

WORD STRESS

A consumers' politician? My student intended to say "a consummate politician." He guessed wrong when he stressed "cónsummate," a word he had never heard before, placing stress on the second syllable rather than the first. As a result, his sentence (*He's a consummate politician*) sounded like "He's a consumers' politician." The student's guess that *consummate* was stressed on the second syllable was probably based on words like *control*, *consumer*, *connect*, or *confession*, all stressed on the second syllable. It was a good guess—which happened to be wrong.

For native English listeners, the most important syllable in a word is the stressed syllable, the primary cue for identifying the word (Grosjean and Gee 1987, Benrabah 1997, Bond 1999). This makes stress a very important pronunciation topic. In addition, because the characteristics of stressed and unstressed syllables in single words are mirrored in rhythm, teaching word stress primes students for work with suprasegmentals. Dalton and Seidlhofer describe word stress as a communicatively important and teachable pronunciation topic, bridging the continuum between segmentals (consonants and vowels), which are considered relatively easy to teach, and suprasegmentals (rhythm and intonation), which are considered more difficult to teach (1994, 73).

LEVELS OF STRESS IN WORDS

In every English word of more than one syllable, one syllable, the stressed syllable, is the most prominent. This prominence is also called primary stress, major stress, heavy stress, or simply the stressed syllable/vowel. (The terms *(un)stressed vowel* and *(un)stressed syllable* are often used interchangeably.) The remaining syllables may be unstressed or have secondary (minor) stress. In the word *sofa*, the first syllable (*so-*) has primary stress and the second (*-fa*) is unstressed. In the word *Japanese*, the last syllable has primary stress, the first syllable has secondary stress, and the middle syllable is unstressed.

In languages, stressed and unstressed syllables can be distinguished by differences in length, pitch, loudness, or vowel quality.¹ As the chart below shows, English makes use of all these distinctions.

CHARACTERISTICS OF LEVELS OF STRESS IN WORDS			
	Primary/heavy stress: <u>TE</u> lephone	Unstressed: tele <u>ph</u> one	Secondary/minor stress: tele <u>ph</u> one
Vowel length	Longest	Short	Long
Pitch level	High	Low	Low
Loudness	Loud (clear)	Softer (indistinct)	Loud (clear)
Vowel quality	Full vowel	Reduced (/ə/-/ɪ/) ²	Full vowel

STRESS PLACEMENT

Learning to lengthen stressed vowels and shorten/reduce unstressed vowels is challenging for most students. Equally challenging is knowing which syllable to stress in a word. When learners are faced with a new word they have never heard before, they base stress placement on many of the same strategies that native speakers do: analogy to phonologically similar words, stress patterns associated with classes of words or endings, or syllable structure (Davis and Kelly 1997, Guion et al. 2003, Guion et al. 2004).

Misplaced stress—stressing the wrong syllable—can make a word unrecognizable and completely disrupt the speaker's message (Benrabah 1997, Field 2005). Not all errors involving misplaced stress are equally serious. Field (2005) reports that rightward misplacements of stress in two-syllable words (e.g., stressing the second syllable of *woman*: woMAN) impaired intelligibility more than leftward misplacements (e.g., stressing the first syllable of *enjoy*: ENjoy). My student's mispronunciation of *consummate*, described at the beginning of this chapter, is an example of rightward stress misplacement.

The rules for English stress placement are complex because English has borrowed many words from other languages, especially French, Latin, Spanish, and Greek, with different rules for assigning stress (Juffs 1990). There are, however, some general, teachable principles which help students at all levels to predict the stressed syllable. Teachers can also help students avoid misplaced stress by working with stress in reading and vocabulary lessons.

¹ Not all languages use stress to systematically differentiate the syllables in a word.

² /ə/ is the sound of the first vowel in *ago* and the last vowel in *jealous*. The same vowel occurs in the word *cup*, where /ə/ is stressed. /ɪ/ is the vowel in *did*. See also Vowels, Central Vowels, /ə/ and /ɪ/, Front Vowels.

NOTATIONS FOR STRESS AND SYLLABLES

There are various notations for stress, each with advantages and disadvantages (Celce-Murcia et al. 1996).

Stressed syllable in capitals	Visit
Circles above syllables	visit
Stressed syllable bolded	vis it
Stressed syllable underlined	<u>vis</u> it
Line over stressed syllable	vīsit
Acute marks (´) over stressed syllables; grave marks (`) over secondary stress	áthlète
Verticals (dictionary markings)	'ath,lete

Capitals and bold letters are visually strong and can be easily added by a computer. It is difficult, however, to show more than two levels of stress without either changing type size or combining bold and caps (for example, bold caps could be used for primary stress, plain caps for secondary stress and lower case for unstressed). Circles are also visually strong but not as easy to add by computer. Underlining is visually strong and easy to do by computer, but in some pronunciation work the teacher may want to use underlines to show linking of words or to indicate syllables. Acute and grave marks and verticals can be visually strong when handwritten but are less noticeable when added by computer. The teacher should not feel bound to one type of notation. When the meaning of the notation is made clear, students are not troubled by mixed notations. In my own teaching, I choose the notation which will make the stressed syllable most salient to my students. In typed materials, for example, I use capital letters for the stressed syllable because they are visually more salient than a typed acute mark; on the board, I usually place a large acute mark over the stressed syllable, since switching between capitals and lower case within a word slows down my writing.

