When David Livingstone’s work in Africa became known, a missionary society wrote to him and asked, “Have you found a good road where you are?” If he had, the letter indicated that the society was prepared to send some men to help with his work. Livingstone’s answer was clear and to the point: “If you have men who will come only over a good road, I don’t need your help. I want men who will come if there is no road.” Increasing cultural and linguistic diversity in the grade-level classroom is, for many educators, as unfamiliar and intimidating as the wilds of Africa were to Livingstone’s contemporaries over 150 years ago. As a consequence of this trepidation, many educators are searching for the good road, the recipe, for successful teaching amid diversity. As Livingstone understood, however, changing times and a changing world demand a different sort of pioneer, a new brand of vigilance and empathy, a willingness among those who seek to educate to pursue the road less traveled.

New to This Edition

- Illustrated Concepts for each chapter provide educators examples of practical ways to implement the theoretical concepts found in the book.
- Global Connections feature English language teaching from a global perspective by connecting what is learned to EFL settings.
- Tips for Practice for EFL classrooms include advice for teachers to implement strategies and techniques for EFL/global settings.
- Video Links offer teachers a multimedia approach to see our theoretical concepts in actions via short video clips, available only through the Pearson eText (other eText formats do not support video).
- A revised framework for conceptual definitions of approach, method, strategy, and technique in Chapter 6 allows educators to be able to articulate how their instruction is grounded in current theory and research.
- An expanded glossary includes accessible definitions of key terms to support readers’ understanding of context.
- New and updated figures and tables assist teachers to visualize the theories and scholarship discussed within each chapter.
- New and updated sources and resources and an updated reference list familiarize readers with the latest being written and talked about in the education of CLD students.

Purpose

This text offers in-service teachers, district or building administrators, school specialists, preservice teachers, and paraprofessionals the opportunity to rediscover the
value, potential, richness, and adventure of diversity as they develop the capacity
to professionally address the differential learning and transition needs of culturally
and linguistically diverse learners. Although we recognize each student as a unique
individual, throughout this text we use the term *culturally and linguistically diverse (CLD)* to refer to those learners whose cultures or languages are different from that
of a dominant culture or language. Our journey pursues the road less traveled, and
along the way we gain new insights into and reflective perspectives on ourselves
and the rich cultural and linguistic assets CLD learners bring to the classroom.
Among the highlights of the adventure are innovative approaches, the latest tools,
contemporary procedures, exceptional strategies, and new ways of knowing, all of
which enhance our effectiveness with English learners. By taking a few turns that
others may have missed, our route explores novel ways to reach and maximize
relationships with the parents, caregivers, and extended family members of these
students, as partners in appropriate pedagogical practices. By traveling the extra
mile to achieve effectiveness amid diversity, we stretch ourselves to develop new
capacities for cross-cultural sensitivity, critical thinking, reflective student accom-
modation, and best practice with CLD students in both domestic and international
settings. Ultimately, we each reach our destination, our goal, having rediscovered
our own abilities, our own sensitivities, and our own professionalism, as well as
having discovered our own potential, which we have perhaps never explored.

As the title implies, this text is about methods. Yet it is also about differenti-
ating instruction and professional practice to accommodate the distinct learning
and transition needs of CLD students in both English as a second language and
English as a foreign language settings. Yes, the world of the classroom is changing.
Nevertheless, each of us is capable of effecting the changes necessary to accom-
modate that shift and demonstrate our effectiveness amid diversity. We begin our
journey by discussing the changes occurring in the classroom and by developing a
better understanding of English learners. Other facets of our expedition examine
the work of practitioners and researchers and the contributions they offer us in
differentiating our own practices for cultural and, especially, linguistic diversity.
At about the midpoint of our journey, we begin to investigate our readiness for
the destination. That is, we assess our emergent capacities to provide appropriate
classroom accommodations for the CLD student.

During the last leg of our quest for effectiveness amid diversity, we acquire
the tools for success, understand their historical foundations, practice their use,
listen to the voices of other teachers who have used them successfully, and apply
them to various dilemmas of practice. Benchmarks along the way designate where
and when various tools are appropriate and when they are not. Other hallmarks
of the adventure distinguish between tools and perspectives and critically assess
their utility in particular situations by examining differences among an approach,
a method, a strategy, and a technique. This is first accomplished by revisiting the
nature, history, and applications of three major approaches to instruction for CLD
students: the grammatical, the communicative, and the cognitive. Subsequently,
we consider which instructional methods are products of each approach and
which offer the best history of success with these students. Later, our discussions
detail the contemporary and effective methods of instruction for English learners, including the integrated content-based method, the sheltered instruction method, and the cognitive academic language learning approach (CALLA) method. Among the details considered in these discussions are the components, sequences, strategies, and techniques associated with each method and their applications in professional practice.

Ultimately, we arrive at our destination having reached the goal of instructional preparedness for cultural and linguistic diversity in the classroom. Our adventure closes with key facets of a platform for best practice with CLD students. With these key facets, we can self-assess our ongoing effectiveness with English learners and refine our capacities and skills so that we are increasingly successful in our professional and reflective practice amid diversity.

## Content Coverage

This third edition of *Mastering ESL/EFL Methods: Differentiated Instruction for Culturally and Linguistically Diverse (CLD) Students* is contemporary, comprehensive, theory and research based, and aligned with the Teachers of English to Speakers of Other Languages (TESOL)/National Council for the Accreditation of Teacher Education (NCATE) standards (TESOL, 2010). Each chapter in this text represents a concerted effort to enhance the professional development and preparation that educators need for today’s diverse and changing classrooms.

## Organization

Part One of this text, “Hallmarks of Accommodative Instruction,” examines the hallmarks of mutually accommodative instructional methods for CLD students. This mindful instruction intentionally accounts for and incorporates findings from the sociocultural, cognitive, academic, and linguistic dimensions of the CLD student biography and schooling experience. Chapters 1 through 3 specify and discuss the sociocultural realities, cognitive growth potentials, academic challenges and processes, and linguistic development of English learners.

Part Two, “Accommodation Readiness,” encourages school educators, based on their understanding of the four dimensions of the CLD student biography, to preassess their readiness for the accommodative instruction of the CLD student. Chapter 4 first describes the ways in which programming decisions (at the district or school level) can frame or restrict a teacher’s instructional options for accommodation. On the other hand, in those districts and schools where language programming is not already prescribed, programming decisions provide new opportunities for the appropriate instructional accommodation of English language learners. In either case, research on program models is summarized as a basis for teacher advocacy. Chapter 5 introduces the accommodation readiness spiral as a framework for teachers’ preassessments of their readiness to deliver
mutually accommodative instruction given a specified programming decision. The spiral serves as a preassessment tool for readiness in the following areas: critical reflection, CLD students and families, environment, curriculum, programming, instruction, application, and advocacy.

Part Three, “Professionalism in Practice,” recommends a professional approach to the instructional accommodation of the CLD student. This professionalism is conceptualized as involving three sequential components: planning, implementation, and evaluation. Chapter 6 provides and rationalizes recommendations for planning appropriate practices for CLD students. Chapters 7 through 9 discuss and detail three contemporary and robust methods of effective implementation. Finally, Chapter 10 discusses ways to appropriately engage in the evaluation of prior instructional planning and implementation. These processes of evaluation use nationally and internationally recognized standards of best practice with English learners as touchstones of comparison.

More specifically, the text is divided into ten chapters. Chapters 1 through 3 detail not only the assets that CLD students bring to the school but also the singular sociocultural, cognitive, academic, and linguistic challenges they face as well as the processes they must accomplish in the classroom. Chapter 1 is particularly concerned with those sociocultural factors that may influence the academic and transitional success of English learners, including impacts on the affective filter, the influences exerted by the culture of the school, and the dynamics of the acculturation process. Chapter 2 explores both the cognitive and academic dimensions of the CLD student biography and details factors in each dimension that may prove especially challenging for these students. Also described are the characteristics of instruction designed to promote cognitive development and academic success, especially classroom practice that is contextualized, relevant, cognitively demanding, elaborative, differentiated for multiple learning styles and strategies, constructivist, and metacognitive. Chapter 3 examines the challenges and processes of the linguistic dimension of learning for CLD students. Of particular interest to teachers and other educators are the processes of first and second language acquisition, each of which is detailed, compared, contrasted, and discussed. Also described are the characteristics that English learners tend to exhibit at each of the various stages of second language acquisition—from the silent period (preproduction stage) to the stage of advanced fluency.

Chapter 4 offers guidance regarding the range of programming models available for CLD students. Included is a discussion of the foundations, characteristics, and concerns associated with each program model. Research on the effectiveness of dominant models with varying populations of English learners is highlighted. The chapter closes with a brief overview of judicial and legislative foundations of programming, including the results of groundbreaking court precedents that have influenced programming and decision making in schools.

Chapter 5 encourages the reader to self-assess both understanding of the foundations offered in Chapters 1 through 4 and his or her readiness for the appropriate accommodation of CLD students. This accommodation readiness spiral offers a rubric for self-assessment in the following progressive domains of readiness:
critical reflection on practice, students and families, internal and external environment, curriculum, programming, instruction, application, and advocacy.

Chapters 6 through 9 detail appropriate instructional practices for English learners, with particular emphases on contemporary, theory and research-driven, culturally sensitive, developmentally appropriate, and content-based instructional methods. Chapter 6 first differentiates among approach, method, strategy, and technique as a basis for communication, collaboration, and effectiveness. Subsequently, one historical (the grammatical) and two contemporary (the communicative and the cognitive) approaches to instruction for CLD students are described, explained, and discussed. Each chapter that follows is devoted to contemporary and effective methods of instruction for English learners. Chapter 7 focuses on the integrated content-based method, Chapter 8 explores the sheltered instruction method, and Chapter 9 discusses the CALLA method and introduces briefly biography-driven instruction, an emerging method in the field. Each of these chapters also illustrates the implementation of these methods in classroom practice.

