

pronunciation
words vocabulary
aspects of language acquisition
tones multilingualism
grammar
rhythm
patterns rules
learning
sounds
use



ASPECTS OF LANGUAGE

SKILLS AND STRATEGIES

- Identifying the Thesis of a Reading
- Definition and Classification
- Passive Sentences

Identifying the Thesis of a Reading

In Skills and Strategies 1, you learned that each paragraph has one main idea, which consists of the topic and the writer's claim about the topic. Like paragraphs, a whole reading (an academic text, article, essay, etc.) usually has one *central* main idea – the thesis. Usually writers clearly state the thesis at the end of the introductory paragraph or paragraphs of a reading, and the main ideas of all of the paragraphs in the reading generally contribute to the thesis. It may be repeated in a new way in the final paragraph. In addition, each paragraph has a function and a specific relationship to the thesis. Understanding the thesis of a reading is an important academic skill.

Examples & Explanations

These are the main ideas from the six paragraphs of a whole reading:

- ① With 1.5 billion speakers, English is now a global language, but the numbers are not the most important issue.
- ② Languages become global when they gain official status in many countries.
- ③ Languages become global when they gain favored foreign-language status in many countries.
- ④ English is an official language in many countries that have no native speakers of English, and it is the most widely studied language in the world.
- ⑤ A large number of native speakers does not necessarily cause a language to become global.
- ⑥ The economic, military, and political power of the nations promotes their languages to global status.

The **topic** that connects the main ideas of all of these paragraphs is *global languages*. As you read, you should form a hypothesis about the writer's thesis: What does the writer want to say about global languages?

The main idea of paragraph 1 introduces the **thesis** with the topic and a **claim**, with English as an example.

The main ideas of paragraphs 2 and 3 are the ways in which a language may reach global status.

The main idea of paragraph 4 is that English is an example of the claims made in paragraphs 2 and 3.

The main idea of paragraph 5 is the common view: a factor that readers might think is important but the author claims is not.

Paragraph 6 provides the most fundamental reason for the global status of a language.

Together, the paragraphs support the writer's primary **claim**: *A language attains global status, not because of the number of its speakers, but because of the power of the nations in which its native speakers live.*

The main idea in paragraph 6 restates the central main idea – the thesis – that the writer wants to express in this reading.

Strategies

These strategies will help you identify the thesis of a whole reading.

- As you begin to read, ask yourself: *What is the topic?* The title often can help you decide.
- What claim do you think the writer will make about that topic? In other words, what do you think the thesis will be?
- Think about the main ideas of each paragraph that you read. Are they all related to this topic and the thesis?
- Pay attention to the first, second, and last paragraphs in the reading. Writers often state or restate the thesis of the reading in one of these places.

Skill Practice 1

Read the following lists of main ideas of each paragraph of a reading. Highlight the topic of the reading for each list. Then read the four possible claims below. Circle the claim you think best expresses the thesis of the reading.

1

Language and Machines

- ① Machine translation uses software to translate sentences from one language to another.
 - ② Machine translation has a long history.
 - ③ Early machine translation programs translated word for word.
 - ④ Word-for-word translations are not satisfactory because they do not produce very natural texts.
 - ⑤ New methods of machine translation are different because they rely on huge databases of real language samples.
 - ⑥ Machine translation has improved a lot in the last few decades.
 - ⑦ Humans often still have to clean up machine-translated texts.
- a The crucial difference between machine translation of the past and machine translation today is the use of massive databases.
 - b There have been tremendous improvements in machine translation in recent years.
 - c Machine translation has improved a lot, but it still usually requires human involvement.
 - d It is still better to use human translators than machine translators because machines cannot really understand language.

2

Signed Languages

- ① Signed languages use facial expressions, as well as hand and body positions and movements, rather than sounds to express meaning.
- ② Signed languages are equivalent to spoken languages in their ability to express a wide range of meaning.
- ③ Signed languages have their own grammars.

- ④ Signed languages are not spelled-out spoken languages.
- ⑤ Signed languages are not related to the spoken languages of the communities in which they are used.
- ⑥ Signed languages have arisen in deaf communities for centuries.
 - a Signed languages are fully expressive, independent, natural languages.
 - b Signed languages are just like spoken languages.
 - c All deaf people learn signed languages.
 - d Signed language is the easiest way for deaf people to communication with one another so it is important for deaf children to learn it.

Skill Practice 2

A Read the following lists of main ideas of each paragraph of a reading. Highlight the topic of the reading for each list. Then write the claim that the writer is making about the topic on the blank line.

1

Extraordinary Language Learners

- ① A polyglot is a person who can speak many languages.
- ② One of history's most famous polyglots, Emil Krebs, knew more than 100 languages.
- ③ Scientists believe that polyglots' brains are different than the brains of people who speak just one or two languages.
- ④ Some polyglots, called *language savants*, also have cognitive or mental disabilities.
- ⑤ One famous language savant, "Christopher," can read, write, and speak more than 15 languages, but he has trouble with life skills like shaving.
- ⑥ In 2004, the British language savant, Daniel Tammet, surprised the world by learning Icelandic after one week of study.
- ⑦ The abilities of language savants remain a scientific mystery.

Claim: _____

2

"He said, she said"

- ① Deborah Tannen, a language researcher, has studied communication between men and women.
- ② She claims that men's and women's communications styles differ in basic ways.
- ③ When men communicate with each other, they compete; when women communicate, they are more likely to offer each other support.
- ④ Men are more likely to offer advice; women are more likely to offer understanding.
- ⑤ Women stress compromise and avoid conflict; men do not try to avoid conflict.
- ⑥ These differences in style can often lead to misunderstandings.
- ⑦ Tannen admits these are generalizations but believes they reflect real differences.

Claim: _____

- B** Reread the paragraph main ideas. If one of them is like your claim statement, highlight it.

Skill Practice 3

- A** Read the following short text. As you read the first paragraph, think about what you think the thesis of the text will be. As you continue reading, decide if the rest of the text confirms this.

The Secret Language of Twins

Many children make up secret communication codes, but few of them can match cryptophasic twins. Cryptophasia is the secret language of twins. Parents of twins have often observed that their children seem to share a private language, but recently cryptophasia has been the focus of scientific research. Scientists say that it is a fascinating topic but that the secret language can create problems for the children who use them.

Scientists claim that cryptophasia emerges because twins spend so much time together. Compared to non-twins, twins spend more time with each other and less time with adults or other children. Twins imitate each other's speech and reinforce each other's invented words. Most children are motivated to learn the language around them so they can communicate with others and so they can get what they want, but for twins, there is less motivation to learn the language that the people around them are speaking.

Researchers who have studied twin language say it is usually very simple and also variable. For example, verbs, nouns, and adjectives may not appear in a consistent order; the twins just put the most important word first. The structure of twin languages may not resemble the structure of the adult language around them, but most of the words are based on the words the twins hear. The language is adequate for the twins to communicate about their child world, but it would probably not be sufficient for all the communication needs of an adult world.

There is concern that cryptophasia prevents twins from learning the language they will need as adults. Researchers also worry that the isolation created by their secret language means that twins don't make friends with other children, and they don't learn how to interact and behave appropriately. Scientists who have studied cryptophasia advise parents with twins who create their own language to encourage them to communicate in the language of the community and to get help from an expert if the twins do not make progress.

- B** With a partner, discuss what you think the thesis of the text is and how the main ideas in later paragraphs support this thesis.

- C** Review the first paragraph. Do any of the sentences include the thesis you discussed with your partner in Step B? If so, highlight the sentence.

Connecting to the Topic

Discuss the following questions with a partner.

- 1 Do you think babies can understand language before they can speak? Why or why not?
- 2 At what age do you think language learning begins?
- 3 Think about how you began to learn your *second* language. Do you think babies begin the process in the same way? Explain your answer.
- 4 How do people become bilingual (able to speak two languages well)?

Previewing and Predicting

Reading the title and first sentence of each paragraph is a quick way to predict what a reading will be about.

A Read the title and the first sentence of each paragraph in Reading 1. What do you think this reading will be about? Put a check (✓) next to the topic or topics that you think will be included in the reading.

- ☐ A Research methods in the study of child language learning
- ☐ B A baby's first sentences
- ☐ C Bilingual education
- ☐ D Early bilingual language learning
- ☐ E Language learning before birth
- ☐ F How infants begin to understand the sounds of language

B Compare your answers with a partner's.

While You Read

As you read, stop at the end of each sentence that contains words in **bold**. Then follow the instructions in the box in the margin.

When Does Language Learning Begin?

- 1 By the time children have reached the age of about five, they have accomplished something that few of us give much thought to but is actually quite extraordinary: They have learned how to speak their native language. They have perfect pronunciation, and they have learned most of the grammar necessary to speak and understand their language. Language acquisition takes place regardless of whether the children are born into educated, prosperous families in a society that uses advanced technology or into uneducated, even illiterate, poor families in a developing country. It occurs regardless of the disparities in individual children's intellectual abilities or their motivation. It also begins far earlier than scientists once thought.
- 2 This remarkable achievement, which takes place without formal teaching, has fascinated scientists for centuries. Once children begin to verbalize, with words or simply with sounds, scientists can study the language acquisition process fairly easily. However, the more mysterious part of the process takes place before that time, when a baby begins to perceive the sounds of language and understand their connection to meaning. How do babies begin this language acquisition **process**?
- 3 Recent research indicates that this process begins before babies are even born. From inside the uterus, fetuses cannot hear individual sounds, but they can perceive the rhythm patterns and tones of the language that they hear. Once they are born, babies use this fetal auditory experience to accomplish three crucial tasks. First, they recognize their mother's voice; second, they distinguish between language sounds and non-language sounds; and third, they differentiate between basic contours of their own language – the rhythm and tone patterns – and those of other languages. They can do all of these things within days of birth.

WHILE YOU READ 1

What do you think the topic of this reading is?

- a) How babies learn language
- b) The earliest stages of language learning
- c) The most important factors in language learning



Children recognize their mothers' voices very early.



Scientists use brain imaging to analyze child-language development.

- 4 We know they can do **these things** because over the last 20 years, researchers have developed several techniques to assess these abilities in infants who are only a few months old or even younger. The two most widely used measures have been heart rate and sucking. For example, when babies recognize the voice of their mothers, their heart rate increases. When they hear a novel sound, they become more alert, and their sucking action gets stronger. Recently, researchers have also utilized brain-imaging techniques, which show how and where blood is flowing through the brain, indicating the focus of a baby's attention.
- 5 The results of this research make it clear that babies perceive and recognize the rhythm and tones of their own language from the moment of birth, and perhaps even more surprising, they reproduce these patterns in their cries. A study that compared the cries of newborn German and French babies found that their cries matched the contours of the language they heard around them.
- 6 In the acquisition process, infants first perceive these basic sound contours, and then they decipher the differences among specific sounds. For example, infants in English environments must learn that *t* and *d* are different sounds. By about six months, they can perceive these differences, but they can also perceive differences between sounds that are not part of their own language. For example, other languages, such as Korean, Hindi, and Thai have two kinds of *t* sounds. One is similar to the English *t*, and the other one is slightly different, but the difference is meaningful in those languages. At six months, babies raised in an English-speaking environment can perceive this difference without effort. For this reason, one researcher has referred to infants as “citizens of the world.” At this age, they have the potential to learn any language. Adult English speakers, on the other hand, no longer have this universal potential. As a result, they have difficulty distinguishing between these two sounds; they hear them

WHILE YOU READ 2

Look back in paragraph 3 to find what *these things* refers to. Highlight the earlier idea that this continuing idea marker refers to.

all simply **as t**. They may eventually be able to learn this distinction, but it will take considerable effort.

7 By their first birthday, babies become more like adults. Most of them will only be able to distinguish among the sounds that are important for their own language. Language researchers explain these changes in terms of brain development. When babies learn something new, connections between neurons, or nerve cells, are **formed**. The more often the babies use this new information, the stronger these connections become. So, as babies in an English environment hear the language around them, the English connections grow stronger.

8 Bilingual babies are a special case in that they can distinguish among the sounds of two different languages at the same time. In order to achieve this, babies have to be exposed to the sounds of the two languages when they are young. Some child language researchers wanted to find out how much of a second language babies would need to hear in order to establish and maintain the necessary neural connections. To find out, they exposed babies who were growing up in an English-speaking environment to Mandarin Chinese when they were 9 months old. A native speaker of Chinese talked with them for just an hour a week for 12 weeks. Even though the babies were exposed to Mandarin for just a short time, they could distinguish among the sounds of Mandarin, an ability they retained when they were tested again at 14 months.

9 There was one more remarkable finding in this study. The researchers had divided the babies into three groups. One group had Chinese-language sessions with a live person, one group watched the sessions on a television screen, and a third group heard the sessions on an audio recording. Only the babies who interacted with a human being learned to distinguish the sounds of Chinese. These findings suggest that learning a language is not just about making connections between neurons; it is also about making connections between human **beings**.

