

Introduction

WHO ARE ENGLISH LANGUAGE LEARNERS?

For the purposes of this book, the term *English language learner* (ELL) refers to a diverse group of students who have one common feature—they are all learning English as other than their native language. There are other labels for these students. Official documents may refer to them as *limited English proficient* (LEP), and the terms *language-minority* and *bilingual* are common. Various government entities and national organizations favor some terms over others. They argue, for example, that the term *language-minority students* does not make sense in those communities where they outnumber their native English-speaking peers. Others suggest that the term *limited English proficient* places too much emphasis on what the student cannot do, hardly a positive approach. Even the term *second-language learner* is not accurate for students who may be learning English as their third or fourth language. To avoid these labeling problems, some organizations are referring to these students as *English as a new language* (ENL) learners and *English as an additional language*, denoting that these learners are adding English to their existing linguistic repertoire. Labels are evolving, so stay tuned.

By all available estimates, the population of school-age children who are English language learners is more than 5 million (NCELA, 2006). It may come as a surprise to many readers that most English language learners (ELLs) in American schools were actually born in the United States. About 76 percent of elementary-age ELLs and 56 percent of middle and high school ELLs were born in the United States. However, about 80 percent of ELLs' parents were born outside of the United States. As shown in Figure I.1, more than 80 percent

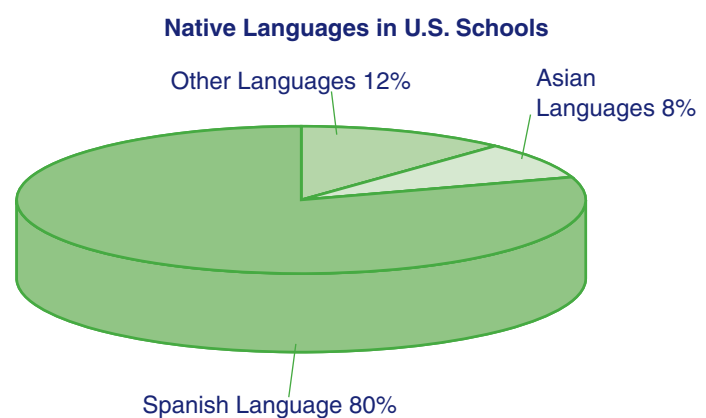


Figure I.1 This chart illustrates the percentage of students in U.S. schools who are native speakers of Spanish, Asian, and other languages (Capps et al., 2005).

of ELLs are Spanish speakers and many of these come from lower economic and educational backgrounds than either the general population or other immigrants and language minority populations (Capps et al., 2005). Furthermore, fewer than 40 percent of immigrants from Mexico and Central America have the equivalent of a high school diploma, in contrast to between 80 and 90 percent of other immigrants (and 87.5 percent of U.S.-born residents). As a result, most ELLs are at risk in school not only because of language but also because of socioeconomic factors. The next largest group of ELLs are the speakers of Asian languages (e.g., Chinese, Hindi, Hmong, Khmer, Korean, Laotian, Tagalog, and Vietnamese) who comprise about 8 percent of the ELL population. Students of Asian origin typically come from families with higher income and education levels than do other immigrant families.

Academic Achievement of ELLs

Despite the increased awareness among educators that ELLs need support to acquire the English proficiency to succeed in school, the academic achievement of ELLs tends to be low when compared to their non-ELL peers. Furthermore, as shown in Figures I.2 and I.3, the gaps in achievement between ELLs and non-ELLs have remained stubbornly unchanged from the 2005 to the 2009 National Assessment of Educational Progress (NAEP) tests in mathematics (NCES, 2009b; Perie, Grigg, & Donahue, 2005a) and reading (NCES, 2009c; Perie, Grigg, & Donahue, 2005b). These gaps are not really a surprise because ELLs are limited in their English

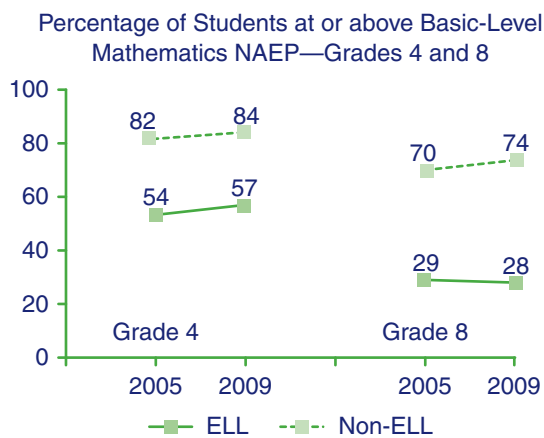


Figure I.2 The graph shows the percentage of ELL and non-ELL students at or above the basic achievement level in mathematics in Grades 4 and 8 on the 2005 and 2009 National Assessment of Educational Progress tests (NCES, 2009b; Perie et al., 2005a).

