July 2009

# Teaching Pronunciation to Adult English Language Learners

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## **Background on Adult Learners**

Adult education programs serve both native English speakers and learners whose first, or native, language is not English. Native English speakers attend adult basic education (ABE) classes to learn basic skills needed to improve their literacy levels and adult secondary education (ASE) classes to earn high school equivalency certificates. Both ABE and ASE instruction help learners achieve goals related to job, family, and further education. English language learners attend English as a second language (ESL), ABE, or workforce preparation classes to improve their oral and literacy skills in English and to achieve goals similar to those of native English speakers.

#### Audience for This Brief

This brief is written for teachers, program administrators, education researchers, and policy makers to provide information about evidence-based strategies for teaching pronunciation to adult English language learners.

#### Introduction

Adult English language learners in the United States approach the learning of English pronunciation from a wide variety of native language backgrounds. They may speak languages with sound systems that vary a great deal from that of English. Individuals with a Spanish language background constitute the largest foreign-born population in the United States. Foreign-born U.S. residents also come from African, Asian, European, and Middle Eastern countries (Center for Applied Linguistics, 2009; Pew Hispanic Center, 2009; U.S. Census Bureau, 2007).

The pronunciation goals and needs of adult English language learners are diverse. These goals and needs depend on a variety of factors, which may include the learners' uses of English (in what settings and for what purposes), their motivation to identify with specific English-speaking groups, the degree to which they want to sound like native speakers, and the frequency with which they speak English (Flege, Frieda, & Nozawa,

1997; Gatbonton, Trofimovich, & Magid, 2005; Moyer, 2008).

Although pronunciation is part of the curriculum in many adult education programs, it is often not included in state language proficiency standards or addressed systematically in instruction (Levis, 2005). In addition, some ESL teachers working with adult learners do not have training in teaching pronunciation (Derwing & Munro, 2005; Levis, 2005). As a result, teachers may not be able to identify the patterns of or reasons for learners' pronunciation problems or have a systematic way to teach the sound, stress, intonation, and rhythm patterns of English. This brief reviews features of languages (particularly English) that can have an impact on the teaching and learning of English pronunciation, discusses the research on learner acquisition of pronunciation, and describes how teachers can teach pronunciation in their classes.

# Factors Affecting the Learning of Pronunciation

Recent discussion of and research on the teaching and learning of pronunciation have focused on the following issues: the importance of accent, stress, intonation, and rhythm in the comprehensibility of the speech of nonnative speakers; the effects of motivation and exposure on the development of native-like pronunciation; and the intelligibility of speech among speakers of different English varieties.

#### Accent

An accent is "the cumulative auditory effect of those features of pronunciation that identify where a person is from, regionally or socially" (Crystal, 2003, p. 3). Accentedness, a "normal consequence of second language learning" (Derwing & Munro, 2005, p. 383), is a "listener's perception of how different a speaker's accent is from that of the L1 [first language or, in our situation, American English] community" (p. 385).

Many adult learners of English have foreign accents that identify them as nonnative speakers. Some linguists support the idea, known as the Critical Period



Hypothesis, that a learner needs to begin learning the language before age 7 in order to develop native-like pronunciation (Lenneberg, 1967). However, more recent research suggests that environment and motivation may be more important factors in the development of native-like pronunciation than is age at acquisition (Marinova-Todd, Marshall, & Snow, 2000). An understanding of the features of learner accents and their impact on intelligibility can help teachers identify and address characteristics of learner pronunciation (Derwing & Munro, 1997). The primary aim is that students be understood. Good pronunciation is needed for this, but a "perfect accent" is not (Harmer, 1991).

#### Stress, Intonation, and Rhythm

Munro and Derwing (1999) observed that even heavily accented speech is sometimes intelligible and that prosodic errors (i.e., errors in stress, intonation, and rhythm) appear to affect intelligibility more than do phonetic errors (i.e., errors in single sounds). For this reason, pronunciation research and teaching focus both on the sounds of language (vowels and consonants) and on suprasegmental features—that is, vocal effects that extend over more than one sound—such as stress, sentence and word intonation, and speech rhythm (Crystal, 2003; Florez, 1998; Low, 2006; Munro & Derwing, 1999).