WHILE YOU READ 3

Look back through the last two sentences to find a cause-and-effect relationship. Highlight the effect.

WHILE YOU READ 4

Look back and highlight the words and phrases that can help you figure out the meaning of *neurons*.

WHILE YOU READ 5

Think about the topic of the reading again. Was your first guess correct? If not, circle a new choice.

- a) How babies learn language
- b) The earliest stages of language learning
- c) The most important factors in language learning



Research shows babies learn language by interacting with people, not by watching TV.

Main Idea Check

Match the main ideas below to five of the paragraphs in Reading 1. Write the number of the paragraph on the blank line.

- _____ A Brain development can explain the decline of babies' ability to distinguish between sounds that are not in their own language.
- _____ B Scientists have used several different techniques to study infant perception of language sounds.
- _____ C Language learning begins before birth.
- _____ D Human interaction is necessary for language acquisition.
- _____ E At the age of six months, infants are able to distinguish among sounds in any language.

A Closer Look

Look back at Reading 1 to answer the following questions.

- 1 Which of the following factors are important in child language acquisition?
 - a Level of education of the family
 - b Motivation
 - c Intelligence
 - d All of the above
 - e None of the above
- 2 Babies can understand words even before they are born. **True or False?**
- 3 Which of the following specific abilities do researchers believe infants have soon after birth? Circle all that apply.
 - a They can imitate the sound patterns of their language when they cry.
 - b They can distinguish between language and non-language sounds.
 - c They can distinguish between different sounds in any language.
 - d They can recognize their mothers' voices.
- 4 How do researchers know that infants can perceive differences among sounds? Circle all that apply.
 - a An increased heart rate indicates the infant has noticed something new.
 - b Scientists can follow the connections between neurons.
 - c Special sensors in an infant's ears can detect what he or she hears.
 - d Images of blood flow can show the infant's brain activity.
- 5 Why are infants sometimes called "citizens of the world"?
 - a Their cries can match any language that they hear.
 - b Many infants grow up to be bilingual.
 - c They can pronounce the sounds of many different languages.
 - d They have the potential to learn any language.

- 6 Babies need a lot of exposure to a language in order to establish and maintain neural connections for that language. **True or False?**

Skill Review

In Skills and Strategies 7, you learned that most readings have a central main idea – the thesis – that the writer wants to express. Identifying the thesis of a reading is an important academic skill.

A Review Reading 1, and then answer the questions below.

- 1 What is the topic of the reading?

- 2 What claim is the writer making about this topic?

- 3 State the thesis of the reading.

B Compare your answers with a partner's. Discuss any differences you find.

C Do any of the sentences in the first paragraph include the thesis of the reading? If so, highlight the sentence.

D Look back at your answers in the Main Idea Check. Then, with your partner, decide whether the main ideas in each of the paragraphs in the Main Idea Check support the thesis you discussed in Step B.

Definitions

Find the words in Reading 1 that are similar to the definitions below.

- 1 remarkable (*adj*) Par. 1
- 2 financially successful (*adj*) Par. 1
- 3 babies before they are born (*n pl*) Par. 3
- 4 related to hearing (*adj*) Par. 3
- 5 new and different (*adj*) Par. 4
- 6 used something effectively (*v*) Par. 4
- 7 to copy (*v*) Par. 5
- 8 to figure out the hidden meaning of something (*v*) Par. 6
- 9 a difference between things that are similar (*n*) Par. 6
- 10 periods of time for a particular activity (*n pl*) Par. 9

Word Families

A The words in **bold** in the chart are from Reading 1. The words next to them are from the same word family. Study and learn these new words.

B Choose the correct form of the words from the chart to complete the following sentences. Use the correct verb tenses and subject-verb agreement. Use the correct singular and plural noun forms.

NOUN	VERB
<i>accomplishment</i>	<i>accomplish</i>
<i>acquisition</i>	<i>acquire</i>
<i>exposure</i>	<i>expose</i>
<i>perception</i>	<i>perceive</i>
<i>retention</i>	<i>retain</i>

- 1 As people reach their seventies and eighties, they often find it difficult to _____ new information.
- 2 When he lived in the Middle East, he _____ knowledge of both Arabic and Farsi.
- 3 Some people with special talents can learn a language after just a few weeks of _____.
- 4 The two sounds were so similar that I could not _____ any difference.
- 5 She stayed home from work because she did not want to _____ others to her cold.
- 6 Teachers often worry about their students' _____ of skills during summer vacations. They think the students may forget what they have learned.
- 7 _____ of a second language is usually much easier for children than adults.
- 8 His proudest _____ was winning a 10-kilometer race when he was 40.
- 9 New techniques have allowed scientists to study infant auditory _____.
- 10 Recently, scientists have _____ the goal of mapping human genes.

Critical Thinking

In Reading 1, you learned that neural connections are an important part of the learning process.

A Briefly define the term *neural connection*. Then, with a partner, discuss the following questions.

- 1 What are neural connections?
- 2 How are they formed?
- 3 How do they become stronger?
- 4 How might neural connections become weaker?

B You have learned about neural connections in language learning. With a partner, think of other areas of learning that might occur in the same way. What exposure would be necessary to establish these connections? Use your ideas to complete the chart. One example has been done for you.

CLARIFYING
CONCEPTS

Critical thinking includes exploring a concept in a text by restating it and applying it to a different context.

AREA OF LEARNING	NECESSARY EXPOSURE
<i>reading</i>	<i>print material</i>

Research

You have learned that babies can distinguish between different sounds by the age of six months. Research some other milestones in child language development. Find answers to the following questions.

- When do most children begin to say their first words?
- When do most children begin to make sentences?
- When do most children begin to read?

Writing

Write two paragraphs about your research. Choose two milestones and write one paragraph about each.

Connecting to the Topic

Discuss the following questions with a partner.

- 1 Do you know more than one language? How well do you know it (or them)?
- 2 Choose one additional language that you know. How did you learn it? In school? At home?
- 3 When did you begin learning this additional language?
- 4 Have you found learning an additional language difficult? What aspects are the easiest? The hardest?

Previewing and Predicting

Looking at illustrations and graphic material (pictures, photos, charts, tables, or graphs) can help you predict what a reading will be about.

A Read the title of Reading 2, and look at Figures 3.1 and 3.2. What do you think this reading will be about? Put a check (✓) next to the topic or topics that you think will be included in the reading.

- ☐ A The difference between first and second language learning
- ☐ B The location of five senses in the brain
- ☐ C Right-handed people and left-handed people
- ☐ D The relationship between age and language learning
- ☐ E Language centers in the brain
- ☐ F Why language learning is critical for education

B Compare your answers with a partner's.

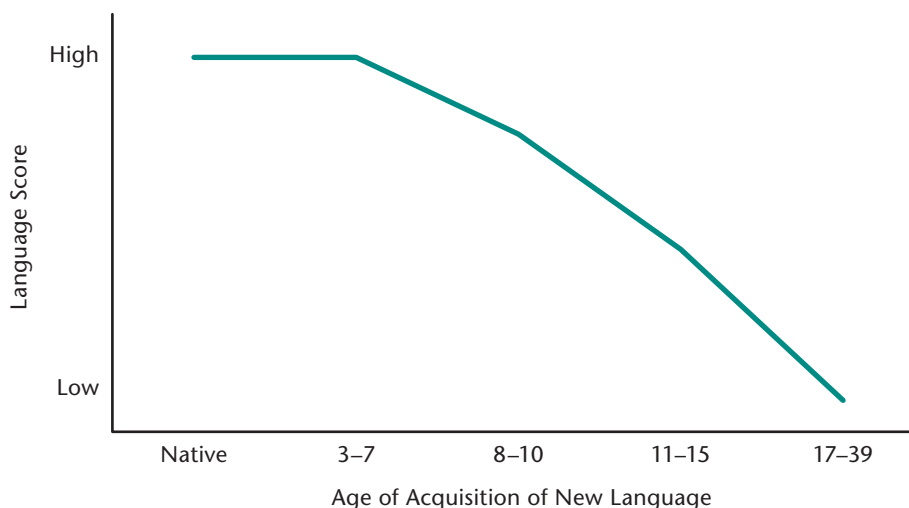
While You Read

As you read, stop at the end of each sentence that contains words in **bold**. Then follow the instructions in the box in the margin.

Learning a Language as an Adult

- 1 The question of how people learn an additional, or second language (L2), has received a great deal of attention from scholars. Their research has offered evidence for a number of conflicting claims about L2 learning. However, there is no dispute about one fundamental observation. It is possible, and quite common, for adults to achieve a high degree of success in learning L2 vocabulary, and even grammar. In their vocabulary and sometimes their grammar, they may become very much like a native speaker. The same degree of success is relatively rare in L2 pronunciation, however. Second language speakers' pronunciation is related to the age at which they are first exposed to the L2. This is the single best predictor of how closely their pronunciation will approximate the accent of native speakers. Speakers who were very young when they were first exposed to their L2 almost always have better pronunciation than those who were exposed at an older age. (See Figure 3.1.)
- 2 Results from a number of research studies offer evidence for the existence of this phenomenon. They support the basic rule that “younger is better in the long run.” Older learners may begin with an advantage, presumably because they have superior cognitive abilities. However, eventually, younger learners always catch up and overtake older learners, especially in pronunciation. It is important to stress that this has been shown in *second* language contexts, that is, where learners are living in the L2 community and receiving constant exposure to the L2. The same

Figure 3.1 Critical Period for Language Learning



Source: TED Talks 2010: The linguistic genius of babies

results have not been demonstrated in situations in *foreign* language learning, where learners live in the first language community and their primary exposure to the L2 is in the **classroom**.

- 3 How have scientists accounted for the fact that adult learners rarely attain nativelike pronunciation in the L2? One explanation is the *critical period hypothesis*. This idea has a much broader application than L2 learning and extends to other animals and other kinds of learning. The hypothesis states that if an animal or human does not receive the necessary stimulation during a critical period of development, it will not develop a specific ability. For example, baby cats that do not receive visual stimulation during a particular period will grow up blind, although there is nothing wrong with their eyes. Baby birds that are not exposed to the song of their species will not develop normal songs. Their songs will sound different.
- 4 **These ideas** have important implications for language learning. Proponents of the critical period for language learning argue that complete acquisition of language is only possible before *cerebral lateralization* ends – about the age of twelve. Cerebral lateralization occurs when two hemispheres of the brain increasingly specialize in particular functions. (See Figure 3.2.) At the end of this process, control of most, although not all, language function is permanently located in the left hemisphere. The right hemisphere is responsible, among other things, for visual and spatial perception. When lateralization is complete, according to the theory, the critical period closes. This is the period during which most humans

WHILE YOU READ 1

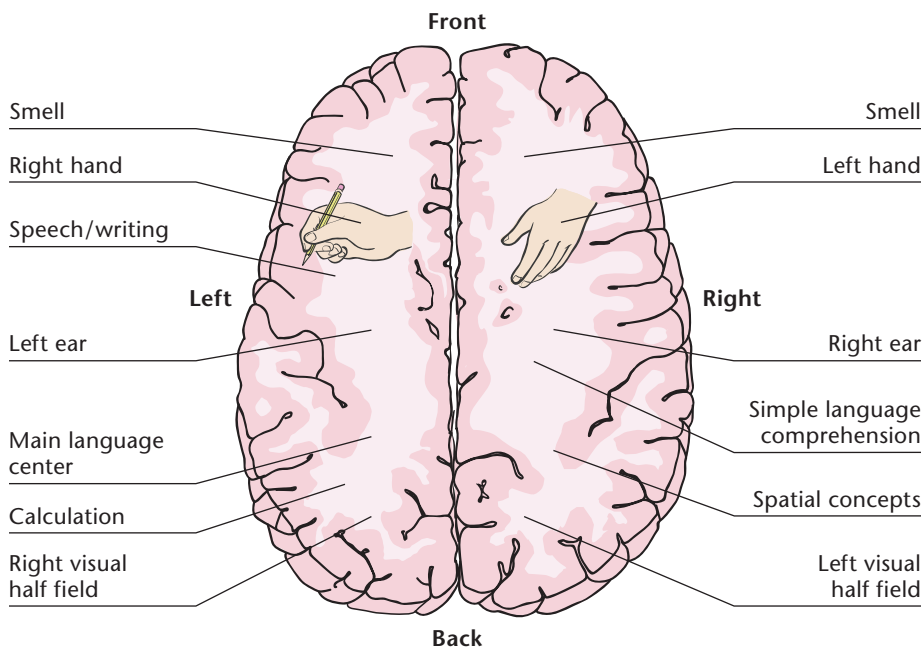
What do you think the topic of the reading is?