Curved underlines are useful for showing the syllables in a word. They are preferable to slashes or hyphens within words (e.g., vi/sit, vi-sit) because they don't commit the teacher to exact locations of syllable boundaries, which are sometimes difficult to determine.

visit

sorry

listened

In addition, dictionaries do not always agree on syllable boundaries. *American Heritage Dictionary*, for example, segments *sorry* as “sor-e,” while *Webster’s* has “sor-re.” It is more important that students know how many syllables a word has than exactly where one syllable ends and the next begins.

STUDENT PROBLEMS WITH WORD STRESS

Students have two general difficulties with English word stress. One involves learning how different levels of word stress are realized in English, in particular the length of stressed vowels and the shortness and reduction of unstressed vowels. There is considerable evidence that the length distinction between stressed and unstressed syllables can be learned; there is less evidence that vowel reduction is learned (Flege and Bohn 1989, Anderson-Hsieh and Venkatagiri 1994, Nguyen and Ingram 2005, Lee et al. 2006).

The second difficulty involves knowing which syllable to stress in a word. Although there are no simple, general rules that will allow students to predict which syllable is stressed, there are classes of words, such as compound nouns (e.g., *airport*), with regular stress patterns that can be taught. As students become more proficient, they also become better able to predict which syllable in a word is stressed.

TIPS FOR TEACHING WORD STRESS

The six tips listed below provide some general suggestions for helping students to create clear differences between stressed and unstressed vowels and to better predict which syllable is stressed. The tips are based on the characteristics of English word stress and on problems students have with word stress.

TIPS

1. Emphasize the length of stressed vowels.
2. Present sets of words with the same stress patterns.
3. Pronounce new vocabulary so students can hear which syllables are stressed.
4. Use pronunciation spellings to develop students' awareness of how unstressed vowels are pronounced.
5. Point out that unstressed vowels have a short, indistinct sound regardless of spelling.
6. Teach classes of words that have predictable stress patterns.

The remainder of this chapter presents specific features of word stress as listed below. The tips are further explained in the context of these features.

SPECIFIC FEATURES OF WORD STRESS

1. Primary/Heavy stress
 2. Unstressed syllables and vowel reduction
 3. Secondary stress
 4. Stress with two-syllable nouns and verbs
 5. Stress with compounds
 6. Stress with verbs and nouns with prepositional prefixes
 7. Stress with abbreviations
 8. Stress with suffixes
 9. More on unstressed syllables
 10. Stress switching
-

We discuss what the teacher should know about each of these topics and provide suggestions for teaching them.

1 Primary/Heavy Stress

What the Teacher Should Know

Vowels with primary stress are longer and louder than unstressed vowels. In citation form (the word pronounced in isolation), the stressed vowel is also pronounced on a higher pitch; in connected speech, high pitch may be down-stepped (lowered) if the word does not present new or important information in a message. Because the long duration of English stressed vowels is unfamiliar to many students, it is this aspect of stress that should be emphasized in the classroom (see also Rhythm, page 50).

In a study comparing the length of stressed and unstressed vowels, it was found that native-English speakers' stressed syllables were about four times longer than their unstressed syllables, a large difference (Anderson-Hsieh and Venkatagiri, 1994, 809). High-proficiency Chinese speakers of English showed the same ratio as the native speakers, but intermediate learners' stressed and unstressed syllables did not differ greatly in length. Research involving learners from other native-language backgrounds also supports the claim that length of stressed syllables is learned gradually (Flege and Bohn 1989, Nguyen and Ingram 2005, Lee et al. 2006).

Matching or comparing the stress-syllable patterns of words (e.g., *SepTEMBER*, *OctOBER*, *NoVEMBER*, *DeCEMBER*) is effective for building sensitivity to patterns of stressed and unstressed syllables. Field describes these analogy exercises as having "strong psychological validity" (2005, 420). Kenworthy (1987, 60–63) also recommends "odd one out" exercises, in which students decide which of several words has a different stress pattern (e.g., *repeat*, *travel*, *explain*, *believe*).


Activity 1.1 Primary stress: Travel season trivia**Level** Low Intermediate**Worksheet** Page 202**Tips** Emphasize the length of stressed vowels.
Present sets of words with the same stress patterns.**Description** This activity practices the stress patterns in the names of months and seasons and in travel-related terms.