Languages have traditionally been classified as either stress timed or syllable timed. In stress-timed languages (e.g., British and American English, German, Dutch, Thai), "stressed syllables fall at regular intervals throughout an utterance" (Crystal, 2003, p. 245), and rhythm is organized according to regularity in the timing of the stressed syllables. That is, the time between stressed syllables is equal because unstressed syllables are spoken more quickly and vowel reduction occurs. For example, the sentence "Tom runs fast" is made up of three stressed syllables, as indicated by the letters in boldface. The sentence "Meredith can run fast" is made up of six syllables, but only three of them are stressed. The unstressed syllables -e-, -dith, and can are spoken quickly and vowel reduction occurs, so the time between the stressed syllables tends to be equal, and both sentences take approximately the same amount of time to say.

In syllable-timed languages (e.g., some nonnative varieties of English, such as Singapore and Malaysian English, and languages such as Tamil, Spanish, and French), syllables are said to be equal in timing (Crystal, 2003). All syllables are nearly equally stressed, vowel reduction does not occur, and all syllables appear to take the same amount of time to utter.

Recent phonetic research has shown that languages cannot be strictly classified as syllable timed or stress

timed. A more accurate description is that they are stress based or syllable based; that is, they are not completely in one category or the other, but tend to have more stress-timed or syllable-timed features (Low, 2006). Stress-based rhythm is achieved through the presence of reduced vowels for unstressed syllables in a sentence. Function words (e.g., articles, helping verbs, prepositions) typically have reduced vowels instead of full ones, and the reduced vowel version is known as a *weak form*. For example, in the sentence "Bob can swim," the words *Bob* and *swim* have the major stress, and *can*, which is unstressed, is pronounced [kin]—its weak form.

The distinction between stress- and syllable-based languages is important, especially if an adult English language learner speaks a first language that is different rhythmically from stress-based British or American English. An understanding of whether a learner's first language is stress based or syllable based will help a teacher plan appropriate pronunciation exercises.

In examining the role of stress—"the degree of force used in producing a syllable" (Crystal, 2003, p. 435)—in intelligibility, Field (2005) asked trained listeners to transcribe recorded material when the variables of word stress and vowel quality were manipulated. He determined that when word stress is erroneously shifted to an unstressed syllable, without a change in vowel quality, utterances are significantly less intelligible than when only vowel quality is manipulated. Native and nonnative English speakers responded similarly when judging the intelligibility of words with misplaced word stress.

O'Brien (2004) reported the results of research on the importance of stress, intonation, and rhythm for a native-like accent in German. Native speakers of German were asked to rate American university students reading aloud in German. It was found that the native speakers focused more on stress, intonation, and rhythm than on individual sounds when rating speech samples as native-like

Implications of this research for classroom instruction are that teachers need to spend time teaching learners the rules for word stress, intonation, and rhythm in English, as well as focusing on individual sounds that may be difficult for the learners in their classes.

#### **Motivation and Exposure**

Along with age at acquisition of a language, the learner's motivation for learning the language and the cultural group that the learner identifies and spends time with help determine whether the learner will develop native-like pronunciation. Research has found that having a personal or professional goal for learning English can influence the need and desire for native-like pronun-

ciation (Bernaus, Masgoret, Gardner, & Reyes, 2004; Gatbonton et al., 2005; Marinova-Todd et al., 2000; Masgoret & Gardner, 2003). The review by Marinova-Todd et al. (2000) of research on adult acquisition of English concluded that adults can become highly proficient, even native-like, speakers of second languages, especially if motivated to do so.

Moyer (2007) found that experience with and positive orientation to the language appear to be important factors in developing native-like pronunciation. In a study of learners of Spanish, Shively (2008) found that accuracy in the production of Spanish is significantly related to age at first exposure to the language, amount of formal instruction in Spanish, residence in a Spanish-speaking country, amount of out-of-class contact with Spanish, and focus on pronunciation in class. Therefore, in addition to focusing on pronunciation and accent in class, teachers will want to encourage learners to speak English outside the classroom and provide them with assignments that structure those interactions.