- a) Second language learning
- b) Comparison of second and foreign learning
- c) Age and language learning

WHILE YOU READ 2

Look back in paragraph 3 to find what *These ideas* refers to. Highlight the earlier ideas that this continuing idea marker refers to.

Figure 3.2 Functions of the Left and Right Hemispheres of the Human Brain



can achieve nativelike mastery of a language, particularly in the area of pronunciation.

- 5 There is not a lot of evidence for the critical period for first language learning because there are not many situations in which children have no exposure to language until they are 12 years old. There have been just a few cases of modern *feral children*, or children who have grown up away from adults and civilization. There is also one famous case of Genie, a child abused by her parents locking her in a room and never speaking to her. The authorities found her when she was 13 years old. Both in her case and in the case of feral children, the critical period hypothesis was supported: These individuals never fully mastered language. They acquired an extensive vocabulary, but their grammar and pronunciation were not **nativelike**.
- 6 There is more evidence for the critical period hypothesis for L2 learning than for first language learning. It seems to apply most strongly to pronunciation. It suggests that learners who wish to acquire a nativelike accent need to begin learning when they are children and that adult learners are



unlikely ever to attain that goal. Nevertheless, there are counterexamples. There are adult L2 learners who can pass as native speakers, and there are learners who, with extensive exposure to the L2 as children, are not nativelike in their L2 as adults. However, both of these are relatively rare. In addition, there does not seem to be a precise age at which complete mastery is no longer possible. The ability to pronounce the L2 like a native speaker does not disappear suddenly; instead, it declines gradually. For this reason, many L2 researchers prefer the term *sensitive period* to critical period.

- 7 It should be emphasized that these ideas do not justify an end to the teaching of L2 pronunciation. It is possible for learners to achieve very good pronunciation in the L2 through instruction, hard work, and practice. Second language learners can develop speech that is grammatical, expressive, and perfectly comprehensible. They do not need to sound like native **speakers**.

WHILE YOU READ 3

Look back and highlight the words and phrases that can help you figure out the meaning of *feral children*.

When a family immigrates to a new country, the children are far more likely than their parents to develop native-like pronunciation.

WHILE YOU READ 4

Think about the topic of the reading again. Was your first guess correct? If not, circle a new choice.

- a) Second language learning
- b) Comparison of second and foreign learning
- c) Age and language learning

Main Idea Check

Match the main ideas below to five of the paragraphs in Reading 2. Write the number of the paragraph on the blank line.

- _____ A Brain lateralization provides a possible explanation for the critical period of language acquisition.
- _____ B The critical period is not limited to language; it applies to other skills and abilities as well.
- _____ C Several cases of feral and abused children provide support for the critical period hypothesis.
- _____ D The ability to pronounce a second language like a native speaker is related to the age at which learning begins.
- _____ E Although adult second language learners may retain an accent, they can still develop comprehensible pronunciation.

A Closer Look

Look back at Reading 2 to answer the following questions.

- 1 Which of these statements does *not* accurately reflect the information in paragraph 2?
 - a Adults have a cognitive advantage over children.
 - b Children learn their second language faster than adults.
 - c Second language learning success differs depending on learning context.
 - d Children are more successful language learners than adults in the long run.
- 2 What does the *critical period hypothesis* propose?
 - a Cognitive and perceptual abilities develop at specific times and in a specific order.
 - b Animals need visual and auditory stimulus in order to survive.
 - c Adults cannot learn languages as well as children.
 - d There is a limited period during which the brain must receive stimulus in order to develop certain abilities.
- 3 All language functions are located in the left hemisphere. **True or False?**
- 4 What two facts about the experience of Genie and feral children provide support for the *critical period hypothesis*?
 - a They did not have exposure to language during the critical period.
 - b They lived without contact with adults during the critical period.
 - c The never fully acquired their first language.
 - d They acquired a normal vocabulary.
- 5 There are some adult second language learners who develop nativelike pronunciation. **True or False?**

- 6 Why do some scientists prefer the term *sensitive period* rather than *critical period*?
- a They are not really sure if the critical period applies to everyone.
 - b People are especially sensitive to any exposure to a second language when they are children.
 - c The loss of language learning ability is gradual rather than sudden.
 - d Animals as well as human beings share this important developmental period.

Skill Review

In Skills and Strategies 7, you learned that most readings have a central thesis that the writer wants to express. Identifying the thesis of a reading is an important academic skill.

A Review Reading 2, and then answer the questions below.

1 What is the topic of the reading?

2 What claim is the writer making about this topic?

3 Is there a sentence that contains the thesis? If so highlight it.

B With a partner, match the function of each paragraph in the reading in the right hand column with the correct paragraph. Write the paragraph number in the left hand column.

PARAGRAPH NUMBER	FUNCTION OF PARAGRAPH
	Shows more specific application to <i>second</i> language learning
	Provides scientific explanation for thesis
	Shows broad application of thesis
	Presents thesis
	Discusses importance of main idea for teaching
	Provides evidence for thesis
	Shows specific application to language learning

Definitions

Find the words in Reading 2 that are similar to the definitions below.

- 1 opposing (*adj*) Par. 1
- 2 argument (*n*) Par. 1
- 3 to be almost the same as (*v*) Par. 1
- 4 something that exists and can be seen and often is unusual (*adj*) Par. 2
- 5 most likely; most probably (*adv*) Par. 2
- 6 to reach the same place or standard as someone else (*phrasal v*) Par. 2
- 7 to go past someone or something (*v*) Par. 2
- 8 to reach; to stretch (*v*) Par. 3
- 9 something that causes another thing or person to become more active (*n*) Par. 3
- 10 related to seeing (*adj*) Par. 3
- 11 a group of animals or plants that have similar characteristics (*n*) Par. 3
- 12 complete control or understanding of something (*n*) Par. 4
- 13 wild (*adj*) Par. 5
- 14 to treat someone very badly (*v*) Par. 5
- 15 exact (*adj*) Par. 6

Words in Context

Complete the passages with words or phrases from Reading 2 in the box below.

attain	fundamental	implications	observation	scholars
counterexamples	hypothesis	in the long run	proponents	superior

- 1 U.S. students do not have a very good record in learning foreign languages.
_____ ^a who study language learning claim that the _____ ^b
problem with foreign language education in the United States is that children do not
begin learning when they are young. As a result, it is unlikely that many of them will
ever _____ ^c advanced proficiency. _____ ^d of foreign language
education argue that this lack of proficiency has negative _____ ^e for the
nation, especially in international business and government relations.
- 2 Educators often discuss the contributions of ability and hard work to school
performance. One _____ ^f is that hard work is important, but
_____ ^g intelligence is even more important. These educators argue that
people with _____ ^h abilities usually perform better in school than people

who work hard but have average abilities. They admit, however, that this is simply a generalization and that it is always possible to find _____ to this general _____.

Academic Word List

The following are Academic Word List words from Readings 1 and 2 of this unit. Use these words to complete the sentences. (For more on the Academic Word List, see page 256.)

acquisition (<i>n</i>)	attain (<i>v</i>)	distinctions (<i>n</i>)	fundamental (<i>adj</i>)	utilize (<i>v</i>)
approximate (<i>v</i>)	conflicting (<i>adj</i>)	exposure (<i>n</i>)	perceive (<i>v</i>)	visual (<i>adj</i>)

- 1 She listened to the teacher and tried to _____ his pronunciation.
- 2 _____ information is processed in both hemispheres of the brain.
- 3 There are _____ arguments about the best way to learn an additional language.
- 4 It is a common belief that language _____ becomes easier with the third and fourth language, but scientists are not sure that this is true.
- 5 Research has demonstrated that it is easier to _____ sounds in women's speech than in men's speech.
- 6 Language learning scholars _____ advanced technology in their research.
- 7 _____ to print material in the home, such as books and newspapers, is an important predictor of a child's reading performance.
- 8 Some people with extraordinary abilities can _____ a high level of proficiency in a new language after a very short period of study.
- 9 Speakers of English have difficulty hearing the _____ between tones in languages such as Chinese and Vietnamese.
- 10 Reading is a skill that is _____ to success in modern life.

Critical Thinking

Reading 1 discusses the earliest stages of language learning and the importance of early exposure. Reading 2 suggests some limitations on language learning, especially in learning the sounds of language.

Work with a partner. Based on what you have learned in Reading 1 and 2, what advice would you give the following people about what to expect from language learning experiences.

- 1 A married couple – he speaks English, she speaks Korean: They have a six-month-old baby, and they want her to become bilingual. They want your advice on what to do.
- 2 An Arabic-speaking high school student who will study at a university in Australia next year: He wants to know the best way to spend his time in his study of English.
- 3 The director of a school district's foreign language program: She wants to know when children should begin foreign language instruction.
- 4 The director of a government agency that prepares military and intelligence officers to work in other countries: The officers must be able to work in these countries as if they are native speakers. He wants your advice on language education for these officers.

APPLYING INFORMATION

You use critical thinking skills when you apply information you have just learned to new situations.

Research

Research a case of a child who was raised in isolation, such as Genie. Find answers to the following questions.

- What were the circumstances of his or her childhood?
- What have researchers learned about language acquisition from this case?

Writing

Write two paragraphs about your research. The first paragraph will describe the person's childhood, and the second will describe the importance of this case to language learning research.

Improving Your Reading Speed

Good readers read quickly and still understand most of what they read.

- A** Read the instructions and strategies for Improving Your Reading Speed in Appendix 3 on page 273.
- B** Choose either Reading 1 or Reading 2 in this unit. Read it without stopping. Time how long it takes you to finish the text in minutes and seconds. Enter the time in the chart on page 274. Then calculate your reading speed in number of words per minute.

Definition and Classification

As you read academic textbooks, you will meet unfamiliar technical words and their definitions. You will also find that writers use classification to divide general concepts into a number of different types. Identifying and understanding texts that contain definitions and classifications will help your academic reading.

Examples & Explanations

Phonetics is the study of speech sounds made in human language.

Here the writer uses the verb *to be* to introduce the definition of the term *phonetics*.

Matter is defined as anything that occupies space and weight.

In this example, the verb phrase *is defined as* introduces the definition of *matter*.

National fertility rates and mortality rates (i.e., the number of births and deaths in a country per year) are used to predict future population growth.

Here two technical terms are defined by words that follow the marker *i.e.*, which means *that is*, and are enclosed in parentheses.

Research shows that there is a relationship between a healthy lifestyle and **cognitive ability, the ability** to think and to reason.

The writer explains the term *cognitive ability* by providing the definition in a noun phrase that follows the term. The noun phrase is always set off by a comma.

A hypothesis refers to an idea or explanation for something that is based on known facts but has not yet been proven.

The definition marker *refers to* introduces the meaning of the term *hypothesis*.

The Language of Definition and Classification

Here are some common definition and classification markers.

DEFINITION MARKERS	
Verbs	Others
<i>to be</i>	<i>i.e.</i>
<i>to be called</i>	<i>in other words</i>
<i>to be known as</i>	+ a comma between a technical term and its defining noun or noun phrase: _____, _____
<i>to define</i>	
<i>to refer to</i>	

CLASSIFICATION MARKERS		
Verbs	Nouns	
<i>to categorize</i>	<i>category</i>	<i>kind</i>
<i>to classify</i>	<i>class</i>	<i>part</i>
<i>to distinguish</i>	<i>component</i>	<i>section</i>
<i>to divide</i>	<i>division</i>	<i>sort</i>
<i>to group</i>	<i>group</i>	<i>type</i>

Strategies

These strategies will help you recognize and understand texts that contain technical terms, definitions, and classification.

- Expect writers to use technical terms and to define them in a text.
- Look for definition markers. They will help you to identify the technical terms and their meanings.
- When you meet a technical term, highlight it and its definition. This will help you remember and understand the term.
- Look for classification markers. This will help you to identify the general term and its types.
- When you meet classifications, make notes in the margins to show the general term and its types.

Skill Practice 1

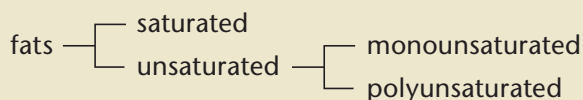
Read the following sentences. Highlight the technical terms and the definition markers. Underline the definitions. The first one has been done for you.

- 1 Cognates refer to words in two or more languages that share the same origin and have similar spellings and meanings.
- 2 Primary school teachers often find that although their students have good decoding skills (i.e., they use their understanding of letter-sound relationships to correctly pronounce written words), this does not necessarily mean they understand the text.
- 3 An ethnic group can be defined as a group of people who share the same ancestry and culture and who often live as a minority in a larger society.
- 4 The family is the most important influence in teaching children how to interact with one another and to become members of society, a process known as socialization.
- 5 Geographers often use toponyms, in other words, place names, as important clues about the social, historical, and physical geography of a place.
- 6 Acquiring linguistic competence (i.e., the rules that govern grammar, vocabulary, and pronunciation of a language) is, of course, an important part of second language learning, but it is also important to know how to adapt your speech to different social situations.
- 7 In the English language, intonation (i.e., changes in the tone or frequency of language) usually falls at the end of a sentence but rises at the end of a question.
- 8 Supporters of the whole language approach to teaching claim that students learn better by this approach than by phonics instruction, an approach that emphasizes teaching students how to sound out words.