Chapter 10 brings closure by highlighting recent efforts in the development of standards of best practice for the instruction of English learners. Following an exploration of the key facets of a platform for best practice with CLD students, self-assessment rubrics are provided to facilitate (1) self-assessment comparisons of practice with national standards and benchmarks, (2) critical reflection on practice, and (3) suggestions for the refinement of professional practice with CLD students.

**Special Features**

To motivate reader interest, accommodate different learning styles, and offer additional insights on topics covered, this text offers the following special features:

**Chapter Outline:** Each chapter begins with a chapter outline, which provides readers with both an advance organizer and a fundamental understanding of the content of each chapter.

**Learning Outcomes:** Every educator should have access to the purpose and the ideas behind a particular lesson or chapter. Therefore, each chapter briefly specifies the learning outcomes that guided the development of content associated with that chapter.

**Key Theories and Concepts:** In each chapter, a list of key theories and concepts is provided to remind the reader of the critical content discussed in that particular chapter.

**Figures, Tables, and Photographs:** Each chapter of the text offers explanatory or illustrative figures, tables, and/or photographs that have been specifically designed to enhance or bolster the content of the chapter. Educators can capitalize on these features to understand the scope and breadth of various research-based practices identified in this text.
Text Boxes: Content enhancements in the form of text boxes are included in each chapter. Some of these features provide explanatory or illustrative information on topics covered in that chapter. Others introduce new but related information. Three types of text boxes are used throughout the text to illustrate (Illustrated Concepts), offer additional perspectives (Voices from the Field), and adapt for EFL classrooms (Global Connections). Three additional types of text boxes recur in all chapters:

- **Theory into Practice:** These text boxes briefly summarize a theory or theoretical concept before encouraging the reader to consider the implications of the theory or applications of it in professional practice with CLD students. Some also prompt thought and reflection on the content of the text box through guiding questions.

- **Dilemmas of Practice:** These content enrichments (some of which are framed in the form of a critical incident) first pose a dilemma of practice with English learners. Each then offers information and suggestions regarding an appropriate resolution of such a dilemma in practice. The resolutions typically use theories, methods, strategies, and information discussed in the various chapters.

- **Snapshots of Classroom Practice:** These teaching and learning enhancements provide a greater level of detail surrounding theory-into-practice applications of key theories or concepts discussed.

Connect, Engage, and Challenge Activities: The purpose of these end-of-chapter exercises is to offer teachers a structure for their theory-into-practice applications of chapter content. These three-part activities encourage teachers to: (1) connect with the material discussed in the chapter, (2) engage in dialogue with peers about content and learning, and (3) challenge themselves to apply what they have learned to differentiated practices for CLD students and families.

Tips for Practice: This is a differentiating feature that provides elementary, secondary, and EFL educators with highly specific extensions of chapter content. Chapters 1 through 7 offer elementary tips, secondary tips, and EFL tips for educators. The “Tips for Practice” section of Chapter 8 is organized according to the eight components of the sheltered instruction observation protocol, the primary subject of that chapter. The tips included for Chapter 9 have been structured according to three main categories of learning strategies emphasized in the CALLA instructional sequence, which is detailed in that chapter. Finally, the tips for Chapter 10 have been organized according to the four key facets of a platform for best practice with CLD students, which provide an organizational framework for that chapter.

Assessment Tips and Strategies: This feature appears at the end of Chapter 3 and summarizes the preassessment issues addressed in Chapters 1 through 3. It also appears at the end of Chapter 6 to summarize the assessment issues discussed in Chapters 4 through 6. Because Chapters 7, 8, and 9 address specific instructional methods, this feature also appears at the end of each of these chapters.

Glossary: This feature is an auxiliary resource for current readers and for future applications of content in practice. Attention has been given to those terms that
are likely to be unfamiliar to practicing educators and future educators who have had limited professional experiences with CLD learners.

**Appendix A: Critical Standards Guiding Chapter Content:** As a model for professionalism in practice with diversity, this special addition aligns the content of all chapters of the text with the nationally recognized TESOL/NCATE Standards (2010). The TESOL/NCATE teacher standards reflect professional consensus on standards for the quality teaching of P–12 CLD students. (For a more in-depth rationale of our decision to use these particular sets of standards, see Chapter 10.)

**Appendix B: Examples of Activities Specific to Mexican American Students:** Because the overwhelming majority of English learners in the United States are Spanish-language-dominant and because many of these students are Mexican American, this distinctive section provides examples of classroom activities specific to the background experiences and growth needs of these students. These activities are organized according to those applicable to elementary, middle, and high school. Within each of these categories, the activities are further subdivided according to those that apply to mathematics, language arts, and social studies.

**References:** Assembled in American Psychological Association (APA) style, this feature documents the theory, research, and analyses that support our discussions, content, conclusions, recommendations, and advocacy. The list is a resource for preservice and in-service educators of English learners.
Hallmarks of Accommodative Instruction

In Part One of this text, we examine the hallmarks of mutually accommodative instructional methods for culturally and linguistically diverse (CLD) students. This accommodative instruction accounts for, and incorporates findings from, the sociocultural, cognitive, academic, and linguistic dimensions of the CLD student biography and schooling experience. In Chapters 1 through 3, we specify and discuss the sociocultural realities, cognitive growth potentials, academic challenges and processes, and linguistic development of CLD students.
Our mission for this chapter will be to:
• Explore social and cultural aspects of what CLD students bring to the classroom.

We will accomplish this mission by helping you to meet the following learning outcomes:
• Explain how preparation for cultural and linguistic diversity in the classroom benefits those in the teaching field.
• Describe what teachers need to know about cultural and linguistic diversity in the classroom and how to differentiate between an asset perspective and deficit perspective of CLD students.
• Analyze the sociocultural dimension of the CLD student biography and ways in which it influences the realities of teaching in diverse classrooms.
Rapidly Changing Demographic Patterns and Student Diversity

Across the United States, student populations and the rise of new education standards continue to rapidly and radically change the dynamics of education. No less changed is the increasingly global workplace for which students, especially high school graduates, must be prepared. Fundamentally, today’s educators teach in a transnationally competitive age in which communication, technology, research, and human potential make incredible advances in every field possible—on a daily basis! We call attention to the complexity that teachers may expect in the classrooms of today and tomorrow. As we walk through the doors of today’s classrooms, we notice that learning is no less important to success than it has been in the past. However, we are more likely to observe that the nature of expected learning has changed.

In this new era, information is pervasive, connections to it abound, and the speed at which each connection is shared grows exponentially. Not surprisingly, learning in this age focuses less on content knowledge than artfully developing and refining processes and perspectives that maximize data, information, connections, and collaborations. The capacity for such learning will prove essential to the success of individuals and the productivity of nations.

Effective teaching for this new age will, in many ways, contrast sharply with the trends of the past century. Outcome-based attainment of relevant goals will replace an emphasis on time on tasks. What students know and can accomplish...
will prove far more integral to success than memorization of content-based facts. Successful students will interact purposefully as a community of inquiry. Literacy development will be a distinct curricular focus across content areas and will emphasize not just the three Rs (i.e., reading, writing, and arithmetic) but also task- and problem-relevant dimensions such as viewing and representing as well as cross-disciplinary vocabulary development (NGA & CCSSO, 2010; Herrera, Perez, Kavimandan, & Wessels, 2013). Students who learn effectively will be goal-driven, active, engaged, collaborative, thoughtful, and intent on reasoning. Strategies will be used to focus students on personalized capacity building for cognition, metacognition, problem solving, and reflection (Herrera, 2010). Recurrent, formative assessment will monitor capacity building among students and provide ongoing data for contingency-based instruction.

Teaching and learning will target distinctly youthful student populations, especially in the United States. The fertility rate in the United States has reached its highest level in 45 years (Kotkin, 2010) and the nation is on the verge of a baby boomlet, in which the children of the largest generation in U.S. history will have school-age children of their own. Another emergent characteristic of this new age will be growing levels of cultural and linguistic diversity. The U.S. population of CLD students and families, currently 30 percent of the total, is expected to exceed 50 percent before 2050. In fact, the largest share of the U.S. population growth will occur among diverse families. Asian and Latino populations, for example, are expected to triple. Perhaps one of the least predictable developments of this emergent population will be a resurgence of growth in the school-age population of rural communities.

Clearly, what the nation does to best prepare this diverse youth to be productive and creative will prove pivotal to its capacity for economic competitiveness and a high-quality standard of living in this increasingly global era. Note how these multicultural education scholars explain the importance of valuing and celebrating the rapidly changing demographics in the classroom by watching this video.

Global Connections 1.1

Emphasis on the sociocultural dimension is essential in EFL classrooms. Often the classroom is the only English-speaking environment to which students are exposed. The daunting task of learning English as a new language is made more manageable when teachers consider, understand, and incorporate the elements of students’ biographies that bring them life, laughter, and love. Such actions help educators promote student motivation, lower affective filters, increase engagement, and thus strengthen learning.

Describing Cultural and Linguistic Diversity in the Classroom

Discussion of changing demographics and demands in public school classrooms invariably includes use of an array of terms and acronyms. Such terminology facilitates national and international conversations about trends, issues, and practices that involve the CLD student. For this reason, we now explore the definitions and nuances of some of the most frequently used terms and acronyms (see Table 1.1). We also discuss our rationale for our preferred choices among those that are used
to describe students. Some are more exacting, more descriptive, and more cross-culturally sensitive than others.