1. Bring rubber bands to class to demonstrate the length of stressed vowels.
2. Elicit from students the months of the year and the names of the seasons. Write the words on the board. Use a rubber band to demonstrate the length of the stressed syllable as you model the words: Stretch the rubber band as you say the stressed syllable. Pass the rubber bands out to students. Model the words again, using the rubber band. Students repeat the words and stretch the rubber band to reinforce vowel length.
3. Elicit the number of syllables in each month, tapping out the syllables. Underline the syllables on the board. Students may misidentify “January” and “February” as three-syllable words, mistaking the vowel-vowel sequence (the sounds represented by the letters *ua* in both month names) as one syllable. Explain that these are really two syllables, separated by an unwritten /w/ (“wə”) sound. Add a small *w* between the two vowels to show their pronunciation (“Janu^wary, Febru^wary”). Underline the syllables in all the words. Then elicit the stressed syllable from students and mark it on the board.

<u>Jánuary</u>	<u>Fébruary</u>	<u>Márch</u>	<u>Ápril</u>	<u>Máy</u>	<u>Júne</u>
<u>Julý</u>	<u>Áugust</u>	<u>Septémber</u>	<u>Octóber</u>	<u>Novémber</u>	<u>Decémber</u>
	<u>Wínter</u>	<u>Spríng</u>	<u>Súmmer</u>	<u>Fáll/Áutumn</u>	

4. Ask students:
 - Which words have a stress pattern like *September*? (answer: *October, November, December*)
 - Which word has a stress pattern like *January*? (answer: *February*)
 - Which words have a stress pattern like *April*? (answer: *August, Winter, Summer, Autumn*)
 - How many words have a stress pattern like *July*? (answer: just *July*)
 - Which words have only one syllable? (answer: *March, May, June, Spring, Fall*)
5. Erase the words on the board. Model the month names again, stretching the rubber band as you say the stressed vowels. Have the class say the names of the months in order and in reverse order, student by student.

Activity 1.1 continued

-  6. Travel Trivia quiz. Pass the trivia quiz out to the class. Explain the meaning of “trivia” if necessary: unimportant facts or pieces of information that most people don’t know. Most people guess the answers to trivia questions. Ask students to read the trivia quiz. Answer questions about vocabulary. Play the audio.
7. Students work in pairs to complete the activity as if traveling from the United States. Tell students to guess when they don’t know the answer. When the pairs have finished, ask them about their answers. Remind them to make the stressed vowels long.
8. Write some questions about travel on the board:
- Where would you like to travel?
 - When would you like to go?
 - What’s the best time to travel? Why?
- In pairs, students ask and answer these questions.
9. When the pair work is finished, ask individuals to report their answers to the class. Monitor the pronunciation of stressed vowels.

Activity 1.2 *Primary stress: Integrating stress, vocabulary, and reading***Level** All levels**Worksheet** Page 203**Tip** Pronounce new vocabulary so students can hear which syllable is stressed.

Description This activity focuses students’ attention on the stress patterns of new vocabulary. The vocabulary sample is from “Timeline of Lindbergh’s Life” in *Northstar Reading and Writing: Introductory* (Beaumont 2009, 135), a reading text for beginning students. The procedure described below can be used at any level to integrate stress with any reading.

1. Before class, follow this procedure:
- a. Select several polysyllabic words from the reading (or vocabulary exercise) to target for stress/syllable work.
- | | | | | |
|------------|------------------|---------|---------|--------|
| welcome | president | receive | kidnap | invent |
| artificial | protect | media | factory | cancer |
| animal | environmentalist | | | |

(continued on next page)

Activity 1.2 continued

b. Count the syllables in the selected words and mark the stressed syllable; ignore secondary stress. Determine the syllable-stress patterns (the number of syllables and the location of the stressed syllable) in the selected words. It does not matter if some stress-syllable patterns are represented by only one word. In the words below, syllables are underlined and stress is marked with an acute accent (´).

wélcomeprésidentrecéivekídnapinvéntartificialprotéctmédiafáctorycánceránimalenvironméntalist

Stress patterns:

1. / _

2. / _ _

3. _ /

4. _ _ /

5. _ _ _ /

welcome**president****receive****artificial****environmentalist****kidnap****media****invent****cancer****factory****animal**

- In class, make sure students understand the new words before they read. Write the preselected words on the board. Write the syllable patterns as column headings on the board and number them. Ask students to copy the words and syllable patterns onto a piece of paper. Explain the notation: / represents a stressed syllable; _ represents a syllable without heavy stress.
- Model the words, lengthening stressed syllables. (To reinforce vowel length, use the rubber band technique described in the Activity 1.1.) Students repeat.
- Draw students' attention to the first word on the list and model it again. Ask students to count syllables in the word. Underline the syllables on the board. Ask students which syllable is stressed and mark it on the board (e.g., wélcome).
- Ask students which pattern the first word should be written under and write it under that pattern. Repeat with another word.
- Students continue the activity in pairs, underlining syllables, marking the stressed syllable, and writing each word under one of the patterns. Circulate, modeling words and helping students count syllables, as necessary.
- When the class has finished, elicit from students the words that belong in each column and add them to the board.
- When all the words are in their appropriate columns, students practice saying them, column by column. Students should notice that words in the same column have the same stress pattern.