Skill Practice 2

Read the following paragraphs. Highlight the general term and underline the classification markers. Then draw a diagram showing the classification. The first one has been done for you.

- 1 Nutritionists have determined that there are two main types of **fats** in food: saturated fats and unsaturated fats. Within unsaturated fats, we can distinguish between monounsaturated fats and polyunsaturated fats.



- 2 Linguists who study phonetics distinguish between two approaches to speech sounds. One approach is to focus on the way speech sounds are produced by the speaker. This is known as articulatory phonetics. A second approach is to study the way in which speech creates waves of pressure that move through the air. This field of research is called acoustic phonetics.
- 3 Status is usually defined by sociologists as the position of an individual in relation to other members of a group. Scientists distinguish two kinds of statuses. An individual has ascribed status, regardless of his or her abilities and wishes. This refers to being born male or female and being born into a social class or racial or ethnic group. Achieved status, the other category, refers to the social position an individual reaches through choice, ability, and competition.
- 4 Psychologists studying motivation and its effects on achievement have identified two types of motivation. One kind is intrinsic motivation, the desire to perform a task successfully for its own sake. For example, answer these questions: Are you working hard in this class because you enjoy learning? If you had time, would you take more classes like this? If you answer “Yes” to these questions, then you are intrinsically motivated. The other type, extrinsic motivation, is the desire that results from outside incentives – the rewards or punishment that individuals may receive for doing or failing to do something. Are you working hard in this class to get a good grade or to be admitted to university so that you can get a good job later? If your answer to these questions is “Yes,” then you are extrinsically motivated.

Skill Practice 3

Reread paragraphs 2–4 in Skill Practice 2, and highlight the definitions of the following terms.

- | | | |
|--------------------------|-------------------|------------------------|
| 1 articulatory phonetics | 3 ascribed status | 5 intrinsic motivation |
| 2 acoustic phonetics | 4 achieved status | 6 extrinsic motivation |

Connecting to the Topic

Discuss the following questions with a partner.

- 1 How would you make a polite request to borrow something, for example, a book, in English? In your native language?
- 2 Would your answers to question 1 be the same for a friend and a teacher?
- 3 Have you ever heard a second language learner making a request in your language that sounded strange or perhaps impolite? Explain your answer.
- 4 Do you think there are rules for doing things like making requests or saying *thank you*? Explain your answer.

Previewing and Predicting

Reading the title and first sentence of each paragraph is a quick way to predict what a reading will be about.

A Read the first sentence of paragraphs 2–7 in Reading 3, and think of a question that you expect each paragraph to answer. Then choose the question below that is most like your question. Write the number of the paragraph next to that question.

PARAGRAPH	QUESTION
	What is a <i>speech act</i> ?
	What is one explanation for miscommunication?
	What knowledge is required for speaking appropriately?
	What is the research evidence for cross-cultural differences in rules of speaking?
	How do rules of speaking differ across cultures?
	What are <i>rules of speaking</i> ?

B Compare your answers with a partner's.

While You Read

As you read, stop at the end of each sentence that contains words in **bold**. Then follow the instructions in the box in the margin.

Rules of Speaking

- 1 Acquiring a second language involves learning many rules, including the rules that govern the grammar, vocabulary, and pronunciation of a language. However, mastering these rules is not sufficient to make a speaker an effective communicator in the second language. For effective communication, it is crucial to be able to understand and produce socially appropriate speech in the second language, and appropriate speech requires cultural knowledge.
- 2 The following conversation and its outcome illustrate the importance of cultural knowledge and how miscommunication may result when such knowledge is lacking. This conversation between a U.S. host and an international student is hypothetical, but the same type of situation has been documented by language researchers.

U.S. Host: Would you like some more dessert? Do have some!

Student: No. Thank you very much.

The host changes the topic of conversation and doesn't mention dessert again. The student really did want more dessert but was trying to appear polite by refusing. He remains hungry and might even feel offended because the host has not repeated the offer.

Clearly, the speech of each participant is linguistically correct – there are no errors in grammar or vocabulary choice. What is also clear, however, is that a breakdown of communication has occurred in the situation. The student has given the host a false impression of his wishes. She thinks he does not want more dessert, but this is not true. She has interpreted the refusal as sincere. She is following her culture's rules for politeness, which are based on the idea that hosts should not impose on their guests



There may be different rules of speaking across cultures, such as the rules for table talk.

by continuing to offer food after they have refused. Unfortunately, the host might be giving the student the impression that she is impolite by not encouraging him to take more food. Furthermore, neither participant in the conversation realizes that there has been a misunderstanding.

3 Such misunderstandings offer evidence for the existence of *rules of speaking*. These are rules that enable us to interact in socially and culturally appropriate ways. They are learned and used, usually unconsciously, by members of a *speech community*. A speech community is defined as a group of people who share both a language and rules of speaking. In the example, the host is following a rule in her culture, which states that offers of more food are made once, or at most, twice. The student, on the other hand, applies a rule from his own culture, which states that you should never accept the first offer of food or even the second. In his culture, it is polite to wait until the third or fourth offer, which he knows will come. In other words, in the same way that second language learners may transfer pronunciation and grammatical structures from their first language to their second language, they may also transfer rules of speaking.

4 Understanding **such differences** is particularly important for performing successful *speech acts*. Speech acts are actions that are performed by speaking. There are many types of speech acts, including making and refusing requests; making and accepting apologies, compliments, and offers; expressing gratitude; and making complaints, among others, and are used in every culture. Knowing how to perform these speech acts appropriately is essential for maintaining good relations among members of a community. In general, all members of a community have this knowledge and use it when they perform these speech acts. Some scholars have described them as the lubrication that keeps interactions among community members smooth and successful.

5 Although these speech acts are probably universal, the rules for when and how to perform them may differ considerably from one culture to another. To perform them successfully, learners need two kinds of knowledge. First, they must know *when* to perform them, and second, they must know *how* to perform them. For the first kind of knowledge, they must know the situations in which it is appropriate to perform these speech acts. For example, under what circumstances is it necessary to apologize? If you are 5 minutes late for an appointment? Or 30 minutes late? If you walk into class after it has already begun? If you bump into someone on the street? If you push ahead in line? Do the answers to these questions change depending on the person you are speaking to – your sister, your friend, your teacher, or a stranger? Cultures differ about which situations require an apology. In some cultures, being late does not call for an apology or explanation; in others, it may cause offense. The answers to these questions require considerable cultural **knowledge**.

6 Once learners understand that a certain speech act is appropriate or even necessary, they must figure out how to perform it. For example, if a situation requires an apology, what form should it take? Is a simple “I’m

WHILE YOU READ 1

What is the continuing idea that *such differences* refers to? Highlight it.

WHILE YOU READ 2

Look back in paragraph 5 for an example of classification. Highlight the sentence with the classification marker.



In many cultures, being late requires an apology.

sorry” sufficient, or is something more elaborate necessary? Should it include a reason or excuse? “I’m sorry I’m late. Traffic was terrible.” Should it include a promise about the future? “I’m sorry I’m late. It won’t happen again.” Should it include some self-criticism? “I’m sorry I’m late. I am a very bad student.” Cultures differ as to how speech acts such as apologies should be performed. In some cultures, offering an excuse is not really an apology at all. If you want an apology to sound sincere, you must accept blame. In addition, interacting with different people might call for different apologies: “I’m terribly sorry that I made that mistake” for your boss, and “Sorry about that” for your **roommate**.

7 There is extensive empirical data supporting both the claim that these rules of speaking exist and that they often differ across cultures. For example, one study showed that Japanese speakers are generally less willing than North American speakers to directly refuse a request. Another study suggests that South Asians, unlike North Americans and Europeans, often do not thank shopkeepers, close friends, or family members. Cross-cultural research has demonstrated that successful speech acts can be quite complex. For example, North Americans tend to minimize rather than accept compliments. If a woman receives a compliment such as, “What a beautiful sweater,” the appropriate response is first to offer brief acceptance, “Thank you,” but then to minimize the compliment. Examples of such responses include “Oh, it’s my sister’s” or “I got it on sale,” or “This? It has been hanging in my closet for years!” Acceptance of the compliment with a response, such as “Thanks, it is very nice. I think so, too,” would be considered impolite and inappropriate. A simple “thank you” and no more would be considered adequate but too brief to be truly **polite**.

8 Learners of a second language, especially those who live in the second language culture, need to be aware that the rules of polite interaction are not universal. Learners should be able to identify situations in which the rules of the cultures are different, and they must also be ready to modify their speech to conform to the conventions of the society in which they live. It may be difficult for learners to accomplish these two tasks, but without an understanding of rules of speaking, there may be serious misunderstandings.

WHILE YOU READ 3

What is the main idea of paragraph 6? Highlight it.

WHILE YOU READ 4

Look back in paragraph 7 for an example of a reduced relative clause. Highlight it.

Main Idea Check

Match the main ideas below to five of the paragraphs in Reading 3. Write the number of the paragraph on the blank line.

- _____ A Learners need to understand when to perform a particular speech act.
- _____ B Research suggests that rules of speaking vary across cultures.
- _____ C Second language learning entails acquisition of rules for social interaction as well as language rules.
- _____ D Learners must acquire *rules of speaking* – the rules that govern social interaction.
- _____ E It is important to learn how to perform speech acts appropriately.

A Closer Look

Look back at Reading 3 to answer the following questions.

- 1 What principle does the conversation in Reading 3 demonstrate?
 - a Second language learning is a very complex and difficult process.
 - b When people visit another country, they should try hard to learn how to be polite.
 - c People from different cultures often have communication problems when they interact.
 - d Learning a second language involves more than learning grammar and vocabulary.
- 2 Most native speakers would be able to describe the rules of speaking that they use.
True or False?
- 3 Which of the following would *not* be an example of a speech act.
 - a Promising to meet someone
 - b Reading a poem aloud
 - c Thanking someone for help
 - d Complimenting someone on a new haircut
 - e Asking someone to lend you money
- 4 Why does the writer refer to *rules of speaking* as “lubrication”?
 - a The writer wants to demonstrate that society is like a car that needs gas and oil.
 - b The writer wants to show that like oil that keeps a machine running well, appropriate speech helps interactions operate smoothly.
 - c The writer wants to illustrate the idea that human relationships can sometimes break down like a car or other kinds of machines.
 - d The writer wants to convince readers that rules of speaking are very important for society.
- 5 According to paragraphs 5 and 6, what two factors would speakers from a different culture need to consider when deciding when to thank a person for a favor?
 - a They would need to think about cross-cultural misunderstanding.
 - b They would need to think about how to say *thank you*.
 - c They would need to consider their relationship to that person.
 - d They would need to consider the circumstances: How big was the favor?

- 6 In acquiring rules of speaking, what two things must second language learners do, according to paragraphs 5 and 6?
- a They must discover the contexts in which particular speech acts are considered appropriate or necessary.
 - b They must learn vocabulary, grammar rules, and pronunciation.
 - c They must acquire cultural differences.
 - d They must learn which words and phrases they need to perform speech acts.

Skill Review

In Skills and Strategies 8, you learned that academic writers often define technical terms and divide important concepts into categories. Identifying definitions and classification is important in academic reading.

A Reread paragraphs 3 and 4 in Reading 3. Highlight the definitions for the following terms:

- Rules of speaking
- Speech community
- Speech act

B Work with a partner. Write definitions for the following speech acts from Reading 3. Use a variety of definition markers from the Language of Definition and Classification chart on page 147.

1 apology

2 promise

3 complaint

4 refusal

Definitions

Find the words in Reading 3 that are similar to the definitions below.