**Table 1.1** Common Acronyms from ESL/EFL Education

<table>
<thead>
<tr>
<th>Acronym/Explanation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>BDI—biography-driven instruction</td>
<td>A research-based instructional method that emphasizes reciprocal facilitation and navigation of the official classroom space and the unofficial space of students’ lives outside the classroom, which draws on assets of both spaces to promote culturally responsive teaching and learning.</td>
</tr>
<tr>
<td>BICS—basic interpersonal communication skills</td>
<td>The language ability needed for casual conversation, which usually applies to the interpersonal conversation skills of CLD students (i.e., playground language).</td>
</tr>
<tr>
<td>CALLA—cognitive academic language learning approach</td>
<td>A method of instruction that is grounded in the cognitive approach and focuses on the explicit instruction of learning strategies and the development of critical thinking as a means of acquiring deep levels of language proficiency.</td>
</tr>
<tr>
<td>CALP—cognitive academic language proficiency</td>
<td>The language ability needed for learning academic skills and concepts in situations in which contextual clues are not present and an abstract use of language is required.</td>
</tr>
<tr>
<td>CLD—culturally and linguistically diverse</td>
<td>A preferred term for an individual or group of individuals whose culture or language differs from that of the dominant group.</td>
</tr>
<tr>
<td>CREDE—Center for Research on Education, Diversity &amp; Excellence</td>
<td>Now based out of the University of Hawai’i at Mānoa; a diverse team of experts who provide educators with a variety of tools to implement best practices for CLD students, including the standards for effective pedagogy:</td>
</tr>
<tr>
<td></td>
<td>1. Joint Productive Activity</td>
</tr>
<tr>
<td></td>
<td>2. Language and Literacy Development</td>
</tr>
<tr>
<td></td>
<td>3. Contextualization</td>
</tr>
<tr>
<td></td>
<td>4. Challenging Activities</td>
</tr>
<tr>
<td></td>
<td>5. Instructional Conversation</td>
</tr>
<tr>
<td>CUP—common underlying proficiency</td>
<td>The conceptual knowledge that acts as the foundation on which new skills are built. Both languages, L1 and L2, facilitate the development of such fundamental cognitive patterns within individuals. The language biographies serve as a bridge, connecting new information with previously acquired knowledge.</td>
</tr>
<tr>
<td>EFL—English as a foreign language</td>
<td>The use or study of the English language by non-native speakers in communities and/or countries where English is not the dominant language of communication.</td>
</tr>
<tr>
<td>ELD—English language development</td>
<td>A term used in some states for the programming model most commonly referred to as English as a second language (ESL).</td>
</tr>
<tr>
<td>Acronym/Explanation</td>
<td>Definition</td>
</tr>
<tr>
<td>---------------------</td>
<td>------------</td>
</tr>
<tr>
<td>ELL—English language learner</td>
<td>A term for individuals who are in the process of transitioning from a home or native language to English. However, CLD is the preferred term because CLD emphasizes both the cultural and linguistic assets that a student brings to the classroom.</td>
</tr>
<tr>
<td>ESL—English as a second language</td>
<td>A programming model in which linguistically diverse students are instructed in the use of English as a means of communication and learning. This model is often used when native speakers of multiple first languages are present within the same classroom.</td>
</tr>
<tr>
<td>ESOL—English for speakers of other languages</td>
<td>Instruction that focuses primarily on the development of vocabulary and grammar as a means of learning English.</td>
</tr>
<tr>
<td>i + 1—comprehensible input</td>
<td>New information that an individual receives and understands that is one step beyond his or her current stage of competence. Accordingly, if the learner is competent at stage $i$, then understandable input at $i + 1$ is most useful for language progression.</td>
</tr>
<tr>
<td>ICB—integrated content-based</td>
<td>A communicative method that involves the concurrent teaching of academic subject matter and second language acquisition skills. This method often employs thematic units as well as content and language objectives across subject areas.</td>
</tr>
<tr>
<td>L1—first language</td>
<td>The first or native language acquired by an individual.</td>
</tr>
<tr>
<td>L2—second language</td>
<td>The second language acquired by an individual.</td>
</tr>
<tr>
<td>NCLB—No Child Left Behind</td>
<td>The No Child Left Behind Act of 2001 was signed into law by President George W. Bush on January 8, 2002. Designed to close the achievement gap between disadvantaged students and their peers, this U.S. education reform calls for greater accountability for assessment results in K–12 education.</td>
</tr>
<tr>
<td>OCR—Office for Civil Rights</td>
<td>The entity of the U.S. Department of Justice responsible for exacting compliance with Title VI of the Civil Rights Act of 1964.</td>
</tr>
<tr>
<td>SDAIE—specially designed academic instruction on English</td>
<td>A variation of sheltered instruction that emphasizes a cognitively demanding, grade-level appropriate core curriculum for CLD students. This variation primarily applies to students who have attained an intermediate or advanced level of proficiency in L2 (English).</td>
</tr>
<tr>
<td>SIOP—sheltered instruction observation protocol</td>
<td>A vehicle for delivering scaffolded instruction of the existing curriculum so that instruction is more comprehensible for students who are acquiring English.</td>
</tr>
<tr>
<td>SUP—separate underlying proficiency</td>
<td>The separate conceptual knowledge bases in L1 and L2, assuming that the two languages operate independently. According to this perspective, no transfer of skills occurs between the two languages.</td>
</tr>
</tbody>
</table>
Key Terms and Acronyms: It’s All in the Context

Educators and researchers use many terms to describe students whose languages and cultures differ from the “typical” grade-level student. The term limited English proficient (LEP), popularized by the federal government in the 1960s and 1970s, is one example. However, it is especially problematic because LEP does not emphasize the assets of multilingualism that the student may demonstrate in school. Rather, the term implies an assumed level of deficit in English proficiency that may not necessarily be accurate.

The long-standing use of the term language minority student (LM or LMS) is equally troublesome. This term, often derived from what is assumed to be typical classroom or school demographics, characteristically presupposes that students who speak a language other than English are in the demographic minority for a given school or district. Today, however, one in four children in the United States is from an immigrant family and resides in a household where a language other than English is spoken (Samson & Collins, 2012). As a result, these students are, in a variety of schools across the nation today, language majority students, thus rendering the acronyms LM and LMS not only inappropriate, but inaccurate as well.

Similarly, use of the term mainstream when referring to “typical” students implies that any students whose cultures, languages, or learning abilities differ from the norm are somehow less than, or not a part of, the students for whom our school systems were supposedly designed. However, diversity in the classroom is increasingly the reality of U.S. schools in the twenty-first century. It has been argued that such diversity is now the fabric, the mainstream, of new-millennial
part one  hallmarks of accommodative Instruction

classrooms (Lynch, 2012; Nieto & Bode, 2012; Samson & Collins, 2012). Therefore, we favor the use of the term grade-level students when referring to this segment of the student population.

In a more exacting and cross-culturally respectful vein, we advocate the use of the term culturally and linguistically diverse (CLD) student when referring to a student whose culture or language is different from other grade-level students. This term is the most inclusive and, in our view, the most holistically descriptive of students whose culture or language is different from that of the dominant culture or language in U.S. society. The use of this term and its associated acronym are increasingly prevalent in educational literature (California Department of Education, 2013; Gonzalez, Pagan, Wendell, & Love, 2011; Perez, Holmes, Miller, & Fanning, 2012). It is CLD students who bring diverse cultural and linguistic biographies, heritages, and assets to the learning environment. We believe that educators must be fully aware of the influence that a CLD student’s biography, especially his or her culture, has on his or her preferred learning processes, language use, and performance potential in the classroom. Each of these represents powerful assets, which, if appropriately maximized, can powerfully impact achievement among CLD students.

These terms and acronyms from the field demonstrate the importance of using appropriately descriptive, cross-culturally respectful terminology when referring to the complex environment of and instructional programming for CLD students. While in no way an exhaustive list, Table 1.1 details other acronyms that are commonly used in language education, each of which has been reviewed for descriptive accuracy, professional utility, and cross-cultural implications.

The CLD Student: Asset or Liability?

As evident in the continued use of terms such as limited English proficient and mainstream in our world of public school education (e.g., LEP.gov), questions regarding the most appropriate ways of serving the differential learning and affective needs of this rapidly growing population of CLD students often stem from perceptions about assets and liabilities. You might well ask, Why assets and liabilities? The sad fact is that some of our schools continue to perceive the CLD student as a liability—a student who is liable to fail because he or she cannot understand or speak the language of instruction, a student who is more likely to migrate and move away than to benefit from teacher instruction, a student who is likely to experience academic failure because of inadequate schooling or time on task, a student who is likely to bring down a school’s test scores because he or she cannot keep up with other students, and more. Remarkably persistent in the educational literature, this view of the CLD student appears as the deficit orientation to the linguistically or culturally different student. Basically, this perspective stresses not the assets that the CLD student brings to the school and the classroom but the
liabilities or deficits that, according to this view, characterize the hopelessness of appropriate educational accommodations for the student.

This perspective holds that CLD students are language (presumably English) deficient and culture and home deficient and, as a result, at risk of academic failure. In one sense, the prevalence of this liability or deficit perspective is not surprising given the fact that the United States is one of the few countries in the world that does not value either bilingualism or multilingualism (Crawford, 2000; Olson, 2013). This deficit point of view is evident in common statements such as, “If they would only learn English . . .” and “They can’t learn science until they speak English.”

An alternative asset perspective on the CLD student more affirmatively recognizes and celebrates the advantages, talents, and experiences this student brings to the classroom and the school. Assets that this perspective acknowledges include:

- Multilingualism
- Experiences and schooling in another country
- Familiarity with multiple cultures and ethnicities

Just as management specialists recognize and use diversity in the workforce as one of the most powerful influences on an organization’s capacity for creativity in the world of business (Florida, Cushing, & Gates, 2002; Terrisse, 2001), educators should recognize and use cultural and linguistic diversity as a powerful enrichment of a school’s learning community. In fact, when CLD student differences are appropriately accommodated and classroom instruction is purposefully differentiated for diversity, these students not only match the academic performance of their native-English-speaking peers, but their academic gains may actually exceed those of their grade-level contemporaries (Goldenberg, 2008; Thomas & Collier, 1997, 2002).