#### Intelligibility and Varieties of English

Because English has become an international language, teachers need to keep in mind that their adult students will speak with both native and nonnative English speakers outside of the classroom (e.g., a fellow student or a boss at work may be a native speaker of Bengali, Spanish, or Vietnamese). Jenkins' seminal work (2000) on the phonology of English as an international language, in which she studied which phonological features caused a breakdown in communication when two nonnative English speakers were communicating with each other, has popularized the notion that specific features of pronunciation must be mastered in order for a speaker to be understood. Jenkins (2002) calls these minimal features of pronunciation a lingua franca core. Teachers of adults learning English should be aware that the goal of improving pronunciation for many adult learners is mutual intelligibility, not perfection.

# **Instructional Strategies**

Based on the discussion above, there are a number of instructional strategies for teaching pronunciation that can help students meet their personal and professional needs. For example, teachers can do the following:

- Cultivate positive attitudes toward accuracy
- Identify specific pronunciation features that pose problems for learners
- Make learners aware of the prosodic features of language (stress, intonation, rhythm)
- Focus on developing learners' communicative competence

#### **Cultivate Positive Attitudes Toward Accuracy**

Teachers should create a classroom atmosphere in which affiliation with the native language group is respected at the same time that learners work on their English pronunciation in order to be understood. To do this, teachers might first give a background lesson on varieties of English in the United States and around the world and how these varieties have developed. They can then help students work on specific pronunciation features. Table 1 (Pronunciation Focus) shows the lingua franca core features that Jenkins (2002) described, as well as the features needed for clear pronunciation in American English.

# Identify Specific Pronunciation Features That Pose Problems for Learners

Linguists have tried to identify potential pronunciation difficulties of nonnative speakers of a language by using contrastive analysis, which was popular in the 1950s and 1960s. The Contrastive Analysis Hypothesis posits that by contrasting the features of two languages, the difficulties that a language learner might encounter can be anticipated (Crystal, 2003; Fries, 1952). Features of many languages were catalogued by linguists, but it was not possible to systematically predict which areas of English would be difficult for speakers of particular native languages. A less predictive version of the hypothesis was eventually put forth that focused on cross-linguistic influence, which claims that prior language experiences have an impact on the way a language is learned, but these experiences do not consistently have predictive value (Brown, 2000; Wardhaugh, 1970). From this work, linguists have been able to develop lists of sounds that native speakers of particular languages may find problematic in learning English. For example, speakers of Asian languages may have difficulty producing /l/ and /r/ sounds; speakers of Spanish may have difficulty distinguishing between and producing /sh/ and /ch/ sounds. These lists for specific language backgrounds are now featured in pronunciation texts, such as Sounds Right (Braithwaite, 2008), and pronunciation software programs, such as American Speech Sounds (Hiser & Kopecky, 2009).

Teachers can also learn a great deal by observing the English learners in their classes as they communicate with each other. By noting the places where communication breaks down and determining the pronunciation features that caused miscommunication to occur, teachers can identify pronunciation features that they should focus on in class. When students are giving presentations or working together in pairs or groups, the teacher might use a checklist similar to the one in Table 2 or in *Well Said* (Grant, 2010, p. 4) to note when a stu-