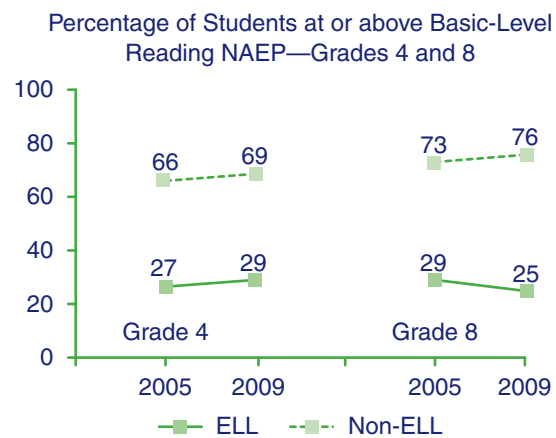


Figure I.3 The graph shows the percentage of ELL and non-ELL students at or above the basic achievement level in reading in Grades 4 and 8 on the 2005 and 2009 National Assessment of Educational Progress tests (NCES, 2009c; Perie et al., 2005b).

proficiency and the NAEP tests are in English. But the test data do not reveal the causes of the achievement gaps. Did the ELLs test low because of limited English proficiency, or because of lagging content knowledge and skills, or because of other factors that interfere with their test performance—or some combination of these? Apart from the reasons for these discrepancies, the scores do not suggest a promising picture for the ELLs' level of achievement in school or for their future. Schools, then, must reexamine their curriculum, instruction, and assessment to ensure they understand our current state of knowledge regarding how to improve the achievement of ELLs.

ABOUT THIS BOOK

Let's face it: Teachers of students who are English language learners have an exceptionally difficult job. Most of them are responsible not only for delivering curriculum content but doing so in a way that students struggling to learn a new language will understand it. These teachers are more likely to be successful if they have a deeper understanding of the cognitive, emotional, and cultural challenges their students are facing while trying to learn English and course content simultaneously. It is a formidable task, and teachers of ELLs need all the help they can get.

In recent years, teachers who work with ELLs can access a growing number of professional texts, articles, and online resources. However, the sheer volume of information is sometimes overwhelming. Consequently, teachers can succumb to the allure of strategy books. But selecting strategies from books without an understanding of the ELLs' unique language and learning needs is like driving a car without knowing the basic rules of the road. You may crash into something before you get very far. Teachers also need to be knowledgeable about the scientifically based evidence that underlies their instructional decisions. In this age of accountability, they not only have to make informed decisions about teaching their ELLs, they have to be ready to justify their decisions to administrators, parents, and teacher colleagues as well. This responsibility can be particularly difficult because few teachers are professionally prepared to serve students who are simultaneously learning English and academic content. That is why I wrote this book. There are plenty of "how to" books available with instructional strategies aimed at ELLs. But few, if any, delve into explaining what new research in cognitive neuroscience is telling us about how the brain of an English language learner deals with the linguistic reorganization needed to acquire another language after the age of 5 years. This is not just a "how to" book. It is a "why-because-how-to" book.

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Questions This Book Will Answer

This book will answer questions such as these:

- What are we learning from neuroscience about how the brain acquires language?
- Why is learning the first language so easy but learning a second language later so difficult?
- Are there differences between male and female brains in learning language?
- Can learning a second language too young interfere with learning the first language?
- What roles do memory and transfer play when acquiring a second language?
- Why is learning English particularly difficult compared to some other languages?
- What role does culture play in second-language acquisition?
- How effective are immersion programs for ELLs?
- How can content-area teachers help ELLs learn academic English successfully?
- How can we tell if an ELL is just having difficulty with language acquisition or has a developmental learning disability?
- What are the basics of an effective research-based program for ELLs?
- How can we identify gifted and talented ELLs?

Many examples in the text will refer to Spanish-speaking ELL students, although they can apply to other native language groups as well. I refer to Spanish more frequently because—as mentioned earlier—Spanish-speaking ELLs represent the largest non-English-speaking minority in the U.S. school population, and their numbers are growing.