## Recognizing the Realities of Cultural and Linguistic Diversity in the Classroom

As previously discussed, the demographic realities of today’s schools demonstrate that the composition of the average classroom in the United States is rapidly changing and will continue to do so in the foreseeable future. Because schoolteachers, administrators, and specialists are responsible for educating all students, we seek to understand what increasing cultural and linguistic diversity will mean for curriculum, instruction, pedagogy, standards, and the teaching profession. Understanding the difference between equality and equity is fundamental to this discussion. The notion of equality suggests that all students have appropriate access to a high-quality education when the same resources, instructional methods, curricular opportunities, and so forth are provided. Equity, on the other hand, reflects the recognition that each student is unique and that his or her access to a high-quality education is dependent on resources, instructional methods, curricular opportunities, and more that are responsive to his or her differential assets and needs.
This section of the chapter explores the realities of CLD students as a foundation for discussion of appropriate instructional methods that can be used to accommodate cultural and linguistic diversity in a professional, responsible, empathetic, and purposeful manner. We first explore a framework from which we can begin to examine the many factors that must be accounted for in creating educational conditions that both accelerate English language acquisition and promote the CLD students’ academic achievement.

The Prism Model and Beyond: Understanding Students from a Holistic Perspective

The prism model (see Figure 1.1) is the product of long-term, multiage, and multisite research and analyses (Collier, 1987, 1989, 1992; Collier & Thomas, 1989, 2007, 2009; Gonzalez et al., 2011; Thomas & Collier, 1997, 2012) in public school districts across the United States. This model represents a uniquely holistic way to frame the differential learning and transition needs and diverse assets that CLD students bring to the school.

Many school educators who are first confronted by the complexities of accommodating CLD students naturally assume that the students’ greatest needs and most formidable challenges are language-related. In fact, a common phrase heard in schools across the country is “If they [CLD students] would just learn English, everything else [in their school performance] would just fall right into place.” However, the research behind the prism model demonstrates that not one but four different dimensions of the CLD student must be addressed if they are to be successful academically. Figure 1.1 illustrates each of these four dimensions

**figure 1.1**
Language Acquisition for School: The Prism Model

of the model: linguistic, academic, cognitive, and sociocultural. Consistent with the findings of Thomas and Collier (1997), no single dimension of CLD student success should be addressed in isolation. Instead, each of the four dimensions of the prism model is interrelated and involves developmental processes that occur simultaneously for the CLD student.

In this and subsequent chapters, we move beyond the defining characteristics of the prism dimensions. We examine and discuss the challenges and processes of each dimension that we have witnessed in our work with CLD students and their teachers in states across the nation, as well as in the work of others in the fields of English as a second language (ESL), English as a foreign language (EFL), and bilingual education. These analyses have informed our conceptualization of the CLD student biography, which provides a more in-depth view of the factors and dynamics associated with each of the four dimensions that influence the degree of success students experience in their linguistic and academic endeavors.

As we will see in chapters to follow, biography-driven instruction (BDI) is a highly effective product of this expanded emphasis on the four dimensions of the CLD student biography (Herrera, 2010). Biography-driven classroom practices are uniquely suited to the challenges of the increasingly diverse classroom because they bridge the gap between high-quality instruction for grade-level students and differentiated instruction for CLD students. They support the teacher in meeting the needs of all learners because they begin with the assets that each individual student already brings to learning. Finally, although BDI constitutes good teaching for all learners, it builds new learning skills and provides instructional supports that are essential for CLD students’ engagement, motivation, comprehension, and retention.

Although beyond the scope of this text, Herrera has detailed the rationales, development, and range of strategies for biography-driven instructional and assessment practices (Herrera, 2010; Herrera, Kavimandan, & Holmes, 2011; Herrera et al., 2013). Biography-driven strategies are a product of long-standing development, field testing, refinement, and evaluation. They each encourage the teacher’s holistic perspectives on the sociocultural dimension, the linguistic dimension, the cognitive dimension, and the academic dimension of the student’s biography. One hallmark of these strategies is that they guide teachers to use insights about these dimensions to support student learning at the opening of the lesson, during the work time of the lesson, and at the closing of the lesson. As BDI strategies reflect, the sociocultural dimension of the biography is often pivotal to CLD students’ success in the classroom.

The sociocultural dimension encompasses the student’s heritage, culture, family interactions, and more. Highly effective teachers of CLD students take time to understand and build on student experiences associated with this dimension. Therefore, this critical aspect of CLD student potential will be the subject of
remaining sections of this chapter of the text. Chapter 2 will examine the cognitive and academic dimensions of the biography—dimensions that are often perceived as pivotal to CLD student performance on assessments. Ultimately, Chapter 3 will explore the linguistic dimension and its importance to student literacy—an emergent focus of standards for grade-level classrooms, especially those of the Common Core (NGA & CCSSO, 2010).

The Sociocultural Dimension of the CLD Student Biography

At the heart of the CLD student biography is the sociocultural dimension. This dimension encompasses the complex social and cultural factors and variables that are critical to the transitional adjustments and the academic success of CLD students. Insightful teachers realize the significance of this dimension in the lives of CLD students and families and are careful to account for it as they plan their differentiated instruction. A significant number of CLD students have either recently immigrated to the United States or recently migrated to the school. These students face a surprising number of sociocultural (especially acculturational) challenges, many of which are anxiety provoking and some of which may promote culture shock.

Sociocultural Challenges

Among such sociocultural challenges are those highlighted in Table 1.2. From a cultural standpoint, such challenges include but are not limited to the following:

- **The CLD student must adjust to a new country, city, or neighborhood.**
  *Implications:* The student faces difficult, survival-based challenges outside the school, many of which may influence her or his punctuality, alertness, attentiveness, ability to concentrate, and more.

- **The CLD student must adapt to a new education system.**
  *Implications:* Significant differences may exist between the current and former education systems. Such differences include public versus private, hours of school day, length of school day, type of instruction, level of interaction in the classroom, rule systems, culture of the school, and so forth. Such differences may confuse the student, puzzle the parents or caregivers, prompt the student to act inappropriately, slow the learner’s progress, and more.

- **The student must cope with the nuances of the school’s culture.**
  *Implications:* Regrettably, the culture of the school does not always welcome diversity, affirm languages other than English, accommodate differential learning needs, or seek out parents or caregivers as partners. The messages that this culture conveys are often subtle and incomprehensible. As a result, CLD students cope with ambiguity, anxiety, and frustration, each of which interferes with their capacity to learn effectively. Their parents or caregivers may also have to cope with misgivings, uncertainty, and alienation from the educational process.
Equally formidable for the CLD student are psychosocial challenges of the sociocultural dimension, including (1) ambiguity; (2) anxiety; (3) prejudice; and (4) discrimination on the basis of skin color, nationality, language, and more. As we will discuss, any one of these multifaceted challenges can significantly inhibit the performance of a CLD student in the classroom.
Cultural Challenges of the Sociocultural Dimension. As illustrated in Table 1.2, the sociocultural dimension encompasses various cultural challenges to the success of CLD students. For example, a review of educational research and literature strongly supports the argument that the culture of the school influences student outcomes, particularly for CLD students (MacNeil, Prater, & Busch, 2009; Nieto & Bode, 2012). The culture of the school can profoundly influence a CLD student’s educational experience, including her or his perspective on schooling, attitude toward learning, behavior in the school, and performance in the classroom. In this sense, a school’s culture encompasses at least three salient elements:

- The attitudes and beliefs of members (in this case, teachers, administrators, and staff)
- The norms and rules to which members adhere
- The relationships that exist among its members

School culture affects not only students but also educators. Specifically, school culture is often pivotal in shaping teachers’ attitudes toward and beliefs about change, including (1) their perspectives on increasing cultural and linguistic diversity in the school and (2) the necessity of adapting curricula and student services that accommodate such diversity (Carroll, 2006; Cushner, McClelland, & Safford, 2011; Glassett & Schrum, 2009). Entrenched educator beliefs (Haberman, 2013; MacNeil, Prater, & Busch, 2009; Sewell, 2009) include but are not limited to:

- Real change in schools is not feasible.
- Discipline problems are an overwhelming barrier to school success.
- Educational bureaucracy precludes progressive educational practices (i.e., accommodations in school and classroom practices for a changing student population).

Findings by Murry (1996) suggest that such beliefs are often the product of at least four counterproductive influences associated with rigid, entrenched school cultures:

- A strict focus on norms and rule systems
- A strong emphasis on conformity
- A distinct self-consciousness about the image of the school (among staff members of the dominant culture)
- Pervasive scapegoating

Such influences can create a school culture characterized by negativity, barriers to collegiality, competition, resistance to change, and the subversion of individual efforts to accommodate change, especially changing student populations.

Ultimately, these characteristics associated with rigid and entrenched school cultures tend to stimulate a variety of myths and misconceptions regarding cultural and linguistic diversity. The persistence of many of the myths has been demonstrated in recent research, as have the findings that these myths tend to pose
formidable, sociocultural challenges for the CLD student (Comber & Kamler, 2004; Fránquiz, 2012; Herrera & Rodríguez Morales, 2009; Murry, 1996). For example, one such myth holds that learning is due to innate abilities. Presumably, CLD students, regardless of their culture or language, are less capable of educational excellence than grade-level students of the dominant culture. Because the school culture considers both the cultures and native languages of CLD students to be inferior, neither the educators nor the curricula place value on the celebration or affirmation of other cultures or native language support. Such myth-based cultural norms can deny many CLD students any sense of motivational pride in and affirmation of their heritage or any benefit from ongoing native language support as a means to second language acquisition.

This myth of learning abilities is but one among many that can arise from a rigid and entrenched school culture. When such myths are shared among school educators, the consequences for CLD students are both numerous and worrisome. Many of these consequences relate to schooling, others to behavior, and still others to learning and performance. To illustrate, the following are often instilled in CLD students:

- A growing conviction that schools are not places that respect or value the presence and contribution of CLD students or their families
- A conception that CLD students are intellectually inferior to the dominant (White) culture
- A perceived sense of hopelessness about new learning in an unfamiliar language and in unaffirming learning environments
- A belief that efforts in school will not be rewarded
- An increasing reluctance to participate or produce in class for fear of ridicule
- A generalized disengagement from learning and withdrawal from active participation in the learning process
- A growing resentment toward the educational system that often results in resistant, if not rebellious, behavior

In rigid and entrenched schools, the curriculum (and often the instruction that CLD students receive) does not recognize, build on, or value the student’s cultural heritage or his or her prior socialization in a different culture. School programming neither affirms nor supports the student’s native language as a means to second language acquisition. Classroom instruction does not account for the acculturation (discussed in the subsequent section) or the language, academic, or cognitive transitions through which the CLD student must pass in order to compete with his or her grade-level peers.