Activity 1.2 continued

9. To practice these words in context, the teacher can ask students to make sentences about the reading from which the words were taken.

2 Unstressed Syllables and Vowel Reduction

What the Teacher Should Know

Unstressed vowels are shorter, softer (less loud), and pronounced at a lower pitch than stressed vowels. Most vowels in unstressed syllables are reduced to a centralized vowel, usually /ə/ (the underlined vowel in *ago*; for /ə/, see also Vowels, page 180).³ For example, the underlined vowels in *again*, *nation*, and *evidence* are unstressed and pronounced the same. Because of its role in unstressed syllables, /ə/ is the most common vowel sound in English (Avery and Ehrlich 1992, 31).

Jenkins (2002) maintains that students who will communicate primarily with nonnative speakers need not learn vowel reduction (or reduced words; see Rhythm, page 72). Dauer, on the other hand, argues that it is difficult to speak English at a natural speed without reducing either the length or quality of unstressed vowels (2005).

There is evidence that ESL learners gradually learn to pronounce more English-like unstressed vowels, with shorter lengths, lower levels of pitch, and less loudness. Vowel reduction, however, seems to be more difficult. The ability to reduce vowels may depend on the presence of vowel reduction in the native language and/or on an early age of learning English (Flege and Bohn 1989, Nguyen and Ingram 2005, Lee et al. 2006, Zuraiq and Sereno 2007). Flege and Bohn suggest that learning to make a length difference between stressed and unstressed vowels is a necessary precursor to vowel reduction (1989).

Students whose native languages lack vowel reduction, spell words phonetically and share many cognate words with English (for example, Spanish or Italian) may have an especially difficult time reducing unstressed vowels. It is useful to emphasize and remind them that unstressed vowels can be spelled with any letter in English but are still pronounced /ə/ or /ɪ/.

Research has not investigated the effect of teaching students to reduce vowel quality. My own experience suggests that some intermediate and advanced students can and do learn to reduce unstressed vowels to /ə/ in normal speaking, although perhaps on a word-by-word basis. When I began teaching pronunciation, I was on a “crusade” against the pronunciation of *today*, *tonight*, and *tomorrow* as “tooday,” “toonight,” and “toomorrow.” In my first attempt at teaching vowel reduction, after

³ The vowel /ɪ/ (the vowel in *did*) may also be used in unstressed syllables, especially those spelled with the letters *e* (as in *decide*) or *i* (as in *divide*). The precise quality of reduced vowels is influenced by the surrounding sounds (Browman and Goldstein 1992). The endings *-y* and *-ow* in words like *pretty* and *window* are unstressed but not reduced to /ə/. The vowel in the *-ing* ending is usually pronounced /ɪ/.

explaining it and modeling reduced vowels in several words, I wrote the word *tomorrow* on the board and told my students I would pronounce it in two different ways. They were to tell me which way was correct. I pronounced *tomorrow* first as “toomorrow” and then with the vowel correctly reduced. When I asked the class which pronunciation was correct, no one said anything. I repeated the demonstration and again got no response. I tried once more, extremely nervous by this time, and was relieved to see one student timidly raise her hand. She said, “Was the /r/ different?” I learned two things that day: first, that my students were very concerned with the pronunciation of /r/; and second, that students do not notice reduced vowels, even when they are constantly modeled in the native English spoken around them. This lack of awareness should not, perhaps, have been surprising to me (although it was), given the fact that reduced vowels are short, indistinct, and not reflected in spelling. A first step to learning to pronounce reduced vowels, then, may be to develop an awareness for how they sound. Awareness is addressed in the sample activity below.

Activity 1.3 *Unstressed vowels and vowel reduction: Today, tonight, and tomorrow*

Level Intermediate/Advanced

Worksheet Page 204

Tips Use pronunciation spellings to develop students' awareness of how unstressed vowels are pronounced.
Point out that unstressed vowels have a short, indistinct sound regardless of spelling.

Description This activity uses pronunciation spellings to direct students' attention to the reduction of unstressed vowels. The second part of the activity, an information gap, uses TV schedules to practice the reduced vowels in *today*, *tonight*, and *tomorrow*. Other types of schedules (e.g., train schedules, movie schedules) can be substituted for the TV schedules.

1. Present vowel reduction. On the board, write words in which unstressed vowels are spelled with each of the vowel letters (*a*, *e*, *i*, *o*, *u*, *y*), underlining the unstressed vowels. Below the normal spelling of the words, write the pronunciation spelling (respellings of words that reflect pronunciation better than the normal spellings do). Mark the stress on each word.