- 1 an idea of what something is like (*n*) Par. 2
- 2 to decide on the meaning of something (*v*) Par. 2
- 3 honest; genuine (*adj*) Par. 2
- 4 to force someone to accept something (*v*) Par. 2
- 5 to move something from one place to another (*v*) Par. 3
- 6 remarks that show approval or admiration (*n pl*) Par. 4
- 7 to need or require (*v 2 words*) Par. 5
- 8 having a lot of detail (*adj*) Par. 6
- 9 a reason that you give when you have done something wrong (*n*) Par. 6
- 10 to make something seem less important than it really is (*v*) Par. 7

Synonyms

Complete the sentences with words from Reading 3 in the box below. These words replace the words in parentheses, which are similar in meaning.

breakdown	conventions	empirical	gratitude	modify
conform	document (<i>v</i>)	govern	hypothetical	unconsciously

- 1 Because immigrants want to succeed in their new country, they often encourage their children to (fit in) _____ to their new culture.
- 2 There was a (failure) _____ in the discussions between the workers and the company managers.
- 3 Researchers presented a / an (data-based) _____ report that showed the role of age in second language learning.
- 4 Immigrant children do not always understand the language of their new country so their teachers often have to (change) _____ their lesson plans for them.
- 5 It is important to (record) _____ any changes in your health so you can inform your doctor.
- 6 Every culture has its own (customs) _____ regarding social interaction.
- 7 The students showed their (thanks; appreciation) _____ by giving their teacher a gift.
- 8 Children learn their first language (without thinking) _____.
- 9 The speaker asked what we would do in a / an (imagined) _____ situation.
- 10 Many health professionals believe that patients' attitudes (control) _____ how quickly they recover from surgery.

Critical Thinking

Reading 3 emphasizes the importance of cultural knowledge in successful communication.

A Chose one of the speech acts in the chart below, and think about how you would perform it in your own language when speaking to (1) a close friend and (2) to someone whom you respect or is older, perhaps a teacher, a doctor, or your boss. Fill in the chart with an English translation of your response.

PERSONALIZING

Thinking about how new information applies to your own life can help you understand a text better.

SPEECH ACT	A FRIEND	A TEACHER, DOCTOR, ETC.
Apology		
Request		
Invitation		
Refusal of an invitation		

B Share your chart with your classmates, and discuss any similarities or differences you find.

Research

Do some research by interviewing classmates or people in your community. Find some examples for the following.

- Speech acts that nonnative speakers have trouble performing correctly in the native languages of your classmates
- Speech acts that your classmates have had trouble performing in English. In other words, speech acts that have ended in miscommunication.

Writing

Write two paragraphs about your research. The first paragraph will describe one speech act and how it should be performed. The second paragraph will be about the problems that second language speakers have in performing it. Use information from your interview.

Connecting to the Topic

Discuss the following questions with a partner.

- 1 Do any people in the community where you live speak more than one language?
- 2 Are there any services in your community for people who do not speak the dominant language?
- 3 Are there advantages to having more than one language in a community? Are there disadvantages? Explain your answers.

Previewing and Predicting

Reading section headings and the first one or two sentences of each section can help you predict what a reading will be about.

A Read the section headings of Reading 4 and the first two sentences of each section. Then decide what content will be in each section. Write the number of the section (II–IV) next to the topics that best describe it. Each section has two topics.

SECTION	TOPIC
	How multilingual communities are established
	Why some languages disappear
	The role of the government in language use
	Communities that use more than one language
	Suppression of minority languages
	Economic factors in language use

B Compare your answers with a partner's.

While You Read

As you read, stop at the end of each sentence that contains words in **bold**. Follow the instructions in the box in the margin.

Languages in Contact

I. Introduction

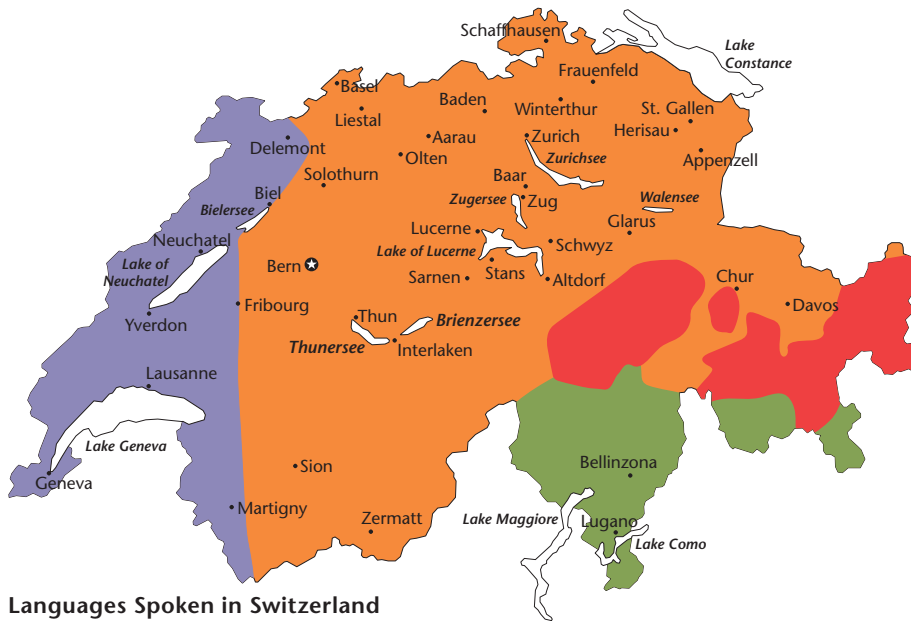
- 1 In Sri Lanka, 2012 was the “Year of Trilingualism.” In India, multilingualism is so common that government forms ask people to list their first, second, and third languages. In 2010, the city of New York listed 176 different languages used in the public schools there; Los Angeles schools had more than 90. Multilingualism is common all over the world; in fact, it is far more common than monolingualism. Throughout history, contact between people who speak different languages has had a wide range of outcomes. The outcomes depend on a variety of factors, including the type of contact; the economic, political, and cultural status of the communities where the languages are spoken; and government policies.

II. Multilingual Communities

- 2 In some cases, different language communities coexist for a long time; that is, they exhibit what is known as *stable bilingualism*. In stable bilingual communities, residents speak two languages with varying levels of proficiency. Switzerland is a good example of this kind of *language contact* situation, where several languages have equal status. A Swiss person may have German, French, Italian, or Romansch as a native language, but can probably also speak at least one of the others. This has been the case in Switzerland for centuries.
- 3 In other cases, the language contact is relatively sudden. There are two main categories of rapid language contact. The first type occurs when a

WHILE YOU READ 1

Look back for a definition marker. Highlight it.



Languages Spoken in Switzerland

■ German, 64%
 ■ French, 19%
 ■ Italian, 8%
 ■ Romansh, <1%

conquering group moves into a new language community, bringing its language with it. The British colonial empire is a good example of this. The British brought English to North America and later to South Asia and a large part of the African continent. Conquest introduces status differences between the two language communities. English had a higher status in relation to the local languages in the colonies.

4 A second kind of rapid language contact occurs with migration, which often creates communities with *transitional bilingualism*. A group of people moves to a new community, bringing their home language with them. For example, when large numbers of Chinese immigrated to Canada and the United States in the nineteenth and twentieth centuries, they established Chinese-speaking communities in their new countries. In cases like these, often bilingualism does not persist. After a while, one language loses ground to the other in a process known as *language shift*. There is a complex set of factors that determine the outcome.

5 In most cases of language contact, the most powerful factor is economics. In colonial contexts, learning the dominant language could be a path to advancement. Under British colonial power, for example, in present-day India, Kenya, and Malaysia, many residents were eager to learn English in order to improve their economic situation. For the British, **this** was also advantageous because the literate, bilingual population in these countries

helped them administer their colonial empire. When there is considerable disparity in the number of speakers of each language, there is unlikely to be language shift. In the British colonies, for example, there were far more local residents than native speakers of English. In these circumstances, the more likely outcome is bilingualism among a relatively small, higher-status sector of the population. In the British colonial empire, the use of English persisted, but English remained a minority language.

6 The economics of the immigrant language situation is similar in some respects. Adopting the language of their new country is generally a path to greater prosperity. Immigrants

know they have a better chance of finding a job in a new country if they learn the language. They also encourage their children to acquire the new language quickly. These decisions generally accelerate the process of language shift. However, in contrast to the colonial situation, there are fewer people in the immigrant community than the host community so language

WHILE YOU READ 2

Look back for a cause-and-effect marker. Highlight it.

WHILE YOU READ 3

What is the continuing idea that *this* refers to? Highlight it.





Immigrants learning the language of their new country

shift may eventually lead to the gradual disappearance of the immigrant language. This has occurred with most early immigrant languages in the United States and Canada, such as Italian, German, and Swedish. For communities in which there is continuing immigration, however, it is easier to maintain the immigrant language. This is one reason why Spanish remains a vibrant language in the United States. Immigrants, and especially their children, learn English, but the flow of new immigrants maintains the status of Spanish and the need for community bilingualism.

III. Endangered Languages and Language Death

- 7 Economic utility is paramount in the future of any **language**. Even in areas with stable bilingualism, languages that are spoken in rural areas often lose ground to dominant languages of the city, as young people leave farms and villages in pursuit of better jobs. This can begin a process of shift to the dominant language that may take several generations. This happened in Scotland and Ireland, where fewer and fewer people chose to speak the Gaelic languages of their communities, and more and more people shifted to English. English was, quite simply, more useful to them. The same thing has happened to the Maori language in New Zealand as young people shifted to English. These have become *endangered languages*.
- 8 People in a community may choose to speak the dominant language, but when children cease learning the community language and learn only the dominant language, the result is called *language death*. In North, Central, and South America, the dominance of English, Spanish, and Portuguese has led to the death of many native American languages. When European explorers came to the Americas, there were thousands of local languages. Scholars believe that today there are between 150 and 175 of

WHILE YOU READ 4

Look ahead in this paragraph for a supporting detail for this main idea. Highlight it.

them; almost half of them will probably die when the current native speakers die. There are no new native speakers. Around the world, 60 percent of all languages have fewer than 10,000 speakers. For many of them, the future is **uncertain**.

WHILE YOU READ 5

What is the main idea of paragraph 8? Highlight it.

IV. Language Policy

- 9 Government policy can also have considerable influence in language contact situations, including the future of endangered languages. A government may ban the use of minority or local languages in order to encourage the use of the language of those in power. It can restrict services, for example, health care, and only provide them in the dominant language. Perhaps most important, if education is provided only in the dominant language, children will be forced to learn and use it. In the eighteenth century, Russia banned the use of local languages, such as Polish and Lithuanian, in their empire. Only Russian was used in the schools. In the twentieth century, under the Spanish dictator Franco, the use of local languages, such as Basque and Catalan, was prohibited in schools and public places. Only Spanish was permitted. Even giving a child a minority-language name was forbidden.
- 10 This kind of suppression of local or minority language can hasten language shift and even language death. However, other outcomes are also possible. For many minority communities, language is a powerful and emotional symbol of their religion, culture, and identity. Native speakers keep their language alive by using it at home and making sure that the next generation learns it. Although in the past, Polish, Lithuanian, Basque, and Catalan were all suppressed by governments that promoted the dominant language; today they are all vigorous and healthy languages. The governments no longer prohibit the use of these languages. Active leaders have fought to save them, and members of the communities have also worked to keep their languages alive.
- 11 The outcome of language contact situations depends of a variety of factors. Economic utility is generally the most important factor in the health and longevity of any language. However, if the language is an important part of the community's cultural identity and there are speakers who are willing to take an active part in maintaining its vitality, people will continue to use it.



Main Idea Check

Match the main ideas below to five of the paragraphs in Reading 4. Write the number of the paragraph on the blank line.

- _____ A Language death occurs when the children no longer learn the community language.
- _____ B Economics has an important influence on language choice.
- _____ C Conquest and colonization bring languages into rapid contact.
- _____ D Governments sometimes suppress minority languages.
- _____ E Immigrant languages often disappear in language shift.

A Closer Look

Look back at Reading 4 to answer the following questions.

- 1 Most people in the world speak more than one language. **True or False?**
- 2 In which of the following circumstances is transitional bilingualism most likely to occur?
 - a Two communities, where languages of equal status are spoken, exist side by side.
 - b A western country has established a colony in a distant place.
 - c Immigrants have come to a new country where they have established a small community.
 - d A city with speakers of different languages grows and spreads into the countryside.
- 3 What factors are important in determining the outcome of language contact according to the reading? Circle all that apply.
 - a Government policies
 - b Literacy rates
 - c Longevity of the community
 - d Economic necessity
 - e Cultural identity
- 4 At what point is a language dead?
 - a When children no longer learn it
 - b When the last native speaker dies
 - c When governments suppress it
 - d When it is no longer taught in schools
- 5 Which of these circumstance is *most* likely to lead to stable bilingualism in an immigrant community?
 - a Parents speak the immigrant language to their children.
 - b The government does not suppress the immigrant language.
 - c There are cultural programs in the immigrant language.
 - d New immigrants continue to join the community.

Skill Review

In Skills and Strategies 8, you learned that academic writers often use words and phrases to mark definitions and classification. Identifying definitions and classification is important in academic reading.

A Review Reading 4 to find the sentences that contain the terms *language shift* or *language death*. Write the sentences on the blank lines below. Then highlight the definition markers, and underline the definitions for each term.