**Table 1: Pronunciation Focus** 

Pronunciation feature	Focus of lingua franca core	Focus for teaching American English pronunciation	
1. Consonantal inventory	All consonant sounds except /t/, /d/, and /l/	All consonant sounds in English	
2. Phonetic realizations	Aspiration after /p/,/t/, /k/; Appropriate vowel length before consonants (e.g., /b/p/, /v/f/, /z/s/)	Aspiration after /p/,/t/, /k/; Appropriate vowel length before consonants (e.g., /b/p/, /v/f/, /z/s/)	
3. Consonant clusters	Preserve consonant clusters word initially (e.g., <a href="mailto:step:0">step</a> ) and medially (e.g., <a href="mailto:sister">sister</a> )	Preserve consonant clusters word initially (e.g., <u>stop</u> ) and medially (e.g., si <u>st</u> er)	
4. Vowel quantity	All long-short vowel contrasts (e.g., bit vs. bite)	All long-short vowel contrasts (e.g., bit vs. bite)	
5. Vowel quality	Consistent regional qualities can be preserved (e.g., Singaporean English vowel pronunciation)	Consistent regional qualities can be preserved (e.g., if teaching English in the South, southern vowels will be taught)	
6. Weak forms of vowels	Contrast between weak and strong forms (e.g., I can [kin] swim/I can't [kant] dance)	Contrast between weak and strong forms (e.g., <i>I can</i> [kin] <i>swim/I can't</i> [kant] <i>dance</i> )	
7. Stress-timed rhythm	Not necessary to teach; use rhythm of the regional variety of English	Stress timing of American English rhythm (e.g., where major stress in words, phrases, and sentences falls: <i>I</i> am <u>sick</u> )	
8. Word stress	Difficult to teach in some areas of the world where the variety of English used is syllable timed	Needed in American English (e.g., <u>pro</u> ject/pro <u>ject</u> , <u>ob</u> ject/ob <u>ject</u> )	
9. Nuclear (tonic) stress	Important to teach the most prominent syllable in a sequence of pitches (e.g., My <u>sister</u> bought a new <u>dress</u> ; dress is the most important piece of information, so it carries the most stress)	Important to teach the most prominent syllable in a sequence of pitches (e.g., My <u>sis</u> ter bought a new <u>dress</u> ; dress is the most important piece of information, so it carries the most stress)	

Source: Adapted from Jenkins, 2002. Used with permission.

dent is not understood or when several students make the same pronunciation mistake. This information can become material for subsequent pronunciation lessons.

The checklist can also be used to make learners aware of particular features of speech that have the potential to cause problems for intelligibility and to help them develop their own pronunciation goals. Teachers and learners can work together to complete a learner pronunciation profile that includes (a) an inventory of the sounds and stress intonation patterns that the learner does well and those the learner wants to change and (b) a questionnaire about when and how the learner uses English (Grant, 2010, pp. 1-8). This profile can help learners develop pronunciation goals and check their progress toward achieving those goals.

# Make Learners Aware of Prosodic Features of Language

As has been noted, prosodic features of language—word stress, intonation, and rhythm—are extremely important to comprehensibility. Teachers should therefore include prosodic training in instruction (Bailly & Holm, 2005; Gauthier, Shi, & Yi, 2009; O'Brien, 2004). They might begin with listening activities. For example, they can ask students to listen for rising intonation in yes/no questions, compare question intonation in English

with that of their native languages, and then imitate dialogues, perform plays (see O'Brien, 2004), and watch videos in which yes/no questions are used (e.g., Hardison, 2005).

#### Focus on word stress

There are a number of activities teachers can do to help learners use word stress correctly.

Lead perception exercises on duration of stress, loudness of stress, and pitch. These exercises will help learners recognize the difference between stressed and unstressed syllables (Dalton & Seidlhofer, 1994; Field, 2005). For example, learners can be taught to recognize where stress falls in words with two or more syllables by learning the rules of parts of speech and word stress (e.g., the primary stress is on the first syllable in compound nouns such as airport, laptop). Learners can also use a pronunciation computer program, such as American Speechsounds (Hiser & Kopecky, 2009), to learn the duration and loudness of stress.

Do exercises on recognizing and producing weak, unstressed syllables (Dalton & Seidlhofer, 1994; Field, 2005). For example, one exercise helps learners identify computer voice recognition mistakes that have occurred because of mispronunciation of weak vowel forms (e.g., "Alaska").