Instead, the dominant school culture tends to argue that it treats all kids the same and that each student, regardless of cultural or linguistic background, should be able to learn the content as it is presented if she or he makes sufficient effort to
participate in the classroom, study the material, and complete assigned homework. The consequences of this myth for CLD students, as fostered and supported by a rigid and entrenched school culture, include the following:

- Few instructional accommodations for CLD students (a situation that arises from the belief that such accommodations would be unfair to other students)
- A conviction that CLD students and their families, not educators, are responsible for addressing the linguistic challenges that students confront
- A pervasive certainty that CLD students choose to fail in school because neither they nor their parents value education
- A distrust of the native language when used for instructional purposes
- A view of ESL and paraprofessional support as unfair, special treatment
- The placement of CLD students in remedial or lower-track classes

Although the sentiment that “we treat all students the same” does not, on the surface, appear to suggest prejudice, this viewpoint in effect denies the accommodations that would provide CLD students with meaningful instruction. As a consequence, CLD students do not have the same educational opportunities that would allow them to be as academically successful as their native-English-speaking peers. Thus, the equity-based affirmation “We recognize and value the different experiences, cultures, and languages that all our students bring to the classroom” can serve as a more inclusive alternative to the equality-based statement “We treat all students the same.” Reflective school educators who target schoolwide success use their CLD students’ sociocultural backgrounds as an entry point to active student engagement for developing cognitive, academic, and linguistic abilities. Professional educators counter the unproductive influences of a rigid and negative school culture by doing the following:

- Affirming and celebrating CLD students as school assets
- Modeling appropriate accommodations for CLD students in the classroom
- Dispelling culture-bound myths about CLD students through research, experience, collaboration, and professional practice

*Psychosocial Challenges of the Sociocultural Dimension.* The notion of the affective filter helps us understand how certain psychosocial challenges of the sociocultural dimension (especially anxiety) might inhibit (or occasionally bolster) the classroom performance of the CLD student. The concept of the affective filter is most notably associated with the work of Krashen (1981, 1982) and his attempts to explain certain processes, especially second language acquisition, through which CLD students progress. The outcomes of this work include five hypotheses, at least two of which are relevant to this discussion.
To understand Krashen’s concept of the affective filter, we must first explore his input hypothesis. According to this hypothesis, the CLD student is able to best incorporate new information (i.e., progress in language acquisition) when the input the student receives is one step beyond his or her current stage of competence. Krashen labels this type of ideal input with the designation $i + 1$. Accordingly, if the learner is competent at stage $i$, then input at $i + 1$ is most useful for producing new understandings. One might wonder how it is possible for a student to understand information that is beyond his or her current stage of competence. According to Krashen (2002), this type of language input is comprehensible input for students when they are able to capitalize on context (e.g., visual aids), extra-linguistic information (e.g., nonverbal or body language), and their prior knowledge of the world.

Krashen (1982) also developed the affective filter hypothesis, which incorporates the work of Dulay and Burt (1977) and argues that the amount of input reaching the CLD student is influenced by a number of affective variables, including anxiety, self-confidence, and motivation. For Krashen, second language learners with a low level of anxiety, high motivation, strong self-confidence, and a good self-image are better equipped for classroom performance and second language acquisition. On the other hand, high levels of anxiety, low motivation, low self-esteem, and other affective factors can combine to raise the affective filter, reduce academic achievement, and slow language acquisition. The hypothesis argues that once the affective filter is raised, the teacher’s instructional input, no matter how well planned or well delivered, is unlikely to aid language acquisition or improve academic performance in the classroom.

As we have illustrated, the culture of the school and several associated myths concerning diversity constitute a significant challenge to the success of CLD students in school. However, the sociocultural dimension also encompasses psychosocial challenges through which the school culture must support CLD students if the goal is to promote success in the classroom. As CLD students confront this variety of cultural and psychosocial challenges, they will also develop through a series of sociocultural processes. The outcomes of these processes will profoundly influence a student’s level of performance in the classroom, collaboration with peers, and achievement in school.

**Sociocultural Processes**

Table 1.2 summarizes many of the sociocultural processes that influence the performance, behaviors, and resiliency of CLD students inside and outside the classroom. These processes are as central to the dynamics of the sociocultural dimension as this dimension is to the CLD student biography and our understanding of the complex and differential needs of CLD students. Unfortunately, many educators have not been prepared to understand the importance of the intercultural dynamics that occur within schools and between the school and its community (Bradford Smith, 2009; Fránquiz, 2012; Lewis, 2001; Li, 2013; Milner, 2003; Sleeter, 2001). As a result, educators may fail to take students’ sociocultural processes into consideration when developing curricula and delivering instruction.
As illustrated in Table 1.2, probably the most significant of sociocultural processes, especially for the newly or recently arrived CLD student, is the process of acculturation. Before discussing acculturation, however, the enculturation process demands attention. Through the subtle process of enculturation, we are gradually initiated into our home or native culture, and almost without even knowing it, we develop a sense of group identity that forms our set of values, guides our beliefs, patterns our actions, and channels our expectations. Enculturation gives us an ethnocentric view of the validity of our own social and cultural ways, leading us to believe our ways to be better than those of others. Although each of us tends to progress through a more or less lifelong process of enculturation, not all will brave the trials and tribulations of an acculturation process, which can result from geographical relocation or significant and frequent cross-cultural encounters.

On the other hand, CLD students must not only come to understand the powerful yet subtle influences of their own enculturation but they must also excel in a distinctly difficult and complex additional process of adjustment to another culture and its dominant language. This additional process of acculturation has been described as a series of stages that have been characterized as often impossible “without severe psychological costs” (García-Castañón, 1994, p. 200; Li, 2013). Whether these costs are debilitating and without purpose, or developmental and transforming, tends to be a function of the acculturation environment.

Ms. James is a recent graduate of her teacher education program and is about three months into her first year of teaching. Based on her preservice education, she is seeking to adapt and modify her instruction to accommodate the differential learning needs of her predominantly Vietnamese students. On this day she has asked the advice of a fellow teacher, Mrs. Davis, about appropriate instructional accommodations. Mrs. Davis responds as follows:

Every student has individual issues and wants the rules bent in one way or another. Making changes to instruction for each student is simply unrealistic. When I was growing up, you had to make the most of whatever you were given. Why should anything different be expected of students today? Part of learning how to succeed in society means following the rules and working within defined parameters. Making exceptions to accommodate students only sets them up for failure in the real world.

Ms. James has just experienced her first encounter with the culture of the school. Regrettably, the culture of the school does not always welcome diversity, tolerate languages other than English, accommodate differential learning needs, or seek out parents and caregivers as partners. The messages it conveys are often subtle and incomprehensible. As a result, CLD students cope with ambiguity, anxiety, and frustration, each of which interferes with their capacity to learn effectively. Their parents and caregivers struggle with misgivings, uncertainty, and alienation from the educational process.

What advice would you offer Ms. James as she responds to the comments of Mrs. Davis? In what ways can a teacher appropriately accommodate CLD students in such an environment? How would you go about influencing the culture of the school in more positive ways?
• The environment should account for the stages of acculturation through which the student will progress.  
  *Teacher Implications:* Teachers who are aware of these stages or phases of acculturation better understand not only the painful adjustments their students must endure but also the process through which they, as teachers, will progress in accommodating cultural and linguistic diversity as a classroom reality.

• The environment should support the individual’s long-standing ethnic identity.  
  *Teacher Implications:* Ethnocentrism, or the tendency to judge others based on one’s own standards (Cushner, McClelland, & Safford, 2011), is an inevitable outcome of long-standing enculturation in a particular culture. It is a product of pride, buy-in, and investment. Effective teachers know that students are best motivated in ways that support (rather than demean) their ethnic or cultural heritage. For such teachers, the affirmation of the student’s home culture is a daily goal, not a once-a-year celebration.

• The environment should reflect and respond to the ways in which the acculturation process can affect students’ academic, linguistic, and cognitive growth.  
  *Teacher Implications:* The influences that the acculturation process can exert on the students’ development are a product of the challenges that CLD students endure at each phase of acculturation. Reflective teachers empathize with students at each phase of the acculturation process and strive to better understand the influences it may have on the students’ language development, cognitive growth, and academic achievement. These teachers understand the students’ struggles, even in cases of misbehavior arising from the hostility phase of the U-curve hypothesis.

Acculturation—the process of adjusting to a new or non-native culture—is perhaps best illustrated by the four phases of the U-curve hypothesis (Cushner, McClelland, & Safford, 2011; Trifonovitch, 1977). The U-curve hypothesis, shown in Figure 1.2, specifies that the process of acculturation may be understood as a sequential series of four phases that occur over time. During the first, or *honeymoon,* phase of the acculturation process, the individual often experiences a certain sense of exhilaration or euphoria as he or she enjoys the novelty of life in a new culture. For instance, among CLD students and families, coming to the United States may represent a lifelong dream, a new opportunity, or a chance to reunite with family. Each of these situations tends to foster a sense of exhilaration.

However, as time passes in the new culture, the many subtle and hidden differences that exist across cultures begin to surface. Often the actions of others in the new culture seem difficult to understand, if not incomprehensible. At other times, one’s own actions do not yield expected results. Ultimately, long-standing, culture-bound responses and solutions to typical questions and problems do not produce the same results. As an outcome of this cultural mismatch, CLD students commonly experience impatience, anxiety, frustration, and even anger. During this so-called *hostility* phase of the acculturation process, CLD students
may begin to disengage from school. They may frequently complain of being tired or sick. They may feel so overwhelmed that they start to daydream in class, and some students may exhibit signs of rebellion against the new culture or new school setting.