<u>a</u> gó	é <u>v</u> idence	bá <u>c</u> on	fó <u>r</u> tune	ph <u>y</u> sí <u>c</u> ian
əgó	évə <u>d</u> əns	bákən	fór <u>ch</u> ən	fəz <u>í</u> shən

2. Direct students' attention to the underlined vowels. Model each word, pronouncing the underlined vowel letters as /ə/. Be sure to reduce the unstressed vowels to /ə/; when you read words from a list, you may give more prominence to unstressed vowels than you would in normal speaking. Imagine how each word

Activity 1.3 continued

sounds toward the end of a sentence, spoken naturally (e.g., for *physician*, "There's a job available as a physician's assistant.") Use this pronunciation when you model the words. Direct students' attention to the pronunciation spellings below the words and model them again. Have students repeat.

3. Ask the following questions:

- What letters in the normal spellings are underlined?
- Are these vowels stressed or unstressed?
- Do the underlined letters have different pronunciations?

Explain that unstressed vowels are pronounced /ə/, regardless of spelling. Point out that the underlined letters represent all the vowel letters used in English, but they are all pronounced the same, as /ə/.

4. Add pronunciation spellings of several familiar words to the board, with a blank below each word. Model the words.

kənróí**məshéén****fáshən****prəféshənəl**

pələés**pəlítəkəl****dánjərəs****sékənd**

5. Ask volunteers to come to the board and write the normal spelling of the words in the blanks. Students practice saying the words, using the pronunciation spellings as guides.

6. Information gap. On the board write *today*, followed by its pronunciation spelling:

today**təday**

7. Say the word twice, once correctly, using a reduced vowel (təday), and again incorrectly, using a full vowel (tooday) in the first syllable. Ask students whether your first or second pronunciation was correct.

8. Add *tonight* and *tomorrow* to the board, with their respellings: *tənight*, *təmorrow*. Model the words, reducing the first vowels. Ask each student to say *today*, *tomorrow*, *tonight*, reducing the first vowel.

9. Put students in pairs, giving each member of the pair a different TV schedule. Tell students not to show each other their schedules.

10. Students complete the information missing in their schedules by asking questions like *What's on today at 1:00?* Remind students to reduce the first syllable of *today*, *tonight*, and *tomorrow*.

3 Secondary Stress

What the Teacher Should Know

In the word *démocràt*, the last vowel has secondary stress. Vowels in syllables with secondary stress (marked with `) have full vowels (i.e., not reduced), length, and loudness. The major difference between secondary stress and primary/heavy stress is pitch: Vowels with secondary stress are pronounced at a lower pitch than vowels with primary stress. Say *démocràt* slowly and listen to how the pitch of your voice changes; it starts high over the first syllable (with primary stress), then falls over the second unstressed syllable and remains low over the last syllable with secondary stress.

Secondary stress is often predictable:

Compounds. Secondary stress occurs on the second word of compounds:

áirpòrt

óffice bùilding

Numbers: “teens”. Native speakers use two patterns of stress with numbers ending in *-teen*. Before a pause, and without special emphasis on the number (e.g., *He’s sixtèen*), primary stress usually falls on *-teen* and secondary stress on the number (*six*). Before a word whose first syllable is stressed (e.g., *thírtèen càndles*), the reverse pattern is used; *-teen* receives secondary stress, and the number, primary stress. The number, rather than *-teen*, also receives primary stress in counting: *thírtèen*, *fóurtèen*, *fiftèen*, and so on.

Numbers: “tens”. With *-ty* numbers, primary stress is always on the number (e.g., *síxty*) and the *-ty* ending is unstressed. Another difference between *-teen* and *-ty* numbers is the pronunciation of the letter *t*. In *-ty* numbers, *t* is a flap (a fast *d*; see Consonants, page 129): *sixDy*. In *-teen* numbers, *t* is a /t/: *sixteen*.

Students are sometimes misunderstood when they use *-teen* and *-ty* numbers; intended *-teen* numbers are heard as *-ty* numbers, and vice versa. If students stress *-teen* numbers on the second syllable, there will be less confusion as to whether they have said *sixtèen* or *síxty*.

Verbs with Prepositional Prefixes. Secondary stress occurs on the preposition in most verbs with prepositional prefixes:

òverlòok

ùnderstánd

Suffixes. Secondary stress also occurs on some suffixes: *réalíze*, *chíldhòod*, *áttitùde*, *pícturèsque*. When words ending with *-ate* are used as verbs, the *-ate* ending has secondary stress and a full vowel (/eyt/): *to gráduàte*. When these words are used as nouns or adjectives, the *-ate* ending is unstressed and the vowel is reduced: *my assóciate* /ət/, *gráduate* /ət/ *students*.

Polysyllabic Words with Primary Stress toward the End of the Word.

Polysyllabic words with primary stress toward the end of the word often have secondary stress two syllables in front of the primary stress. This use of secondary stress creates a more even alternation of stresses:

còntríbutíon

Jàpanése

càpabílity

As a pronunciation topic, secondary stress is less important than primary stress. For beginning students, the teaching of secondary stress can be limited to certain types of words, like compounds and *-teen* words.