**Table 2: Pronunciation Checklist** 

<b>Pronunciation</b> (Mark "x" where applicable, according to frequency of error)		Sometimes	Never
Consonants			
th (e.g., <u>th</u> in—not [t])			
th (e.g., <u>th</u> en—not [d])			
s & z (e.g., <u>s</u> ue vs. <u>z</u> oo)			
r (e.g., <u>r</u> ice vs. <u>l</u> ice)			
l (e.g., pa <u>l</u> ate vs. pa <u>rr</u> ot)			
Final consonants			
Voiceless, voiced (e.g., ni <u>p</u> vs. ni <u>b</u> ; sea <u>t</u> vs. see <u>d</u> ; lo <u>ck</u> vs. lo <b>g</b> ; lar <u>ch</u> vs. lar <b>g</b> e)			
final l (e.g., fina <u>l</u> , litt <u>l</u> e, se <u>ll</u> )			
final s (e.g., <i>pupil<u>s</u>, write<u>s</u>, school<u>s</u>)</i>			
-ed suffix to mark past tense			
Vowel variation			
h <u>i</u> ll vs. h <u>ee</u> l			
c <u>u</u> t ∨s. c <u>a</u> rt			
c <u>o</u> t vs. c <u>au</u> ght			
p <u>u</u> ll vs. p <u>oo</u> l			
p <u>e</u> n vs. p <u>a</u> n			
Intonation			
Use of rising intonation: yes/no questions (e.g., Are you coming?)			
Use of falling intonation: statements (e.g., Yes, I am coming); wh questions (e.g., What are you doing?)			
<b>Voice</b> (Mark "x" where applicable, according to frequency of error)			
Audibility level			
Too loud			
Too soft			
Fading out at end of statements			
Pitch and range			
Monotonous			

Note: This checklist was designed as a means to assess teachers' oral English proficiency.

Source: From Low, E. L., & Samosir, N. (2000, December). Designing a pronunciation checklist as a diagnostic of oral proficiency: The case of the Entrance Proficiency Test (EPT) in Singapore. Paper presented at English in South East Asia Conference, Perth, Australia. Reprinted with permission.

if she wants to come with us" instead of "I'll ask if she wants to come with us" [Hancock, 1998, p. 80]).

*Present pronunciation rules for stress* (Dalton & Seidlhofer, 1994; Kenworthy, 1987). For example, teach learners that in reflexive pronouns, the stress is always on the syllable *-self* (e.g., *myself*, *ourselves* [Grant, 2010, p. 57]).

*Teach word stress when teaching vocabulary* (Field, 2005). For example, any time that new words are introduced, point out to learners where the major stress falls.

Use analogy exercises (Field, 2005). Words sharing similar stress patterns are easier for listeners to remember (Aitchison, 2003). For example, give learners a list of words with similar stress and ask them to state the rule (e.g., in compound adverbs of location, such as *inside*, *downstairs*, and *outdoors*, the stress is on the final syllable [Hancock, 1998, p. 69]).

At higher levels, teach learners how to break words into syllables and predict where word stress lies (Field, 2005). For example, the number of syllables in a word can be taught to the class with examples from the teacher. The Making Tracks board game, played in pairs (Hancock, 1998, p. 8), gives learners practice breaking up words into syllables.

## Focus on unstressed syllables

There are many exercises that a teacher can use to focus on unstressed syllables, or weak vowel forms, in connected speech. Liang (2003) discusses three strategies to teach weak vowel forms.

*Use function words.* Introduce weak forms through the grammatical category of function words, such as articles, pronouns, auxiliary verbs, and prepositions.

Present sentence drills where both strong and weak forms appear. For example, the teacher can read a passage while learners underline the weak forms in the passage.

Allow learners to practice using weak forms in conversations in order to simulate real-life speech encounters. For example, the teacher might focus the lesson on the ability to do things. Student A can play the role of an interviewer, and student B can be the interviewee. Student A poses a list of questions regarding student B's ability to do things. For example, student A asks, "Can you dance?" Student B uses both the strong and weak form of the vowel in can and can't in an answer such as this, "I can't dance very well, but I can try."

# Focus on Developing Learners' Communicative Competence

The goal of pronunciation teaching and learning is communicative competence, not the complete absence of an accent (Gatbonton et al., 2005; Hymes, 1972; Low, in press; O'Brien, 2004; Savignon, 1997). Savignon (1997)

stressed the need for meaningful communicative tasks in the language classroom, including those that focus on pronunciation. Pronunciation exercises that relate to daily use of English include, for example, role-plays of requests that learners have to make (e.g., to ask a boss for a day off or to ask a bank teller to cash a check). (See Grant, 2010, "Communicative Practice" exercises.)