Rebellious behavior is often a sign of culture shock, a worst-case scenario of the acculturation process that occurs as more and more cultural differences surface in increasingly intense, cross-cultural encounters. As CLD students experience the increasing conflict between the cultures they know and the cultures they are learning, they may feel threatened. Students sometimes rebel against the new culture as a way of negotiating personal identity and meaning. Among the reactions that CLD students typically experience during this phase are:

- A sense of alienation
- Actions that are interpreted as hostile
- Patterns of indecision
- Feelings of frustration and sadness
- An intense desire to withdraw from situations
- Symptoms of physical illness
- Exhibitions of anger grounded in resentment

Some students, especially secondary-level CLD students, never quite recover from this phase of the acculturation process (Clayton, Barnhardt, & Brisk, 2008; Collier, 2010; Suarez-Orozco & Suarez-Orozco, 2001). The frustration that CLD students encounter during the hostility phase can lead to an increased rate of school absenteeism, maladaptive behavior, suspensions from class and school, or dropping out. School educators can significantly reduce the possibility of these negative results by providing a supportive, respectful, and caring school environment. Students who are experiencing the hostility phase of the U-curve also benefit from
discussions with their teachers that help them better understand their own acculturation processes.

If CLD students transcend the hostility phase of the U-curve, a newfound awareness of cross-cultural differences and their significance in a diverse world typically emerges from the acculturation process. The CLD students learn to confront the new cultural environment in more reflective and proactive ways. In the process, they manage feelings of embarrassment, disappointment, and frustration as they begin to reshape their cultural identity in this humor phase of the U-curve hypothesis. Although this phase remains stressful, the trials of this step in the acculturation process are, perhaps after a time for reflection, met with humor on the part of the students. They are able to laugh at mistakes in word use and pronunciation and find humor in miscommunication that might result from cross-cultural interactions. Confronting challenges in this phase yields an enhanced cross-cultural understanding of differences, norms, values, beliefs, and behaviors. Some CLD students learn to cope through a higher level of engagement with either the language learning community or their own academic endeavors. In fact, Brown (1986, 1992) has characterized this aspect of the acculturation process as a period during which the individual must learn to synchronize his or her linguistic and cultural development.

Having reached the final leg of the acculturation journey, the CLD student enters the decisive pinnacle of the U-curve, appropriately characterized as the phase called home. Cross-culturally sensitive perspectives that enable culturally adept performance and productive social interactions in a second culture characterize the student’s thinking and actions in this phase of the acculturation process. At this stage, CLD students not only respect but also affirm cross-cultural differences. They value and celebrate their own bicultural and bilingual identity. The CLD student delves into and understands those nuances of culture and language that allow her or him access to the full repertoire of connotative meanings of social interaction and language. Most CLD students who reach this acculturation threshold (Acton & de Félix, 1986) have attained near-native literacy development and second culture understanding. Unfortunately, such individuals tend to be the exception rather than the norm. Figure 1.3 illustrates one student’s acculturation journey in relation to the U-curve.

In like manner, the CLD student’s sense of self, as well as his or her understanding of self in relation to social groups, is often shaped by the psychosocial processes of the sociocultural dimension. These psychosocial processes include the following:

- Self-esteem development
- Self-concept formation
- Social identity development
- Ethnic identity formation

In particular, the dynamics of ethnic identity formation illustrate one reason why sociocultural processes can so powerfully influence CLD students’ perceptions of the school or community environment, as well as their appraisals of success probabilities in those environments.
Ethnic identity formation is a complicated process that is influenced by various factors (e.g., home, school, community, geographical space), and it is important to note that this formation process is different for each individual. For some, ethnic identity formation is greatly influenced by the social climate in their community. More specifically, some individuals have been raised to feel that their ethnic identity is somehow “less than” the dominant ethnic identity within the community, which causes individuals to internalize a sense of inferiority. Because of this internalization, individuals will unfortunately cast aside parts of their ethnic identity in order to assimilate into the dominant ethnic group (Alba & Nee, 2005) in order to move up economically, politically, and socially within their communities.

Illustrated Concept 1.6
Collaborate with other teachers to share observations and information regarding the assets that CLD students bring to the classroom. Capitalize on this knowledge within your own classroom. SMILE ☺. It’s a universal language!
On the other hand, individuals who are not part of the dominant ethnic group experience discrimination and racism much differently than those who are part of the dominant group. Those individuals who strongly identify with their ethnicity can experience discrimination more strongly than those who want to attain the same privileges as the dominant group. For example, a study of ethnic identity dynamics (Félix-Ortiz, Newcomb, & Myers, 1994) found that perceptions of discrimination were proportional to the degree of ethnic identification and inversely proportional to levels of acculturation. Because perceptions of discrimination are often pivotal in the self-concept development and motivation levels of CLD students (Clayton, Barnhardt, & Brisk, 2008), these findings indicate that the sociocultural process of ethnic identity formation is sometimes central to the students’ sense of self-worth and their motivation to succeed in life and in school.

Teachers, however, need to view the ethnic identity formation process as a continuum. The aforementioned ways students form their ethnic identity are merely two examples; however, students may find themselves both strongly identifying with their ethnicity while simultaneously casting some cultural aspects aside. Furthermore, the same student might react differently to discrimination one day than the next. This can be difficult for teachers to assess, but understanding the ethnic identity formation process is paramount to meeting the needs of CLD students.

One way for teachers to understand better the degree of a student’s identification with her or his own culture and her or his level of acculturation is to have teacher–student conversations prior to instructional planning. Although these conversations are more extensively explored in Chapter 5, teachers who purposefully converse with their CLD students prior to instructional planning (through an interpreter, if necessary) often find that teaching effectiveness is improved, reteaching is reduced, and students are more motivated.

**Sociocultural Dimension: Implications for Classroom and School Practice**

The success of any CLD student in any classroom depends on educators’ understandings of and responses to the teaching and learning implications of the four interrelated dimensions of the CLD student biography (sociocultural, cognitive, academic, and linguistic). Because the sociocultural dimension lies at the core of CLD student success or failure in school, the implications of this dimension should form the foundation of any discussion of appropriate teaching practices for CLD students. Therefore, as increasing cultural and linguistic diversity transforms the average classroom, the implications of this dimension for teaching practice become increasingly relevant. The following list summarizes two of these sociocultural implications:

- Reflective teachers understand that increasing diversity in the school need not be perceived as a liability. Frustration and negativity toward increasing school diversity are not uncommon responses among teachers, staff members, and school administrators who are unprepared for the changes. Yet changing student and
For students, it is exciting to see themselves in relation to the whole. It provides a springboard for conversations that begin with the self and have the potential for moving students toward academic talk. In classrooms where the cultures and languages of students are visible and valued, a sense of community develops among their members.

Information from students becomes a source for planning and teaching. This information can be used to modify instruction, decide grouping configurations, tie content to prior knowledge, and much more. Knowing the biography of the student is essential for success in the classroom!
community demographics are not a trend but an emergent reality of schools. At the same time, the support of CLD family members is often critical to the accommodations and modifications that school systems must make to this changing reality. Their families are a source of cultural identity, self-esteem, and social grounding for students. Family members are also a sociolinguistic resource for ongoing literacy development in the student’s first language. To allow frustration and negativity within the school culture to alienate and isolate CLD students and their families is to further complicate the sociocultural challenges of reaching the new students, adapting and modifying for their needs, and ensuring their grade-level academic performance from the time they begin school until high school graduation. If the numbers of CLD students are increasing in the schools, and if we continue to alienate and push them out, what then is the purpose and productivity of our schools? What has been achieved? What has the school accomplished in our society? The heritage of U.S. education has developed from the preparation of the common student for the uncommon challenges of each new age, of each new frontier. In a rarely cited ruling of the United States Supreme Court, the case of *Lau v. Nichols* (1974), Justice Douglas affirms this underlying belief in the following majority opinion:

There is no equality of treatment merely by providing students with the same facilities, textbooks, teachers, and curriculum; for students who do not understand English are effectively foreclosed from any meaningful education. Basic English skills are at the very core of what these public schools teach. Imposition
of a requirement that, before a child can effectively participate in the educational program, he must already have acquired those basic skills is to make a mockery of public education. We know that those who do not understand English are certain to find their classroom experiences wholly incomprehensible and in no way meaningful. (414 U.S. 56)

Reflective teachers value the cultural and linguistic diversity that their students bring to the classroom, and they use this diversity to enrich the learning of all students.

- Effective teachers know that instructional decision making should include time for the preassessment of CLD students in order to determine the potential impact of the affective filter on the comprehensibility of that instruction. As this chapter explores, Krashen’s (1982) affective filter hypothesis tells us that instruction for CLD students, no matter how well planned or well delivered, will not affect the student if it or the surrounding circumstances of instruction raise the affective filter. Therefore, insightful teachers preassess. The professional practice of preassessment helps educators avoid instructional decisions that may prove counterproductive. Variables to preassess include:
  - Recency of immigration
  - Cultural background
  - Prior schooling in the home country
  - First language (L1) and second language (L2) proficiency
  - Family dynamics
  - Prior knowledge in the content areas

Because guardians, parents, family, and extended family members critically influence instructional success, home visits are an extremely effective strategy for preassessing students’ sociocultural realities.

**theory into Practice 1.1**

The affective filter hypothesis (Krashen, 1982) asserts that the amount of language or instructional input that reaches the CLD student is influenced by a number of affective variables, including anxiety, self-confidence, and motivation. Thus, CLD students with a low level of anxiety, high motivation, self-confidence, and a good self-image are better equipped for classroom performance and second language acquisition. On the other hand, high anxiety, low self-esteem, low motivation, and other affective factors can combine to raise the affective filter, reduce academic achievement, and slow language acquisition. The hypothesis argues that once the filter is raised, the teacher’s instructional input, no matter how comprehensible, is unlikely to aid language acquisition or improve academic performance in the classroom.

