization and development of their drafts to make sure their letters are as effective as possible. They should produce the next drafts on the basis of systematic feedback from others. These drafts will be more “reader-based” than the first drafts because the students will naturally take into consideration the needs of the readers as they respond to the text. An Evaluation Form is included at the end of the Student Version.

A Text-Based Grammar for Expository Reading and Writing

If you have been integrating Chapter 3 of A Text-Based Grammar for Expository Reading and Writing throughout this unit, you should be ready to assign Exercise 8 (Editing Your Guided Composition). In that exercise, your students will select a paragraph from their letters to the editor and make sure their nouns are formed correctly and that subjects and verbs agree.
Activity 16: Revising the Draft

The most natural way to improve a letter to the editor is to share it with others before you send it. Working with partners or in groups, share your drafts and give each other feedback. Listen to what others say—even those who disagree with you.

Peer Group Work
Break into groups of three or four. Each student will read his or her letter aloud to the other members of the group. Then complete Part I of the Revising Checklist (page 51) of the Evaluation Form for each member’s essay.

Paired Work
Now work in pairs to decide how you want to revise the problems that group members have identified.

Individual Work
Revise the draft on the basis of the feedback you have received and the decisions you have made with your partner. Consider these additional questions for your individual work:
- Have I responded to the assignment?
- What is my purpose for this essay?
- What should I keep? What is the most effective?
- What should I add? Where do I need more details, examples, and other evidence to support my point?
- What could I omit? Do I use irrelevant details? Am I repetitive?
- What should I change? Are parts of my essay confusing or contradictory? Do I need to explain my ideas more fully?
- What should I rethink? Is my position clear? Do I provide enough analysis to convince my readers?
- How is my tone? Am I too overbearing or too firm? Do I need qualifiers?
- Have I addressed differing points of view?
- Does my conclusion show the significance of my essay?

Editing the Draft

Your students will now need to work with the punctuation and mechanics of their drafts to make sure their essays conform to the guidelines of standard written English. In this case, students will benefit most from specific feedback from you or a tutor rather than a peer evaluation. You might choose to provide mini-lessons on common grammar, usage, punctuation, and mechanics before your students proceed with the editing of their drafts.

Activity 17 calls for your students to edit their drafts on the basis of the information they have received from you or a tutor. The editing guidelines on page 52 will be helpful to them as well.
A Text-Based Grammar for Expository Reading and Writing

If you have been integrating Chapter 3 of *A Text-Based Grammar for Expository Reading and Writing* throughout this unit, you should be ready to assign Exercise 9 (Editing Your Own Writing). Your students will edit their letters to the editor, focusing on noun forms and subject-verb agreement rather than on general editing (as described below).

**Activity 17: Editing the Draft**

Once you are satisfied with the tone and content of your letter, you should proofread it for spelling, grammar, and punctuation errors. The following guidelines will help you edit your draft:

**Editing Guidelines for Individual Work**

- If possible, set your essay aside for 24 hours before rereading it to find errors.
- Read your essay aloud so you can hear errors and any rough spots.
- At this point, focus on individual words and sentences rather than on overall meaning. Take a sheet of paper and cover everything except the line you are reading. Then touch your pencil to each word as you read.
- With the help of your teacher, figure out your own pattern of errors—the most serious and frequent errors you make.
- Look for only one type of error at a time. Then go back and look for a second type and, if necessary, a third.
- Use the dictionary to check spelling and to confirm that you have chosen the right word for the context.

The scoring guide on the next page may be used to evaluate your final product.

**Scoring Guide for Letters to the Editor**

**Categories**

- Focus
- Word choice, including the use of text from the article
- Argument and support, including the use of logical, emotional, and/or ethical appeals
- Grammar and mechanics

**Scoring**

**Score of 4—Superior**

- The letter is tightly focused on the issue or issues raised in the editorial, article, or opinion piece to which it responds.
- The letter uses words effectively and efficiently and quotes key words and phrases from the article.
- The letter makes a clear point or points and provides convincing support for those points, including logical, emotional, and/or ethical appeals.
- There are no grammatical or mechanical errors.
Score of 3—Good
- The letter focuses on an issue or issues raised in the editorial, article, or opinion piece to which it responds.
- The letter uses words accurately and effectively.
- The letter makes a clear point or points and provides support for those points.
- Grammatical or mechanical errors, if present, are minor.

Score of 2—Fair
- The letter discusses an issue or issues raised in the editorial, article, or opinion piece to which it responds but may be unclear or vague as to its focus.
- The letter is sometimes repetitive or vague in language.
- The letter does not make a clear point or does not provide support for its points.
- Grammatical or mechanical errors inhibit communication.

Score of 1—Poor
- The letter fails to clearly address an issue raised in the article.
- The letter is vague, repetitive, or confusing.
- The letter fails to make a clear point.
- Grammatical and mechanical errors confuse and distract the reader.

Evaluating and Responding

Responding to the Students’ Writing

Use the scoring guide from Activity 17 to evaluate the letters your students have produced. Note that this scoring guide has four score points, unlike the English Placement Test (EPT) Scoring Guide, which has six score points. This guide was designed specifically for the type of writing required for an effective letter to the editor.
Alternative On-Demand Writing Assignment

This essay prompt is provided as an alternative to the letter to the editor writing assignment. If assigned, the essay should be scored with the EPT Scoring Guide, which can be found in Appendix G of the Assignment Template.

On-Demand Writing Assignment

“Each year, humans subject thousands of animals to painful laboratory experiments so women can wear makeup safely. Even millions of domestic animals are raised under the most inhumane conditions and destined for slaughter and human consumption. No one should wear a fur coat or chase fox in the English countryside. Bull fighting can not be justified as some cultural event. ’The U.S. should adopt strong animal-rights laws. In fact, what we need is a ‘Bill of Rights’ for animals.”

J. Hendricks Marsh

Write a well-organized essay, explaining the extent to which you agree or disagree with Marsh. Develop your points by giving reasons, examples, or both from your own experience, observations, or reading.