Learners can become careful listeners in their own conversations. Pitt (2009) shows that learners need exposure to conversations so they can hear variation in pronunciation. By using audiotapes and videotapes, especially of speakers of different varieties of English, teachers can give learners meaningful exposure to variation in pronunciation and increase their communicative competence (Florez, 1998).

#### **Conclusion**

Although there are challenges to teaching and learning English pronunciation, it is an area vital to adult English language learners' communicative competence. Recent research has shed light on pronunciation features to be taught and on learners' goals and motivations for improving their pronunciation. By incorporating current research and its implications into their teaching practice, teachers can help learners gain the skills they need for effective communication in English.

### References

Aitchison, J. (2003). Words in the mind. Oxford: Blackwell.

Bailly, G., & Holm, B. (2005). SFC: A trainable prosodic model. *Speech Communication*, 46(3/4), 348-364.

Bernaus, M., Masgoret, A., Gardner, R., & Reyes, E. (2004). Motivation and attitudes towards learning language in multicultural classrooms. *International Journal of Multilingualism*, 1(2), 75-89.

Braithwaite, M. (2008). *Sounds right*. New Plymouth, New Zealand:Curriculum Concepts

Brown, H. D. (2000). *Principles of language learning and teaching*. White Plains, NY: Addison Wesley Longman

Center for Applied Linguistics. (2009). *U.S. refugee* program: Current fiscal year admission statistics. Washington, DC: Cultural Orientation Resource Center. Retrieved June 30, 2009, from http://www.cal.org/co/refugee/statistics/index.html

Crystal, D. (2003). *A dictionary of linguistics and phonetics*. Oxford: Blackwell.

Dalton, C., & Seidlhofer, B. (1994). *Pronunciation*. Oxford: Oxford University Press.

Derwing, T. M., & Munro, M. J. (1997). Accent, intelligibility and comprehensibility: Evidence from four L1s. *Studies in Second Language Acquisition*, 19, 1-16.

- Derwing, T. M., & Munro, M. J. (2005). Second language accent and pronunciation teaching: A research-based approach. *TESOL Quarterly*, *39*(3), 379-397.
- Field, J. (2005). Intelligibility and the listener: The role of lexical stress. *TESOL Quarterly*, 39(3), 399-423.
- Flege, J. E., Frieda, E. M., & Nozawa, T. (1997). Amount of native-language (L1) use affects the pronunciation of an L2. *Journal of Phonetics*, *25*(2), 169-186.
- Florez, M. C. (1998). *Improving adult ESL learners' pronunciation skills*. Washington, DC: Center for Applied Linguistics. Retrieved June 30, 2009, from http://www.cal.org/caela/esl\_resources/digests/Pronun.html
- Fries, C. (1952). *The structure of English*. New York: Harcourt, Brace, & World.
- Gatbonton, E., Trofimovich, P., & Magid, M. (2005). Learners' ethnic group affiliation and L2 pronunciation accuracy: A sociolinguistic investigation. *TESOL Quarterly*, 39(3), 489-511.
- Gauthier, B., Shi, R., & Yi, X. (2009). Learning prosodic focus from continuous speech input: A neural network exploration. *Language Learning and Development*, *5*(2), 94-114.
- Grant, L. (2010). Well said. Boston: Heinle & Heinle.
- Hancock, M. (1998). *Pronunciation games*. Cambridge: Cambridge University Press.
- Hardison, D. (2005). Contextualized computer-based L2 prosody training: Evaluating the effects of discourse context and video input. *CALICO Journal*, *22*(2), 175-190.
- Harmer, J. (1991). *The practice of English language teaching*. New York: Longman.
- Hiser, N., & Kopecky, A. (2009). *American speechsounds*. Portland, OR: American Speechsounds.
- Hymes, D. (1972). On communicative competence. In J. Pride & J. Holmes (Eds.), *Sociolinguistics* (pp. 269-293). Harmondsworth: Penguin.
- Jenkins, J. (2000). *The phonology of English as an international language*. Oxford: Oxford University Press.
- Jenkins, J. (2002). A sociolinguistically based, empirically researched pronunciation syllabus for English as an international language. *Applied Linguistics*, 23(1), 87-103.
- Kenworthy, J. (1987). *Teaching English pronunciation*. Oxford: Oxford University Press.
- Lenneberg, E. H. (1967). *The geological foundations of language*. New York: John Wiley and Sons.
- Levis, J. M. (2005). Changing contexts and shifting paradigms in pronunciation teaching. *TESOL Quarterly*, 39(3), 369-377.