- What are the implications of this hypothesis for your professional practice (or your future practice) as an educator?
- In what ways will you adapt or modify instruction to reduce the likelihood that your instruction will raise the affective filter?
## Connect, Engage, Challenge

### CONNECT

*Review and Reflect on the Reading*

1. What are the four dimensions of the prism model? Which dimension is central to the model, and why?
2. What type of input is central to Krashen’s input hypothesis? Why is this type of input considered important? What are the characteristics of this type of input?
3. What is the affective filter? What sorts of conditions raise the affective filter? What are typical consequences of instruction that raises the affective filter?
4. What are the phases of the U-curve hypothesis? Which of these phases is typically most problematic for CLD students, and why? What does the U-curve hypothesis explain?
5. What sociocultural challenges for CLD students are associated with schooling in the United States? Name and explore at least three.
6. What characteristics are associated with a supportive classroom environment for acculturation among CLD students?
7. What reactions do CLD students typically experience during the hostility phase of the U-curve? Why should teachers be aware of these potential reactions? What can teachers do to support CLD students during this phase of acculturation?

### ENGAGE

*Share What You Learned*

1. Given the ways in which enculturation takes place, discuss what aspects of socialization might prompt teachers to hold a deficit perspective of CLD students.
2. This chapter explores the many challenges that the culture of the school can pose for CLD students. Discuss ways in which an informed teacher might reduce the counterproductive influences of such a culture.
3. The differences between a perspective that emphasizes equality and one that stresses equity were summarized in this chapter. Discuss the following questions:
   a. Which of the perspectives did you identify with before you read this chapter?
   b. According to which perspective were you socialized?
   c. Which perspective is most likely to prove effective with CLD students? Why?

### CHALLENGE

*It’s Not Real until You Practice*

**Preservice Teachers**

1. Based on information learned from this chapter, create a protocol and interview a CLD student. Based on the findings of your interview, identify two sociocultural challenges that the student confronts in all-English classroom settings. Finally, discuss the planning implications of these challenges for classroom instruction.
2. Read the following case study of Raja, a student from Saudi Arabia. Identify student strengths and needs in terms of sociocultural processes. List activities or accommodations to maximize teaching and learning for this student.
In elementary classrooms, consider:
• Helping CLD students find an appreciation and validation of their own heritage within the lessons, through storytelling themes, songs, rhymes, or poems that incorporate their cultures; having bilingual parents or caregivers of CLD students come read with the class; and providing a buddy system between CLD students who share the same cultural background.
• Observing the progress that your CLD students have made in their development of first and second language literacy skills through
informal assessment. This might involve having them draw or write about activities they have engaged in with their families, and making anecdotal notes as they subsequently share their drawings or read their writing projects with classroom partners.

* Setting challenging yet attainable goals regarding literacy or academic development with your CLD students. Individually meet with them on a frequent basis to discuss their progress in reaching these goals.

* Working to increase the understanding and respect that your students have for one another by asking CLD students to share their insightful perspectives on lessons as related to their own cultural heritage.

**In secondary classrooms, consider:**

* Organizing a mentoring program (with an organization, an institute of higher education, or a business) for CLD students in order to provide professional role models from the community.

* Assisting CLD students in making connections to new content vocabulary and concepts by previewing in their first languages before presenting the lesson in English.

* Using interactive journals between CLD students and yourself in order to encourage the development of literacy skills, a positive student–teacher relationship, and meaningful communication through writing.

* Enhancing the self-esteem of CLD students by continually reinforcing their potential to succeed and making it a point to praise their efforts rather than overcorrecting their errors.

* Helping newcomer CLD students feel welcome and comfortable in their new classroom environment by pairing them with classmate mentors who have progressed farther through the acculturation process and can provide support and encouragement.

**In EFL classrooms, consider:**

* Planning lessons that directly relate to your students’ ethnic heritages by using bilingual versions of songs, poems, and stories.

* Inviting bilingual speakers to the classroom, so they may share their own English language acquisition process through stories and pictures. These visits can be in-person, or if technology is available, visitors may be seen via video conferencing.

* Focusing on praising students’ accomplishments in language production rather than overly correcting grammar, punctuation, or pronunciation errors. By celebrating the successful communication of messages, students become more engaged in the classroom and more invested in learning the second language. Student progress is more likely in positive learning environments where targeted feedback is provided in strategic ways.
CHAPTER 2

Cognitive and Academic Dimensions of Methods for Culturally and Linguistically Diverse Students

our mission

Our mission for this chapter will be to:
• Explore cognition and schooling issues associated with CLD student backgrounds and their academic success.

We will accomplish this mission by helping you to meet the following learning outcomes:
• Explain the cognitive dimension of the CLD student biography.
• Summarize key cognitive challenges and processes for CLD students and discuss teaching implications.
• Explain the academic dimension of the CLD student biography.
• Summarize academic challenges and processes for CLD students and discuss their implications for teaching.

Socorro Herrera
Classroom performance is significantly based on learning, and at the heart of learning is understanding. That is, to learn something new, students must derive the meaning of new information. Among conscious or subconscious questions the learner may ask are the following:

- How is the new information similar to or different from what I already know? Where does it fit?
- Is it consistent with patterns or schemata of knowledge I have already developed? If not, how will I resolve the difference?
- Does it seem to make sense? If not, how can I make sense of it?
- Is a new perspective on this information or my schema needed? If so, does this change what I know or what I thought I knew?

Each of these questions involves cognition—the act or process of coming to know or understand something. If an individual uses such questions to purposefully examine what he or she knows or is seeking to understand, then these questions involve metacognition, or thinking about one’s thinking processes.

Therefore, if we can describe learning in terms of understanding and cognition, then it ought to concern us a great deal when research and analysis (e.g., Burns, 1993; Shepard, 1997; Sousa, 2011) suggest that the understandings that many children come to achieve as a result of instruction can be characterized as
fragile. If the goal of instructional methodology is to achieve learning, then what has been accomplished when the result is a fragile understanding? More fundamentally, what is a fragile understanding?

Basically, a fragile understanding exists when the student appears to know a concept in one context but does not appear to know that same concept in another way or in another setting (Burns, 1993). Although such a situation might arise as a result of incomplete learning processes, it is not uncommon for a student to master the learning of a concept but prove unable to transfer that learning. Shepard (1997) has argued that this inability to transfer learning—that is, a fragile understanding—often occurs because the student has mastered not the concept but certain classroom routines. For Shepard, instructional methods that emphasize robust understandings are the supports that students need to ensure the transfer of understandings. Current instructional agendas move toward students taking ownership of their learning through cognitively challenging activities. An example in the United States is Common Core, which has been adopted by 45 states, the District of Columbia, and four U.S. territories: Guam, the American Samoan Islands, the U.S. Virgin Islands, and the Northern Mariana Islands (CCSSI, 2012). Teachers who use instructional methods that target these robust understandings do the following:

- Frequently check students’ prior knowledge.
- Regularly prompt students to think about existing understandings in novel ways.
- Encourage students to derive new connections between existing schemata and new contexts.

The notion of transfer is a particularly critical one for culturally and linguistically diverse (CLD) students. If these students are to prove successful in the content areas, they must exhibit the ability to transfer knowledge, skills, and capacities learned in the first language to learning and understandings in content-area domains taught in a second language. Ultimately, it becomes apparent that the instructional methods necessary to prevent fragile understandings and to ensure transfer must focus on the cognitive dimension of student learning, especially the student’s capacity for the metacognition necessary to achieve deep and robust understandings. The next section explores this cognitive dimension of the CLD student biography and the many implications for understanding, transfer, and learning.

The Cognitive Dimension of the CLD Student Biography

Chapter 1 summarizes the four interrelated dimensions of the prism model: the sociocultural, the cognitive, the academic, and the linguistic. The prism model (Collier & Thomas, 2007, 2009; Thomas & Collier, 1997, 2012) represents a uniquely holistic
way to frame and better understand the differential learning needs of CLD students, as well as the many adjustment and process difficulties faced by this population.

A deep understanding of the cognitive dimension requires us to transcend this dimension’s defining characteristics. To this end, we explore and specify the challenges and processes of this dimension that we have witnessed in our work with CLD students and in the work of others. Such explorations of the cognitive and academic dimensions of the CLD student biography are the subjects of this chapter. These analyses begin with the many challenges and processes we have associated with the cognitive dimension.

Perhaps the most neglected challenges and processes that influence CLD students’ success in school settings are those of the cognitive dimension. One reason for this neglect may be the complexities of this dimension and the recency of research that genuinely integrates our understanding of how this dimension interrelates with other dimensions of the CLD student biography. In fact, August and Hakuta (1997), in conjunction with the meta-analyses of the National Research Council, have argued that serious research questions remain in at least seven major domains of the cognitive dimension, including:

- The nature of the relationship between language proficiency and literacy skills
- The consequences of acquiring nominal content knowledge in a first language and then switching languages for the learning of higher levels of content material
- The identification of which features of second language knowledge and acquisition are additive for cognition

Exploring questions related to these areas of research remains a priority in second language acquisition scholarship. For example, Robinson and Ellis (2008) present the most current research on cognitive linguistics and second language acquisition, in which scholars emphasize that language acquisition cannot happen in a vacuum. Rather, this acquisition process is dependent on an individual’s cognition processes, as well as his or her knowledge of the world, environment, length of use, and even motivation. Given the many factors that create a very complex picture of the relationship between cognition and second language acquisition, we will begin with an overview of some of the pivotal cognitive challenges that CLD students encounter in academic settings.