If a beginning student's lack of secondary stress makes a word difficult to understand (this sometimes happens with *pòlitician*, where secondary stress is on the first syllable), the teacher can address the error by instructing the student to lengthen the first syllable of the word.

With intermediate and advanced students, secondary stress can be addressed when working with the stress patterns of compounds, verbs with prepositional prefixes, or suffixed words (see below).

Activity 1.4 Secondary stress in numbers: How many people live at 44 Main Street?

Level Beginning

Worksheet Page 205

Tip Teach classes of words that have predictable stress patterns.

Description This information gap provides practice with *-teen* and *-ty* numbers. Students have a map with boxes representing apartment buildings at different locations. Each student has the number of occupants in half of the buildings.

1. On the board, write all the *-teen* numbers in one column and the *-ty* numbers in a second column:

13 30

14 40

15 50

16 60

17 70

18 80

19 90

2. Model the *-teen* words first, stressing *-teen*. Students repeat. Ask students which syllable is stressed. Repeat with the *-ty* words.

(continued on next page)

Activity 1.4 continued

3. Ask students to listen again, this time paying attention to how the *t*'s in *sixteen* and *sixty* sound (the *t* in *sixteen* will be a true *t*; the *t* in *sixty* will be a flapped *t*). You can explain the flapped *t* as a "fast *d*" (see Flapped /t/ and /d/, page 129).
4. Model the numbers across the rows. Students repeat.
5. Say one of the numbers on the board. Ask students to write the number you said and check their answers with partners. Then select students to choose a number and say it to the class. The class writes the number they heard and then checks with the speaker.
6. Information gap. Model the information gap. Draw a box on the board to represent a building on a local street. Write the address below the box. Below the address write the question "How many people live at 232 Main Street?"



232 Main Street

How many people live at 232 Main Street?

Ask the question and choose a student to guess the answer, using a *-ty* or *-teen* number. Have the student write the number in the box. Repeat with a different student and a different address.

7. Put students in pairs and hand out a different map to each member of the pair. Read the instructions on the maps to the class. During the pair work, monitor pronunciation of the numbers.
8. After the pair work, ask students how many people live in the buildings at the various addresses. Provide feedback on the pronunciation of *-teen* and *-ty* numbers.

4 Stress with Two-Syllable Nouns and Verbs

What the Teacher Should Know

Over 90 percent of two-syllable nouns are stressed on the first syllable: *mother*, *kitchen*, *husband*, *table*. About 60 percent of two-syllable verbs are stressed on the second syllable: *repeat*, *occur*, *admit*, *announce* (Avery and Ehrlich 1992, 67).⁴ As

⁴ Two-syllable adjectives which are Germanic words (e.g., *yellow*, *hungry*, *thirsty*) are stressed on the first syllable of the root; two-syllable adjectives borrowed from other languages (e.g., *polite*, *afraid*, *local*) may be stressed on either the first or second syllable (Celce-Murcia et al. 1996). Three-syllable words are usually stressed on the first or second syllable. *Cánada*, *ófficer*, *póssible*, and *éxcellent* are all stressed on the first syllable. *Potáto*, *agréement*, *apártnment*, and *condítion* are stressed on the second syllable.

the percentages suggest, stress placement is far more regular for two-syllable nouns than for two-syllable verbs.

Dauer presents an alternative rule for two-syllable verbs and adjectives: Stress is placed on the root syllable (1993, 67). This is a useful rule provided that students can recognize the root. Syllable structure also influences stress on two-syllable verbs and may help students identify the root. The last syllable of the verb is stressed if it contains a long vowel (e.g., *repeat*, *decide*, *contain*) or ends in a consonant cluster (two or more consonants; e.g., *elect*, *disturb*). These types of syllables are heavy syllables, which attract stress. While students cannot be expected to analyze syllable structure, heavy syllables are often graphically longer (i.e., have more letters) than light syllables.

Noun-Verb Pairs: a REcord-to reCORD. Noun-verb pairs are two-syllable words whose grammatical function determines stress. When stressed on the first syllable, the word functions as a noun (e.g., *a permit*); when stressed on the second syllable, the word functions as a verb (e.g., *to permit*). These word pairs reflect the general tendency for two-syllable nouns to be stressed on the first syllable and two-syllable verbs on the second.

Depending on both the speaker and the word, the stress shift is not always mandatory. Some speakers, for example, pronounce *INcrease* with the noun pattern, whether it is used as a noun or verb.

Group A: Different stress patterns for nouns and verbs are mandatory for most speakers.

record, conduct, addict, progress, permit, conflict, desert, object, convict, present, produce, rebel, project, suspect

Group B: The noun pattern can be used for nouns or verbs.

increase, contract (business/legal agreement), protest, research, subject, detail, defect, insult

Group C: Nouns and verbs are stressed only on the first syllable.