- Liang, W. X. (2003). Teaching weak forms. *Forum*, *41*, 32-36.
- Low, E. L. (2006). A review of recent research on speech rhythm: Some insights for language acquisition, language disorders and language teaching. In R. Hughes (Ed.), Spoken English, TESOL and applied linguistics: Challenges for theory & practice. London: Palgrave-Macmillan.
- Low, E. L. (in press). Sounding local and going global: Current research and implications for pronunciation teaching. In L. Lim, L. Wee, & A. Pakir (Eds.), *English in Singapore: Unity and utility.* Hong Kong: Hong Kong University Press.
- Marinova-Todd, S. H., Marshall, D. B., & Snow, C. E. (2000). Three misconceptions about age and L2 learning. *TESOL Quarterly*, 34(1), 9-34.
- Masgoret, A., & Gardner, R. (2003). Attitudes, motivation, and second language learning: A meta-analysis of studies conducted by Gardner and associates. *Language Learning*, 53(Suppl. 2), 167-210.
- Moyer, A. (2007). Do language attitudes determine accent? A study of bilinguals in the USA. *Journal of Multilingual and Multicultural Development, 28*(6), 502-518.
- Moyer, A. (2008). Ultimate attainment in L2 phonology: The critical factors of age, motivation, and instruction. *Studies in Second Language Acquisition*, 21(1), 81-108.
- Munro, M. J., & Derwing, T. M. (1999). Foreign accent, comprehensibility, and intelligibility in the speech of second language learners. *Language Learning*, 49(Suppl. 1), 285-310.
- O'Brien, M. G. (2004). Pronunciation matters. *Teaching German*, 37(1), 1-9.
- Pew Hispanic Center. (2009, March 5). Statistical portrait of the foreign-born population in the United States, 2007. Washington, DC: Author. Available from http://pewhispanic.org/factsheets
- Pitt, M. (2009). How are pronunciation variants of spoken words recognized? A test of generalization to newly learned words. *Journal of Memory and Language*, *61*(1), 19-36.
- Savignon, S. (1997). *Communicative competence: Theory and classroom practice*. New York: McGraw-Hill.
- Shively, R. L. (2008). L2 acquisition of [β], [δ], and [γ] in Spanish: Impact of experience, linguistic environment and learner variables. *Southwest Journal of Linguistics*, 27(2), 79-114.
- U.S. Census Bureau. (2007). *American community survey* 2005-2007. Available from http://factfinder.census.gov

Wardhaugh, R. (1970). The contrastive analysis hypothesis. *TESOL Quarterly*, 4(2), 123-130

## **Pronunciation Teaching Materials**

(These materials are provided solely as examples; their inclusion here is not intended as a product endorsement.)

Brown, A. (2006). *Sounds, symbols & spellings*. Singapore: McGraw-Hill (Education) Asia.

Dauer, R. (1992). *Accurate English*. Upper Saddle River, NJ: Prentice Hall.

- Gilbert, J. (1993). *Clear speech*. Cambridge: Cambridge University Press.
- Gottlieb, M. (2006). *Assessing English language learners*. California: Corwin Press.
- Hewings, M. (1993). *Pronunciation tasks*. Cambridge: Cambridge University Press.
- Thornbury, S. (2005). *How to teach speaking*. Harlow: Longman.

## **Acknowledgment**

Special thanks to Karen Taylor, who provided feedback on an early version of this brief.