Chapter Contents

Chapter 1 — Learning the First Language(s). Humans learn language effortlessly. This chapter discusses how and why young children can acquire spoken language easily and without direct instruction. It explores the structure of language and examines whether male and female brains learn language differently. How can the brain learn two languages at once? That is also explained in this chapter.

Chapter 2 — Learning a New Language (English) Later. Children’s innate ability to learn language begins to decrease as they get older. How does this affect learning a new language after the age of 5 years? What impact does the first language have on learning the second? What roles do memory and transfer play? Why is English a difficult language to learn for speakers of Romance languages? These and other related questions are addressed in this chapter.

Chapter 3 — Teaching English Language Listening and Speaking. Are immersion programs for ELLs as successful as some people claim? This question is explored along with research evidence on other program formats. But the focus here is on ways of developing ELLs’ listening and speaking skills in English.

Chapter 4 — Teaching English Language Reading and Writing. Learning to read is a real challenge for many ELL students. Research is telling us more about how the brain learns to read and suggests ways we can apply these findings to helping ELLs learn to read and write English faster and with understanding. This chapter investigates the research and applications.

Chapter 5 — Teaching Language Arts and Social Studies. Many ELLs have difficulties acquiring the academic English they need to succeed in the content areas. This chapter explores ways of helping ELLs learn the academic English and content in language arts and social studies. It also discusses ways of working with the culture differences among ELLs from various countries.

Chapter 6 — Teaching Mathematics and Science. Despite the notion that mathematics and science use universal symbols and languages, ELLs still have difficulty mastering these subjects. That is because language plays an important role in describing mathematical and scientific operations. Among other ideas, this chapter suggests ways of helping ELLs with word problems in mathematics and working successfully with the scientific method.

Chapter 7 — Recognizing and Addressing Problems in Learning English. How can we tell if an ELL is just having difficulty with language acquisition or has a developmental learning disability? Not knowing the difference may misidentify ELLs so that those without a learning disability get special services while those who need extra support do not. This chapter offers some ways that can help teachers avoid misidentification while helping struggling ELLs to succeed.

Chapter 8 — Putting It All Together. This chapter pulls together the main ideas of the book. It debunks some common misconceptions about ELLs and discusses the basics of an effective ELL program, including professional development for teachers of ELLs. It also explores ways of incorporating technology into ELL instruction and suggests ways to identify and support gifted and talented ELLs.

Other Helpful Tools

Applications. At the end of most chapters are the **Teaching Tips**. These suggestions stem from the major concepts and research discussed in the chapter and represent ways of translating the research into practical classroom applications. Many of them have been used successfully by teachers of ELL students at the elementary and secondary levels. A few teaching strategies are found in several sections of the book because it is possible that some readers will go to only those sections that interest them.

Key Points to Ponder. This page at the very end of each chapter is an organizing tool to help you remember important ideas, strategies, and resources you may wish to consider at a later time.

Glossary. Many of the neuroscientific and specialized terms used in the text are defined in a glossary.

References. Many of the citations in this extensive section are the original research reports published in peer-reviewed journals. These references will be particularly helpful for researchers

6 *How the ELL Brain Learns*

and for those who would like more specific information on how the research studies were conducted.

Resources. This section offers some valuable Internet sites that will help teachers at all grade levels find many additional strategies for working with ELL students.

The value of this book can be measured in part by how it enhances your understanding of how ELLs acquire the English language and of the strategies that are more likely to help them succeed in that challenging task. Take the following true-false test to assess your current knowledge in this area.

WHAT DO YOU ALREADY KNOW?

Directions: Decide whether the statements are generally true or false and circle T or F.

1. T F Exposing ELLs to English and having them interact with native English speakers will result in learning English.
2. T F All ELLs learn English in the same way and at the same rate.
3. T F Teaching methods that are successful with native English speakers also will be successful with ELLs.
4. T F Using visuals and other nonverbal tools in instruction helps ELLs avoid the language demands in school.
5. T F Assessments of ELLs' native language proficiency provide an accurate picture of linguistic proficiency.
6. T F The more time ELLs spend in receiving English instruction, the faster they will learn it.
7. T F Errors in English may cause problems and should be avoided.
8. T F Using technology regularly in the classroom will reduce the ELL students' attention span.
9. T F Intelligence and nonverbal tests are reliable methods for identifying gifted and talented ELLs.

The answers to these items will be found throughout Chapter 8.