1 _____

2 _____

B Reread paragraph 3 and 4 in Reading 4.

1 Find classification markers to help you understand the term *rapid language contact*. Highlight the markers.

2 Find the categories for *rapid language contact*, which are identified in the reading. Write them on the blank lines below.

a _____

b _____

C Write a classification statement for the two types of bilingual communities described in Reading 4. Review the Language of Classification box for markers of classification. Then write a definition of each type of bilingual community.

Classification statement: There are two _____

Definition 1: _____

Definition 2: _____

Definitions

Find the words in Reading 4 that are similar to the definitions below.

- 1 sets of plans or rules followed by a government, business, or other group (*n pl*) Par. 1
- 2 people who live in a place (*n pl*) Par. 2
- 3 helpful; beneficial (*adj*) Par. 5
- 4 able to read and write (*adj*) Par. 5
- 5 to control the operation or management (*v*) Par. 5
- 6 a specific part of society (*n*) Par. 5
- 7 to make something go faster (*v*) Par. 6
- 8 changing or developing slowly (*adj*) Par. 6
- 9 to keep up; continue (*v*) Par. 6
- 10 energetic; lively (*adj*) Par. 6
- 11 usefulness (*n*) Par. 7
- 12 most important (*adj*) Par. 7
- 13 to stop an action (*v*) Par. 8
- 14 a leader with complete power (*n*) Par. 9
- 15 a long life (*n*) Par. 11

Words in Context

Complete the sentences with words from Reading 4 in the box below.

coexisted	eventually	hastened	path	vigorous
contact	exhibited	lost ground to	suppressed	vitality

- 1 The patient _____ strange symptoms that the doctors had never seen before.
- 2 When immigrants first arrive in a new country, they often choose to live in close _____ with other immigrants from the same country.
- 3 Minority languages have fewer speakers today than 100 years ago because they have _____ the world's 10 most widely spoken languages.
- 4 The French- and English-speaking communities have _____ in Canada for more than 200 years.
- 5 When languages lose most of their native speakers, they lose their _____ and often disappear.
- 6 For many immigrants, education is the _____ to success in their new countries.
- 7 Indigenous languages and culture were often _____ by colonial governments.

- 8 European diseases _____ the decline of many Native American groups in the seventeenth and eighteenth centuries.
- 9 There has been a/an _____ ongoing debate on immigration policy in many western countries.
- 10 Experts believe that half of today's languages will _____ disappear.

Academic Word List

The following are Academic Word List words from Readings 3 and 4 of this unit. Use these words to complete the sentences. (For more on the Academic Word List, see page 256.)

ceased (v)	impose (v)	maintain (v)	policy (n)	sector (n)
hypothetical (adj)	interpret (v)	modify (v)	residents (n)	utility (n)

- 1 Scientists have learned how to _____ defective genes by using viruses.
- 2 Only a small _____ of society will benefit from the new law.
- 3 Colonial leaders often tried to _____ their religion and culture on indigenous people.
- 4 After several defects were found in their products, the medical equipment company _____ production.
- 5 The Dutch government established a new immigration _____ at the beginning of the twenty-first century.
- 6 Unfortunately, some students do not recognize the _____ of a second language.
- 7 Miscommunication may result if you cannot _____ the meaning of another person's comments.
- 8 The _____ of the city voted against an increase in taxes.
- 9 As part of their training, medical students must decide what to do in _____ emergencies.
- 10 Some scholars believe that it is important to _____ language diversity in the world, so they are working to save endangered languages.

Critical Thinking

Reading 4 discusses language death, which decreases language diversity around the world.

A Read the following two arguments about language diversity and language death. Which one do you agree with and why?

- 1 Linguistic and cultural diversity are an important source of knowledge. When languages and cultures die, we often lose knowledge of these cultures as well as knowledge about the natural world. We should not allow languages to die.
- 2 People make intelligent choices about the language they want to speak. Languages have emerged and died throughout history. We should not interfere with this natural process. We should not force people to learn endangered languages.

B Find a partner who has the opposite opinion, and discuss your reasons for your opinions.

EXPLORING OPINIONS

Critical readers form their own opinions about important topics in a text.

Research

Research a dying language. Find answers to the following questions.

- What is the history of this language?
- Are there many native speakers left? About how many?
- Are any children learning the language?
- Have there been any efforts to save the language? Explain your answer.

Writing

Write two paragraphs about your research. The first paragraph will describe the history of the language, and the second will describe its current status and efforts to save it.



Improving Your Reading Speed

Good readers read quickly and still understand most of what they read.

A Read the instructions and strategies for Improving Your Reading Speed in Appendix 3 on page 273.

B Choose either Reading 3 or Reading 4 in this unit. Read it without stopping. Time how long it takes you to finish the text in minutes and seconds. Enter the time in the chart on page 274. Then calculate your reading speed in number of words per minute.

Passive Sentences

Writers frequently use passive sentences in academic writing. Using the passive allows writers to focus on the action rather than the performer, or agent, of the action. Recognizing passive sentences and understanding why writers choose to use passive sentences will help you better understand academic texts.

Examples & Explanations

Forensic linguists analyze written and spoken language in order to provide help in legal and criminal cases.

In active sentences, the writer focuses on who performed the action (the agent). In this sentence, the agent is *forensic linguists*.

In the last two decades, considerable progress **has been made** in the field of forensic linguistics.

In passive sentences, the writer focuses on what happened, that is, the action, rather than the agent.

The threatening letter **was analyzed by** an experienced forensic linguist who later gave evidence in court.

In this sentence, the writer emphasizes the action – *the analysis of the letter*. The writer has added a *by* phrase, believing that including information about the agent is an important detail.

The letter **must have been written by** two different people, one of whom most likely was raised in the north of the country.

Note that a modal is often used in passive sentences.

A phone call **had been made** just before the attack. Police were using voice analysis to identify the caller.

In this sentence, the writer uses the passive because the agent – *the caller* – is unknown.

The Language of the Passive

The passive has two parts: any form of the verb *to be* and a past participle verb. If it is important to identify the agent, writers will add a *by* + noun phrase.

At least one form of the verb <i>to be</i> :	A past participle verb, for example:
be	argued
am / is / are	considered
was / were	made
being	thought
been	written

Strategies

These strategies will help you identify and understand passive sentences as you read.

- If you see one of the eight forms of the verb *to be*, scan ahead and look for a past participle.
- If you see a past participle, scan back to look for one of the eight forms of the verb *to be*.
- If you see a *by* + noun phrase, scan back for a passive verb.
- Remember that a reduced relative clause drops the “to be” part of the passive verb; for example: *Today’s government follows rules ~~that were~~ established by previous governments.*
- Use the general context of the reading to understand why the writer has chosen to use the passive.

Skill Practice 1

Read the following short texts and highlight all examples of the passive verb.

- 1 Sociolinguists are interested in how languages vary. This variation is found in each of the three main components of language. It is visible in the lexicon (i.e., the vocabulary of a language); in its grammar (i.e., the rules which are used to form phrases and sentences); and in its phonology (i.e., the sounds of language and the rules that govern their pronunciation).
- 2 Research has also confirmed the existence of gender varieties, the English that is used by men and women. For example, in both British and American English, men tend to use the nonstandard pronunciation of *-in* of the *-ing* ending. They say “I’m eatin’” more often than women do, for example. Men also tend to use nonstandard grammar more often than women. The following is more likely to be spoken by a male: “I didn’t see nothing.”

Skill Practice 3

In each of the following short texts, identify a clause in the second sentence that would benefit if the writer used the passive instead of the active. Rewrite that sentence in the passive. Add a *by* clause if necessary. The first one has been done for you.

- 1 Within every country, accents vary from one geographical region to another. In addition, people associate some accents with the speaker's gender, social class, or ethnic origin.

In addition, some accents are associated with the speaker's gender, social class, or ethnic origin.

- 2 Personal questions are often considered rude in some cultures. For example, people often consider it impolite to ask about such things as salary or how much a house costs.

- 3 The university officials admitted that they had made mistakes in their application process. In some cases, the university accepted students but a month later, rejected them.

- 4 Research has shown that many people suffer from a "sleep debt." People build up this sleep debt from weeks, even months, of lack of sleep.

- 5 The government announced that a small amount of taxpayers' money had been lost. Someone illegally transferred the money to an unknown account, and it is likely that the government will be unable to recover the money.

- 6 Clinical trials of new medical treatments should not begin until the risks and benefits to patients have been adequately assessed. Experts who are not working on these research projects and who have no financial interest in their success or failure should make such assessments.

- 7 Extremely high death rates, like those that are associated with HIV/AIDS, are not new in history. Bubonic plague, a disease that fleas transmit from rats to people, killed 35 percent of Europe's population in the fourteenth century.

Connecting to the Topic

Discuss the following questions with a partner.

- 1 What are some advantages to knowing more than one language?
- 2 Do you use or plan to use your additional language in your career? Explain your answer.
- 3 How do you feel about raising children in a bilingual environment? Do you think it helps them or hurts them?

Previewing and Predicting

Reading the section headings and looking at the graphs and photographs can help you predict what a reading will be about.

A Read the title and section headings in Reading 5. Look at the graphs and photographs. Then decide what content will be in each section. Write the number of the section (II–VI) next to the topics that best describe it.

SECTION	TOPIC
	Employment opportunities for people who know more than one language
	The growing importance of Chinese on the Internet
	Going to school in more than one language
	Economic benefits of knowing an additional language
	Multilingualism and the brain
	How multilingualism improves thinking
	How language is connected to culture
	The importance of languages other than English

B Compare your answers with a partner's.

While You Read

As you read, stop at the end of each sentence that contains words in **bold**. Then follow the instructions in the box in the margin.

The Advantages of Multilingualism

I. Introduction

- 1 A U.S. soldier who speaks Arabic receives \$1,000 more every month than his fellow soldiers who speak only English. A multinational company promotes a Belgian manager to vice president because she can speak English, French, and German in addition to her own language. A report shows that the test scores of French-English bilingual Canadian children are consistently higher than the scores of the children who speak only French. A five-year-old girl in Manchester, England, listens to her grandmother tell stories in Urdu. All of these people are enjoying the wide range of advantages of knowing more than one language.

II. Practical Advantages

- 2 The world grows more interconnected every day. Recent economic problems throughout the world have shown that it is no longer possible to think of countries in economic isolation; what happens to one country's economy is likely to have an impact on many other economies. Businesses are interconnected, as well. Whereas the public once thought of Apple as a U.S. company, Siemens as German, and Ericsson as Swedish, in fact, they are all multinational, with manufacturing operations and distribution networks all over the world. Thanks to technology, smaller companies can also reach across the globe. Billions of people are connected through the Internet and cell phones. The global markets are no longer limited by



Multinational companies and their products connect the world.



Multilingual skills are important for business success.

space, time, or international borders; language may be the final remaining barrier to global communication.

- 3 A global world demands global skills. Both employees and customers are international and mobile. This means that businesses need to operate in multiple languages, and employees who can help them do that may have advantages over their colleagues who cannot. A 2010 survey of British businesses revealed that knowledge of other languages was second on a list of the most desirable skills for job candidates, just after knowledge of information technology. Employers are also willing to pay more for employees with **these skills**. The same survey found that the average salary of employees 3 years after graduating from college was higher for students who had studied languages than students who had studied math, physics, and chemistry. In Canada, a 2008 study reported that fluent bilinguals earn an average of 10 percent more than English monolinguals and 40 percent more than French monolinguals. In short, there is ample evidence showing that advanced proficiency in an additional language can boost earnings. At the same time, however, it is important to note that these studies compare workers who are equal in other respects, for example, in socioeconomic status and educational level. Simply knowing an additional language cannot always compensate for disparities in these areas.

- 4 Companies are willing to pay more for employees who know more than one language because there is a shortage of people with these crucial skills. In a recent study by the European Commission, more than 10 percent of the 2,000 companies in the study reported that they had lost business because of the lack of language and culture skills in their workforce. Many described incidents of miscommunication with their business and trade partners as a result of language deficits. To increase productivity in

WHILE YOU READ 1

What are the continuing ideas that *these skills* refers to? Highlight them.

European countries, the Commission says the ideal employee should be proficient in two languages beyond his or her native **language**.