ACcent, COMfort, PURchase, PROMise, REScue

Group D: Nouns and verbs are stressed only on the second syllable (many words with the prefixes *de-*, *dis-*, and *re-* fall into this group).

conTROL, surPRISE, deSIRE, deMAND, aRREST, reVIEW

When used as nouns, the words in Groups A and B often have secondary stress on the second syllable; the verb forms have reduced vowels in the first syllable: *the project*, *to project* /prəjekt/.

Because of the amount of new vocabulary, this topic is better suited to intermediate and advanced students.

Activity 1.5 Stress with two-syllable nouns: Classroom objects**Level** Beginners**Worksheet** None**Tip** Teach classes of words that have predictable stress patterns.**Description** This activity familiarizes students with stress in two-syllable nouns. It ends with pair work in which each member of the pair tries to guess five items that the partner has in her backpack (purse, bag).

1. On the board, write three column headings: *Things in the room*, *Things in your pocket*, and *Things in your backpack or purse*. Explain “pocket” and “purse” if necessary.
2. Ask students to work together and write down as many things as they can for each column. Help students by pointing at objects and by taking things out of your pocket or backpack/purse. Examples of things in the room include a table, a chair, a blackboard, chalk, eraser, a door, a computer, a window, and books. Examples of things in your pockets include a wallet, keys, a cell phone, tissues, and change. Examples of things in backpacks or purses include books, papers, pencils, pens, iPods, laptops, water, sandwiches, and notebooks.
3. When the lists are finished, ask students to volunteer words. Write the words on the board, circling two-syllable nouns. Ask students to count the syllables in the circled words. Ask students if the circled words are nouns (names of things) or verbs (names of actions). Model the words, exaggerating the length of the stressed vowel (ignore secondary stress in words like *backpack* or *blackboard*). Students repeat. Model the words again. Ask students what syllable is stressed and mark stress. Ask students if most two-syllable nouns are stressed on the first syllable or the second syllable.
4. Add some unfamiliar, two-syllable nouns to the board which can be easily pointed out. Point to the objects without saying them. Examples might include (depending on the room or the contents of your pockets or bag):

ceiling outlet carpet scissors folder

Tell students the words are nouns. Ask students what syllables they think are stressed and add stress marks. Model the words. Students repeat.

5. Model the pair work. Choose five items from the column *Things in your backpack*, including some two-syllable words. Choose a student and ask her, “Sue, do you have a _____ in your backpack?”
6. Put students in pairs. Explain that each student will guess five things that his partner has in his backpack, using the question “Do you have a _____ in

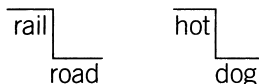
Activity 1.5 continued

- your backpack?" The students can choose words from the board or words for other things they know.
7. After the pair work, ask several students to report on the contents of their partners' backpacks. Provide feedback on word stress.

5 Stress with Compounds

What the Teacher Should Know

Compound nouns and adjective-noun compounds have primary stress on the first word and secondary stress on the second: *áirpòrt*, *gráduate stùdents*, *the Whíte Hòuse*. The first word is pronounced on a higher pitch:



This is a topic appropriate for beginning through advanced students and is covered in most pronunciation textbooks.

Mispronunciations of compounds usually occur because students have used a higher pitch on the second word or on both words. Most intermediate and advanced students use the correct stress-pitch pattern on compounds like *airport* or *subway*, written as one word (although Spanish students often misstress *boyfriend* and *girlfriend*). They have more difficulty with compounds written as two words, which are harder to recognize (e.g., *graduate students*, *post office*, *office building*). Nouns and adjectives formed from phrasal verbs (e.g., *the takeoff*, *my makeup*), have the same stress-pitch pattern as compounds. Phrasal verbs are discussed in Rhythm, page 69.

Activity 1.6 *Compounds: Which came first?*

Level Intermediate/Advanced

Worksheet Page 206

Tip Teach classes of words that have predictable stress patterns.

Description This activity practices compounds in the context of a trivia activity and can be integrated with other work on discoveries/inventions or technology. Students see pairs of compounds (e.g., cell phones, iPods) and decide which came first.

(continued on next page)

Activity 1.6 continued

1. Direct students' attention to the compound pairs. Go over meaning if necessary.
2. Select one of the compounds and write it on the board. Write the first word higher than the second, to illustrate the pitch pattern. Model the compound and the isolated stress-pitch pattern (DA
da). Ask the class whether the first or second word is pronounced on a higher pitch.

cell _____
phones



3. Students listen to the compounds and repeat them.
4. In pairs, students decide which came first, guessing as needed. For example, cell phones were in use before iPods.
5. After the pair work, ask students to report which came first. Provide feedback on the stress-pitch pattern of the compounds—make sure students pronounce the first word on a higher pitch.