III. Not Just English

- 5 Although English is the language most widely used in business and in the greatest demand, many companies are looking for expertise in other languages, as well. Business executives say that in order to remain competitive, it will be necessary to go beyond English. One U.S. business survey named Mandarin Chinese as the most important language of business after English, followed by French, Arabic, and Spanish.
- 6 One measure that reflects both the global use of and demand for different languages is Internet content. English is more widely used than any other language on the Internet; however, its dominance has dropped to just over 27 percent of all Internet content. (See Figure 3.3.) In 2000, English was the language of more than half the Internet content and Chinese just over 2 percent. The number of Chinese Internet users increased by more than 1,000 percent between 2000 and 2010. Experts say the percentage of Chinese language content on the Internet is likely to overtake English. The demand for bilinguals with Chinese language proficiency is likely to grow, as **well**.
- 7 It is not only in business that knowledge of an additional language beyond English is of practical value, however. The U.S. government has made a significant investment in language training for its military forces, which have traditionally relied heavily on translators. Military personnel are learning languages that are of strategic importance to the American government. One commander maintains that skill in local languages is as valuable to a soldier as skill with a rifle. The U.S. Secretary of Defense went even further, saying, “Languages are the key to understanding that world.”

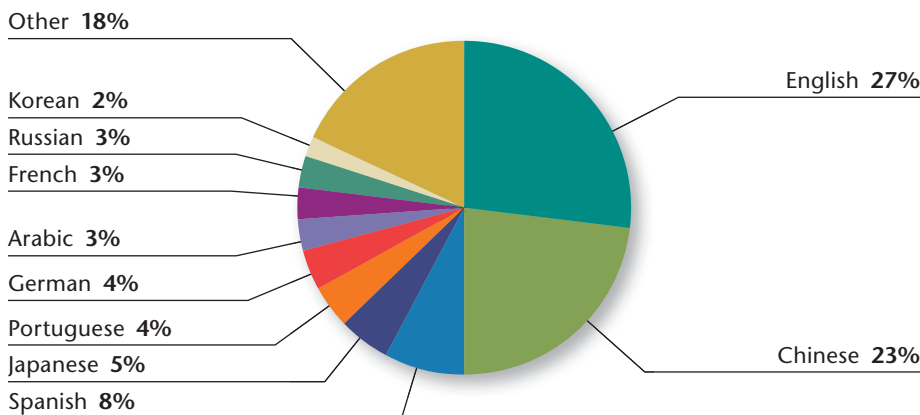
WHILE YOU READ 2

Look back at this sentence. Find a cause-and-effect relationship. Highlight the cause-and-effect marker. Then highlight the cause.

WHILE YOU READ 3

Look back over paragraph 6, and highlight the sentence with a passive verb form.

Figure 3.3 Language of Internet Content – 2010



Source: Internet World Stats, 2010

IV. Multilingual Education

8 Parents today understand the economic advantages that proficiency in an additional language can bring their children, and their decisions about their children's education are often informed by this understanding. Even when their children are very young, parents seek out opportunities for them to be exposed to an additional language. Wealthy parents can provide this opportunity for their children by hiring a caregiver who speaks more than one language. Bilingual babysitters and nannies are in high demand.

Parents hire them to speak to their children in the hope that the exposure and interaction will help their children become bilingual. Many of these children develop some ability in the second language, particularly in understanding it. However, experts say that unless the exposure and interaction extend beyond the child's early years, the experience is unlikely to lead to proficiency.

9 The potential benefits of bilingualism are also behind the rise of dual language immersion programs, particularly in North America and Europe. Dual immersion is not remedial education for immigrant children that people often associate with bilingual education; instead, these programs mix children who are native speakers of two languages, say, Spanish and English, and attempt to build language proficiency and literacy in both languages. These programs recognize the increasing demand for bilingual and bi-literate workers and the positive effects of having students who are learning English and students already fluent in English, but are learning another language, in the same classroom. The popularity of these programs has risen steadily in the United States, where there were more than 2,000 in 2011. Spanish is the most frequent second language, but the popularity of Mandarin is not far behind. In 2000, there were only 10 Chinese dual immersion programs; 10 years later, there were 75.

10 Sometimes the quest for proficiency in a second language, particularly English, can divide families. Some Asian families, mostly from Korea, Taiwan, and Hong Kong, have decided their children can get a better education outside of their home countries. They want their children to get a western education and develop advanced proficiency in English, so the mother and children go to live in Australia, Canada, New Zealand, or the United States while the father remains home and works to support the family. In other cases, the young students go alone and live with relatives or friends. These students are sometimes referred to as "parachute kids" or "wild geese." The number of Korean "wild geese" reached a peak of about



Many parents choose bilingual education for their children.

WHILE YOU READ 4

Look back to find a definition marker. Highlight it.

40,000 in 2006 and has since declined. These families believe that the sacrifice of separation and loneliness is worthwhile because the children will have an advantage when they apply for college and enter the workforce.

V. Cognitive Advantages

- 11** The practical and economic advantages of advanced second language proficiency seem clear. However, research in psychology over the past 20 years indicates that there are additional advantages of bilingualism. They show that bilingualism actually changes neural connections in the brain and improves cognitive performance outside of the domain of language. This is an enormous shift from past perspectives on bilingualism. For much of the twentieth century, experts thought that bilingualism was a barrier to academic success. Scientists and educators believed that knowledge of an additional language delayed language development and academic progress in the language used in schools. This belief was supported by data from tests of the cognitive abilities of bilingual and monolingual children, which revealed consistently superior performance by the monolinguals.
- 12** Subsequently, however, more sophisticated tests contradicted these results and showed that bilinguals reach the milestones of language development at about the same time as monolingual children. Analysis of the earlier tests showed that these tests were flawed because they were really a kind of language **test**. This put the bilingual children at a disadvantage because the test was in their weaker language. The scientists needed to develop a test of the children's cognitive abilities that was not also a language test. When they began to use nonverbal tests, such as asking the children to sort shapes and colors, the results were very different.
- 13** In the nonverbal tests, the superior cognitive abilities of the bilingual children became **evident**. They were better than the monolingual children at focusing their attention and ignoring distractions. In addition, they were better at paying attention to changes in their environment and using this information to solve complex problems. Furthermore, they were able to remember information about one task while they were working on another task. Bilinguals have to do this all the time when they switch back and forth between languages so it makes sense that they are able to do this well in other cognitive domains. These studies also examined brain images of the two groups, which showed that the bilinguals were able to perform these tasks with less mental effort than the monolinguals. In other words, their brains worked more efficiently.
- 14** This bilingual advantage begins early and lasts through life, if speakers continue using both languages. In a scientific study, seven-month-old babies from a bilingual environment showed more cognitive flexibility than babies from a monolingual environment. Scientists played a sound for both groups of babies; the sound was a cue that a dancing puppet would appear on one side of a screen. After the babies listened and watched this a

WHILE YOU READ **5**

Look back in this paragraph, and find a contrast and an assessment marker. Highlight them.

WHILE YOU READ **6**

Scan ahead and highlight three details that support the main idea expressed in this sentence.

few times, they began to turn their heads to that side in anticipation of the puppet's appearance on the screen. Then the scientists moved the puppet to the other side of the screen. The bilingual babies quickly absorbed this new information and changed the direction of their gaze, whereas the monolingual babies continued to look in the original direction. The scientists interpreted this behavior as the superior ability of bilingual babies to pay attention to cues in their environment and to modify their behavior in response to those cues.



- 15** Studies of older children have shown that bilingualism can also have a positive impact on school performance. A series of studies comparing the academic performance of monolingual and bilingual children have shown that the bilingual children do better on problem-solving tasks and especially on reading tasks. In other words, bilingualism seems to give a cognitive advantage. One psychologist was interested in whether this bilingual advantage could help children of lower socioeconomic status, who generally have lower test results than students of higher socioeconomic status. In 2009, she and her colleagues conducted a study with particularly exciting results: They indicated that socioeconomic status was less significant in predicting the test scores of the bilingual children. In other words, even the poor children in the study showed the bilingual advantage in reading and language tests. The authors of the study suggest it is possible that early and sustained bilingualism could compensate for other educational deficits.

Bilingual children have been shown to have some advantages over monolingual children.

- 16** At the other end of life, scientists have also detected a bilingual advantage. As they reach old age, many adults experience **dementia**, a gradual loss of their memory and mental abilities. Several studies have shown that lifelong bilingualism can delay these symptoms of dementia by as long as 6 years. The more proficient bilinguals showed the longest delay in the onset of dementia. Many studies have shown that keeping the brain active can help postpone dementia; it seems bilingualism is one way to do this. Switching from one language to another is a form of mental exercise.

VI. Cultural Advantages

- 17** The practical and cognitive advantages of knowing more than one language can be measured, but there are other advantages that may be harder to calculate. The cognitive flexibility that comes with knowledge of an additional language may also lead to greater flexibility in social choices

WHILE YOU READ 7

Look back at this sentence, and find clues in the context to help you understand the meaning of *dementia*. Highlight the clues.

and greater tolerance of social and cultural differences. Studies of babies as young as 10 months raised in monolingual and bilingual homes show that monolinguals have a preference for interaction with people who sound familiar, whereas bilinguals are more willing to accept people who sound different. By the age of five, monolingual children tend to select playmates that sound like they do and reject those who do not. They have begun to form a group identity. For the bilingual children, group identity is more flexible and fluid. The researchers claim that these findings have implications for adults as well. They believe that children who grow up with more than one language may become more tolerant adults.

- 18 Many children who grow up with two languages also develop a connection to and an understanding of two cultures. Their language creates a bond to their family across generations and a connection to their heritage.



Bilingual children are connected to two cultures.

Because they understand two cultures, they can act as a bridge between them, in their families, their communities, and in the wider world. For these reasons, and also for practical reasons, there has been increased interest in *heritage languages*. The idea behind heritage language education is that children from second language communities begin their language education with an advantage. For example, Chinese children in Canada might be encouraged to develop their knowledge of Mandarin rather than learn a new, additional language. This practice builds cultural bonds and strengthens communities at the same time that it improves potential resources for the nation.

- 19 Multilingualism is a resource for individuals, communities, businesses, and governments. Although English is the dominant world language and is likely to remain so for the immediate future, experts stress that languages, like empires, rise and fall. Knowledge of more than one language will almost certainly be a requirement for the global citizens of the **future**.

WHILE YOU READ 8

Look back in paragraph 19 to find a main idea that expresses the thesis of the whole reading. Highlight it.

Main Idea Check

For sections II–VI of Reading 5, match the main ideas to two of the paragraphs in each section. Write the number of the paragraph on the blank line.

SECTION II: Practical Advantages

- _____ A There are not enough multilingual employees to meet the demand for them.
- _____ B Employees who know more than one language often earn more than employees who don't.

SECTION III: Not Just English

- _____ A One indication of the demand for a specific language is the amount of Internet content in that language.
- _____ B Military leaders understand the benefits of a multilingual force.

SECTION IV: Multilingual Education

- _____ A Some children from Asian countries come to study in western countries without their parents.
- _____ B Some parents hire bilingual caregivers in order to expose their young children to a second language.

SECTION V: Cognitive Advantages

- _____ A Studies suggest that bilingualism can delay the symptoms of dementia.
- _____ B The bilingual advantage has been demonstrated in small babies.

SECTION VI: Cultural Advantages

- _____ A Studies suggest that bilingual children are more tolerant than monolingual children of people who are different than they are.
- _____ B Knowledge of a second language can strengthen cultural connections.

A Closer Look

Look back at Reading 5 to answer the following questions.

- 1 According to a survey in Great Britain, what skills do employers want the most from their employees?
 - a Business skills
 - b Multilingualism
 - c Information technology knowledge
 - d Communication and writing ability

- 2 In paragraph 3, the writer cautions that knowledge of an additional language may not always result in higher salaries. Which situation is the best illustration of this possibility?
- a An American teacher in Japan speaks English and Japanese.
 - b An immigrant from El Salvador cleans hotel rooms in New York. She has no high school degree but has learned English.
 - c A college student from Mexico is hired to take care of a doctor's two small children in Los Angeles. She is bilingual.
 - d A Bulgarian manager has just been hired by a German company to open an office in Sofia, the capital of her country. She speaks German, English, and Bulgarian.
- 3 Why do you think U.S. military leaders are providing language training for their personnel instead of using translators? Circle all possible answers.
- a Translators are not always available when they are needed.
 - b They think that local people are more likely to trust soldiers who speak their language.
 - c They believe that knowing a second language will help soldiers to think better.
 - d It is cheaper to train soldiers than to hire translators.
- 4 Bilingualism was once considered a barrier to academic development. **True or False?**
- 5 Which of these abilities are the result of the "bilingual advantage" over monolinguals? Circle all that apply.
- a Greater ability to concentrate on a task
 - b Faster reading speed
 - c Ability to change behavior more quickly in response to new information
 - d Greater ability to process information from many different sources in sequence
- 6 What can explain the delay of symptoms of dementia among bilinguals?
- a The cognitive benefits of bilingualism can be saved for old age.
 - b Using and responding to two different languages keeps the brain more active than using and responding to one language.
 - c Scientist believe that connections in the brains of bilinguals last longer than those of monolinguals.
 - d Scientists are not sure of the reason.
- 7 Match the skills and qualities below to the type of advantage it represents.

Skills and Qualities	Types of Advantages
_____ 1 higher reading test scores	a practical
_____ 2 greater tolerance for others	b cognitive
_____ 3 faster processing of new information	c cultural
_____ 4 higher pay	
_____ 5 closer ties to home community	
_____ 6 more job options	

Skill Review

In Skills and Strategies 9, you learned that passive sentences are frequent in academic writing. Writers use the passive to focus on the action rather than the performer, or agent, of the action. Recognizing passive sentences and understanding why writers choose to use passive sentences will help you better understand academic texts.

A Read the following sentences and parts of sentences from Reading 5. Find the passive verbs, and highlight them.

- 1 Thanks to technology, smaller companies can also reach across the globe. Billions of people are connected through the Internet and cell phones. The global markets . . . (Par. 2)
- 2 The global markets are no longer limited by space, time, or international borders; language may be the final remaining barrier to global communication. (Par. 2)
- 3 One measure that reflects both the global use of and demand for different languages is Internet content. English is more widely used than any other language on the Internet; however, its dominance . . . (Par. 6)
- 4 Parents today understand the economic advantages that proficiency in an additional language can bring their children, and their decisions about their children's education are often informed by this understanding. Even when their children are very young . . . (Par. 8)
- 5 These students are sometimes referred to as "parachute kids" or "wild geese." The number of Korean "wild geese" reached a peak . . . (Par. 10)
- 6 Scientists and educators believed that knowledge of an additional language delayed language development and academic progress in the language used in schools. This belief was supported by data from tests of the cognitive abilities of bilingual and monolingual children, which revealed consistently superior performance by the monolinguals. (Par. 11)
- 7 The practical and cognitive advantages of knowing more than one language can be measured, but there are other advantages that may be harder to calculate. (Par. 17)
- 8 The idea behind heritage language education is that children from second language communities begin their language education with an advantage. For example, Chinese children in Canada might be encouraged to develop their knowledge of Mandarin rather than learn a new, additional language. This practice builds cultural bonds . . . (Par. 18)

B With a partner, discuss why the passive was used in each of sentences in Step A.

Definitions

Find the words in Reading 5 that are similar to the definitions below.

- 1 to raise someone to a higher or more important position (v) Par. 1
- 2 always happening in the same way (*adv*) Par. 1
- 3 the state of being alone or not connected to anything else (*n*) Par. 2
- 4 people who are applying for jobs (*n pl*) Par. 3
- 5 to improve or increase something (v) Par. 3
- 6 events that are unusual or unpleasant (*n pl*) Par. 4
- 7 an insufficiency in or lack of something (*n*) Par. 4
- 8 perfect; best possible (*adj*) Par. 4
- 9 people who are paid to care for children (*n pl*) Par. 8
- 10 area; field (*n*) Par. 11
- 11 to pay no attention to something (v) Par. 13
- 12 things that take your attention away from what you should be doing (*n pl*) Par. 13
- 13 a usually positive feeling about what will happen next (*n*) Par. 14
- 14 the beginning of something (*n*) Par. 16
- 15 cultural history (*n*) Par. 18

Words in Context

A Use context clues to match the first part of each sentence to its correct second part and to understand the meaning of the words in **bold**.

- | | |
|---|---|
| _____ 1 The tests we use to measure language proficiency are | a personnel to take a drug test before beginning employment. |
| _____ 2 If you want to learn a second language, you should | b his cue before he made his speech. |
| _____ 3 The actor listened for | c a flawed argument. |
| _____ 4 The restaurant staff were very nice but | d socioeconomic status based on how they speak. |
| _____ 5 Young children often | e more sophisticated than in the past. |
| _____ 6 The teacher gave the paper a poor grade because she said it contained | f remedial courses in math when they enter college. |
| _____ 7 The company requires all | g seek out opportunities for practice. |
| _____ 8 Some students are required to take | h this could not compensate for the poor quality of the food. |
| _____ 9 One important personality factor in a successful study-abroad experience is | i develop strong bonds with their grandparents. |
| _____ 10 Many people claim they can guess speakers' | j flexibility . You must be ready to do things differently than in your own country. |

B Compare your answers with a partner's. Discuss what clues helped you match the parts of the sentences and helped you understand what the words in **bold** mean.

Same or Different

The following pairs of sentences contain vocabulary from all the readings of this unit. Write *S* on the blank lines if the two sentences have the same meaning. Write *D* if the meanings are different.

- | | |
|---|--|
| _____ 1 Learners who seek out native speakers as friends can acquire a second language quickly. | Exposure to native speakers can boost second language learning. |
| _____ 2 It is possible to attain a high level of language proficiency quickly, but it is more difficult to maintain it. | Learners can achieve mastery of a second language but they cannot catch up with native speakers. |
| _____ 3 Remedial math classes can sometimes make up for deficits in academic preparation. | Classes that give extra help in math can often compensate for fundamental problems in past education. |
| _____ 4 In the long run , the dominance of English will probably hasten the decline of some minority languages. | It is likely that English will eventually accelerate the decrease in minority language use. |
| _____ 5 The survey reported on the implications of the company's personnel policy . | The reported described the ideal characteristics for the company's employees. |
| _____ 6 Her elaborate excuses for why she did not come to work sounded false. | She gave some complicated reasons for her absence, but she did not seem sincere . |
| _____ 7 The town's residents were proud of their accomplishments during the disaster. | The people in the town exhibited extraordinary behavior during the storm. |
| _____ 8 The incident showed the new manager's flexibility . | The new manager documented the incident and was able to resolve the dispute . |

Academic Word List

The following are Academic Word List words from all the readings of this unit. Complete the sentences with these words. (For more on the Academic Word List, see page 256.)

anticipation (<i>n</i>)	conventions (<i>n</i>)	eventually (<i>adj</i>)	ignore (<i>v</i>)	promote (<i>v</i>)
conform (<i>v</i>)	documented (<i>v</i>)	exhibited (<i>v</i>)	implication (<i>n</i>)	retain (<i>v</i>)
consistently (<i>adv</i>)	empirical (<i>adj</i>)	flexibility (<i>n</i>)	isolation (<i>n</i>)	transfer (<i>v</i>)

- 1 The doctors kept the patient in _____ so no one would be exposed to her infection.
- 2 It is important not to _____ the early signs of heart disease.
- 3 _____ studies support the idea of a sensitive period of language acquisition.
- 4 When community activists _____ the use of endangered languages, they can sometimes revitalize it.
- 5 The _____ of the study are clear; an early start in second language acquisition is the best.
- 6 One of the requirements of the position is _____ because the business is always changing.
- 7 Doctors _____ all of the patient's symptoms and responses to medication for the report.
- 8 When you are living in a new country or community, it is important to learn about its cultural _____.
- 9 Studies have _____ demonstrated that language use and cultural identity are closely connected.
- 10 The patient _____ strange symptoms that the doctors could not explain.
- 11 We could see the _____ on the children's faces as they waited for the music to begin.
- 12 It took a long time, but _____ they were able to find a translator who speaks Estonian.
- 13 Because they are in high demand, it is sometimes difficult for companies to recruit and _____ multilingual employees.
- 14 Independent people often prefer not to _____ to the social rules of groups and organizations.
- 15 The army _____ the soldier to a new position because of his knowledge of Korean.

Critical Thinking

In Reading 5, the writer suggests there may be exceptions to the bilingual advantage.

A With a partner, review the figures on the graph below. It shows the median income of white Americans, Asian Americans, and Hispanics Americans in the United States in 2011. Many, though not all, of the Asian and Hispanics in the workforce are bilingual.

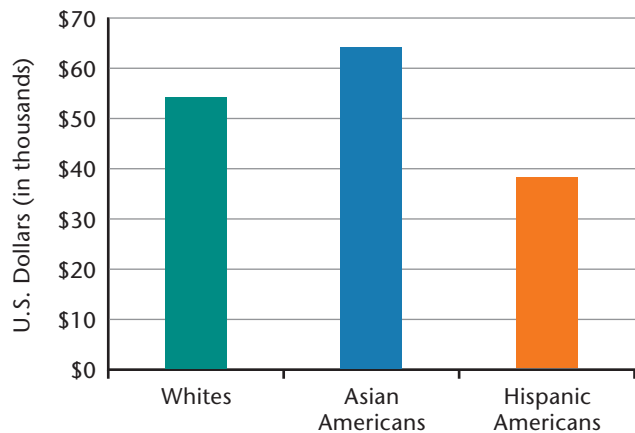
B Now discuss these questions with your partner.

- 1 What do you think might account for these disparities in income among the three groups?
- 2 What role do you think bilingualism might play in income disparities?

ANALYZING INFORMATION

Critical thinking involves thinking carefully about important topics that the writer has not completely explained.

Figure 3.4 Median Annual Income 2011



Source: U.S. Census Bureau

Research

Many parents want to raise their children to be bilingual. They get lots of advice on how to this. Do some research on what experts and parents say are the best methods for raising bilingual children. Find answers to the following questions.

- When should exposure begin?
- How should parents behave?
- What worries do parents have?
- What should parents do if their children resist?

Writing

Write two paragraphs. The first paragraph will describe the ideas that you read about raising bilingual children. The second paragraph will give your own ideas of what methods you think will work best.

Exercise 1

Writers may connect ideas between sentences in many different ways. The second sentence may:

- a describe a **result** of what is reported in the first sentence
- b provide a **contrast** to what is described in the first sentence
- c add a **detail** or details to support the more general information in the first sentence

How does the second sentence in each pair of sentences below connect to the first sentence? Write *a*, *b*, or *c* on the line depending on whether it is a result, a contrast, or a detail.

- _____ 1 Early critical period studies of language acquisition contained a number of flaws in their research design and methods. Later studies avoided some of these fundamental weaknesses by using real language samples and powerful statistical analysis.
- _____ 2 Researchers analyzed overgeneralization errors that children make, such as “I ate everything,” and “My mommy brang me a cookie,” which have been documented extensively in the child language literature. This helped them to understand some of the most basic principles of language acquisition.
- _____ 3 We can define linguistic competence, or knowledge, as the ability of the native speaker to comprehend and produce novel utterances. One of the components is phonological competence, that is, knowledge of the sounds of the language and the rules for combining those sounds in appropriate ways.
- _____ 4 As children, we all attain a uniform level of competence in our first language, apparently with little effort, just by interacting with native speakers in our environment. For most adults, however, learning a second language seems to be a fundamentally different process, which involves considerable effort and produces widely varying outcomes.
- _____ 5 When immigrants come to a new country, it is usually their children that acquire the language of the host country most rapidly. Because their knowledge of the new language is superior to their parents, the children often have to translate for them at stores, hospitals, and government offices.

Exercise 2

Make a clear paragraph by putting sentences A, B, and C into the best order after the numbered sentence. Write the letters in the correct order on the blank lines.

- 1 Bilingualism has clear practical advantages, but recent research indicates that it also has significant cognitive benefits. _____

A They also found that learning and maintaining a second language can delay some of the effects of aging on the brain.

B Since that time, researchers have shown that bilinguals are often better at focusing their attention and performing complex tasks.

C This view is in contrast to the perspective of 50 years ago, which characterized bilingualism as a barrier to cognitive development and academic progress.

2 People often assume that the rules and conventions for polite interaction are universal. _____

A These research results document a tendency for Americans to say thank you in situations where such an expression would be inappropriate, or even offensive, in some South Asian cultures.

B However, data collected in investigations of one instance of interaction – thanking – in different cultures are inconsistent with this popular notion.

C Such evidence reinforces the position of researchers who argue that the rules for appropriate speech often vary from culture to culture.

3 A fundamental challenge for psycholinguists has been to account for children's remarkable capacity to acquire their native language. _____

A Empirical evidence has emerged from research on language development that children know things about language that they have not been taught or heard.

B This evidence supports the conclusion that some aspects of language development are part of our human genetic code.

C This conclusion has led linguists to compare the emergence of language to other genetically determined stages of development, like the first appearance of teeth.

4 Ironically, it is often the language errors made by children that provide evidence for how children acquire their native language. _____

A Such overgeneralization errors, which are extremely rare in adult English but are typical of children's speech, reveal that children do not simply imitate the English they hear.

B For example, we consistently find utterances such as, "I seed Santa Claus," "I holded the rabbit," and "We readed a story."

C They also suggest that children have the natural capacity to construct grammatical rules for the language they are exposed to and to apply these rules as they create novel utterances.

5 Military conquest can often lead to enduring changes in language use but also in language structure and vocabulary. _____

A Examples of common present-day English words of French origin include *beef*, *table*, *fruit*, and *people*.

B An example of such enduring changes is found in the influence of Norman French, the language of the forces that conquered England in the eleventh century.

C Over the hundreds of years of Norman French rule, English absorbed many words from French, with some experts claiming that as much as 30 percent of the English lexicon is of French origin.