6 Stress with Verbs and Nouns with Prepositional Prefixes

What the Teacher Should Know

Most verbs with prepositional prefixes have primary stress on the verb and secondary stress on the prefix: *òutlìve*, *òveréat*, *ùnderstánd*, *ùpsét*. A few are more often stressed on the preposition: *òverdòse*, *òutràge*, *òutlàw*. These are not fixed rules, however, and speakers may stress either the preposition or the verb in order to maintain a more equal alternation of stresses:

You really *ùpsét* Mary. or You really *ùpset* Mary.

Because of the new vocabulary involved with these verbs, this topic is better suited to intermediate and advanced students.

Nouns and adjectives can be formed from some verbs with prepositional prefixes. These constructions are stressed on the preposition, following the general pattern for two-syllable nouns: *a positive òutlòok*, *an ùpswìng in prices*, *an òutbrèak of flu*. The adjective *outstanding* can be stressed either on the prefix or on the root: When the meaning is “exceptionally good,” *outstanding* usually has primary stress on *stand*; when the meaning is “unpaid,” as in *an outstanding bill*, stress is usually on *out*. Note that with *outdoor(s)*, *indoor(s)*, *outside*, and *inside*, stress can be on either syllable.

Activity 1.7 Verbs and nouns with prepositional prefixes: Why do women outlive men?**Level** Advanced/intermediate**Worksheet** Page 206**Tip** Teach classes of words that have predictable stress patterns.

Description This activity uses paired dictations to practice the stress patterns of nouns and verbs with prepositional prefixes, in the context of gender differences. The activity can be integrated with work on longevity, aging, or gender issues. This is also an opportunity to practice the pronunciation of the plural *women*, using the vowel /ɪ/ (/ɪ/ is the vowel in *did*; see Front Vowels, page 169).

1. On the board, write some verbs with prepositional prefixes. Go over meaning if necessary. Students may ask whether *whelm* is a verb. Explain that it comes from a verb meaning “capsize” used in Old and Middle English (it is listed by itself in the American Heritage Dictionary with the meaning “overwhelm”).

outlive**overdo****undertake****overtake****withhold****overwhelm****outweigh****withdraw**

2. Model the words, stressing the verb. Students repeat. Ask students whether the words are nouns or verbs and which part of the word is stressed (verb or preposition). Mark stress on the words. Explain that most verbs with prepositional prefixes are stressed on the verb.
3. Add nouns with prepositional prefixes to the board.

income**outgo****overview****outline**

4. Model the words, stressing the prepositions. Students repeat. Ask students which part of the words is stressed. Explain that nouns with prepositional prefixes are stressed on the preposition.
5. Paired dictations. Model the activity. Dictate the sentence below to the class. Tell students to mark the stress on the word with the prepositional prefix.
Elderly women outnumber elderly men.
6. Put students in pairs and give each member of the pair a different set of sentences for dictation. Students decide where stress should fall in the underlined words in their sentences and dictate the sentences to a partner who writes them. Students should speak as clearly as possible and not show the dictation sentences to the partner until the activity is finished.
7. After the activity, ask individuals to read the sentences. Ask the class to comment on the dictation statements: Are the statements true, false, or partly true? Ask students if they think there are other reasons that women outlive men.

7 Abbreviations

What the Teacher Should Know

The last letter of an abbreviation has heaviest stress and highest pitch: e.g.,
ATM (automated teller machine).

Activity 1.8 *Abbreviations: Integrating pronunciation and grammar*

Level Intermediate

Worksheet Page 207

Tip Teach classes of words that have predictable stress patterns.

Description This activity combines practice with the stress pattern of common abbreviations and the use of premodifiers (articles and possessives) with abbreviations. Students match abbreviations to definitions and supply a modifier in front of the abbreviation.

1. Students listen to the abbreviations on Worksheet 1.8 and repeat them.
2. Ask students which letter of the abbreviation has the heaviest stress and which has the highest pitch. (The last letter has the heaviest stress and the highest pitch, which then falls.) Ask individuals to read some of the abbreviations. Provide feedback on stress and pitch.
3. Explain the use of articles and possessive adjective premodifiers if necessary.⁵
4. Students work in pairs to match the abbreviations with definitions and write a modifier in the blank before the abbreviation.
5. After the pair work, ask students to explain what each abbreviation stands for (e.g., *the UN* stands for the United Nations), monitoring stress on the abbreviation, as well as premodifier use.
6. Abbreviated phrases such as *TGIF* (thank God it's Friday), *ASAP* (as soon as possible), and *FYI* (for your information), and texting abbreviations such as *BFF* (best friend forever), *LOL* (lots of laughs or laughing out loud, also little old lady), and *IDK* (I don't know) can also be presented. These abbreviations are used more in writing than speaking.

⁵ The article *the* is used when the abbreviation refers to a specific (or known) referent (e.g., *the UN*), and *a/an* is used with a nonspecific (or unknown) referent (e.g., *an ATM*); no article is used when the abbreviation is a proper name (e.g., IBM). Possessives are used when the referent "belongs" to an individual (e.g., *his DOB*, date of birth).