**Cognitive Challenges**

Personal experiences with CLD students, as well as recent research and analysis in education, provide some insights into certain key challenges that students face within the cognitive dimension of the CLD biography (Chamberlain, 2005; Chamot, Dale, O’Malley, & Spanos, 1992; Chi, de Leeuw, Chiu, & LaVancher, 1994; Cobb, 1994; Fitzgerald, 1995; Herrera, 2010; Purcell-Gates, 1996; Rosebery, Warren, & Conant, 1992; Sousa, 2011; Young & Leinhardt, 1996). Among these cognitive challenges for CLD students are those summarized later in Table 2.1.
A number of these cognitive challenges highlight the interrelationships between
the cognitive and the sociocultural dimensions. For example, interrupted cognitive
development in a student’s first language is a frustrating challenge for CLD students,
some of whom have emigrated from war-torn countries where long periods of irregular
schooling are commonplace. Demographic evidence suggests that the number of CLD students emigrating from such environments may be increasing (Roxas, 2011).

In like manner, strong cognitive–sociocultural connections exist with respect to learning styles. Learning styles can be understood as the emotional needs and the environmental and interaction preferences that students have for processing new information and relating to others in the classroom (Putintseva, 2006). Students’ preferred learning styles are influenced largely by socialization and cognitive development in the primary or home culture. When a persistent discrepancy exists
between the modes of educational interaction in the classroom (instruction, inquiry, problem solving, dialogue, etc.) and the modes of learning to which students have been primarily socialized, challenges to student learning and success are heightened (Bennett, 2010; Garcia, 1996, 2010). Therefore, effective teachers will reassess the kind of prior teaching the CLD student has received and the types of learning environments to which she or he has been exposed.

Students from the African American, American Indian, Asian American, and Mexican American cultural groups often employ styles of inquiry and response that differ from predominant styles in classrooms. Students from these groups who exhibit strong cultural affiliations may favor oral and communal interactions (Appiah & Gates, 1997; Nieto, 1999), divergent (exploratory) lines of inquiry (Valdes, 1996), and inductive (whole-to-part) lines of reasoning (Freeman & Freeman, 2011). On the other hand, teachers socialized in the dominant culture tend to emphasize convergent (prompt-answer) questions and model deductive problem solving (Bennett, 2010; Gay, 2000, 2010). These teachers are likely to structure classroom interactions that focus on the particular, build from part to whole, reason from the specific to the general, and emphasize a didactic dialogue. Given these discrepancies, schools often recognize and wish to act on the differences in socialization between teachers and CLD students. Nonetheless, in attempts to defend their practice, many teachers tend to argue the impossibility of targeting the preferred learning styles of all students in the classroom. These educators fail to realize that the intent of the learning styles research was not to argue the necessity of planning instruction that targets all the preferred learning styles represented in a given classroom. Instead, this research informs us that an awareness of the major groups of learning styles present within a classroom can assist the teacher in targeted, instructional planning that anticipates different student needs. Such awareness also facilitates teaching modifications that are:

- Cross-culturally sensitive
- Effective in reducing the need for reteaching
- Designed to reduce the slope of the learning curve for all students

Interrelationships between the cognitive and sociocultural dimensions become alarmingly evident when curriculum programming in the school or instruction in the classroom evolves from untested assumptions. This is especially the case when school educators make assumptions about the prior knowledge that a CLD student does or does not bring to the learning environment. Because a CLD student, by definition, generally exhibits some level of limited English proficiency, schools often mistakenly assume that the student’s prior knowledge in the content areas is limited as well. Additionally, some educators assume that because a CLD student does not speak English well, she or he cannot learn in an English-speaking environment.

Not surprisingly, then, educators who make these sociocultural attribution errors seldom set aside appropriate time or secure support (e.g., translators or native language collaborative groups) to assess students’ prior knowledge in the content areas before planning instruction. As a result, many CLD students are not cognitively
Transformative learning begins when students can use linguistic and nonlinguistic representations to share what they know and what they are learning. Time used to allow for this type of learning benefits both the teacher and the learner.

The ultimate goal is to take student words and representations and turn them into text. Learners begin to see themselves as contributors in the learning process when opportunities are provided for them to be actively involved, regardless of linguistic proficiency.

Mind maps are great for tapping into students’ experiences and academic knowledge. They also serve as a point of departure for making connections to vocabulary and concepts to be taught.
stretched toward new and grade-level learning in the content areas. Regarding the
cognitive dynamics of this challenge for CLD students, August and Hakuta (1997)
have noted:

The depth, interconnectedness, and accessibility of prior knowledge all dramatically
influence the processing of new information. . . . Knowledge is a complex integrated
network of information of various types: ideas, facts, principles, actions, and scenes.
Prior knowledge is thus more than another chunk of information. It might facilitate,
inhibit, or transform a new learning task. Students must connect their own prior
knowledge with new information continuously, while teachers must understand
how well students are making these connections. (pp. 69–70)

As this passage explains, the elaboration of a student’s prior knowledge is critical
to cognitive development and transformative learning. When classroom instruc-
tion does not explicitly teach and encourage CLD students to make connections
between their prior knowledge and the key content concepts they are learning,
these students face formidable challenges to their academic success and to their
ongoing cognitive development.

Other cognitive challenges for CLD students (see Table 2.1) underscore the
interrelationship between the cognitive and the linguistic dimensions of the prism
model. For example, the ongoing debate over phonics versus whole language has
significantly influenced classroom literacy development instruction in schools
throughout the nation (Routman, 1996; Freeman & Freeman, 2011). Many English
as a foreign language (EFL) and English as a second language (ESL) programs
are still grounded in the grammatical approach; however, there has been a recent
move, globally speaking, to approach language learning from a constructivist/
communicative approach. Focusing on phonics learning rather than whole language
is especially problematic for CLD students because long-standing research and
analysis regularly indicate that successful second language learners benefit from
literacy instruction that emphasizes word meaning rather than the phoneme struc-
ture of the word (Adams, 1990; Escamilla, 2004; Herrera, Perez, & Escamilla,
2010; Jimenez, García, & Pearson, 1996; Krashen, 2000, 2002). For instance,
the research of Jimenez and colleagues (1996) indicates that CLD students benefit
most from a constructivist literacy development environment, in which students
focus on the construction of meaning as central to learning. According to these
and other authors (e.g., Au & Carroll, 1997; Moore, 2012; Morrow, Pressley,
Smith, & Smith, 1997), a constructivist, cognitively demanding learning envi-
ronment encourages students to make cognitive connections between their prior
knowledge and current content context. Because CLD students have access to two
or more languages, linguistic connections such as cognates and reading strategies
can facilitate meaning construction between languages and enhance their growth
in the cognitive dimension.

Constructivist learning environments make possible the cognitive–linguistic
and cognitive–sociocultural connections at the contextual, intracultural, and
affective levels. First, the rich use of context in these environments encourages
pattern recognition, especially in literature-based instruction (Au, 2000). This pattern recognition in turn fosters the derivation of meaning through integration with what the learner already knows (Freeman, 1995; García, 2000). For example, a constructivist learning environment at the elementary level might emphasize a lesson on colors in connection with a literature-based story on colors, such as *Mouse Paint* (Walsh, 1989). Students might begin with a hands-on activity involving the primary colors red, blue, and yellow. The teacher would then encourage mixed groups of students to discover what other colors they might create by mixing the primaries. As students discover new colors, they would be named in Spanish, in other languages represented in the classroom, and in English, and the names would be placed on separate language word walls, along with the primary colors combined to achieve them. Then students might be prompted to discuss how each color makes them feel. Names of these feelings would be added to the word walls. Later, students would be encouraged to use prior experiences to make a list of things they know are associated with each color created, and these would be added to the word walls in Spanish, in other languages represented, and in English. Having established the context of the story, the book would then be previewed in the native language for the CLD students. Finally, the story would be read and learned in English with an emphasis on the fact that the mice in the story mix paint to create new colors according to the same patterns the students used in their hands-on activity.

Constructivist environments also tend to emphasize the relevance of new information to the learner. Relevance is connected to the learner’s cultural lens, which filters incoming information according to schemata established by long-standing socialization in that culture. When teachers present information or instructional input that relates to what the CLD student already knows and understands, the student is more likely to recognize the information as relevant and worthy of integration into existing schemata. On the other hand, students will most likely treat learning input that markedly differs from prior knowledge and experiences as irrelevant. Research on how the brain learns confirms the importance of relevancy to students’ retention of learning (Sousa, 2011). Thus, constructivist learning environments highlight the need for teachers to preassess what prior knowledge and experiences the CLD student brings to the ESL/EFL classroom as a basis for enhancing cognitive development.

Finally, constructivist learning environments often encourage the active and affective involvement of the learner in the construction of meaning. Research on this emphasis indicates that a strong affective (emotional) response to what is being learned helps students remember what they learn (Cahill, Prins, Weber, & McGaugh, 1994; Jensen, 2008; Sousa, 2011). Therefore, effective teachers foster a learning environment that emphasizes prior knowledge, creates a context for understanding, makes new concepts relevant, and helps students connect
Students in ESL/EFL classrooms often encounter cognitive challenges when they need to communicate in a second language and perform in cognitively demanding academic settings. Cummins (1991) has described a theoretical framework he developed for understanding some of the situational environments and demands that CLD students encounter as they go through the process of developing a cognitive, academic level of second language proficiency. In his model of situational environments, Cummins considered three critical processes influencing second language acquisition:

- The development of communicative competence in the target language
- Different cognitive and contextual demands on language competence
- The correlations between first and second language development

Cummins created the framework by using two intersecting continua. One continuum considers communicative situations to the extent that they are context-embedded versus context-reduced. In a context-embedded situation, CLD students use readily available, paralingual cues—such as the context in which the discourse occurs, body language, and prior knowledge—to actively construct meaning. A routine interpersonal conversation is an example of a context-embedded situation. If a CLD student does not understand, he or she might ask for clarification or derive the meaning of a communication from the context of the conversation. Another example of a context-embedded situation would be a conversation concerning the weather.
In a context-reduced situation, the CLD student has few if any paralinguistic cues to facilitate meaning construction. Therefore, meaning must come from the language itself. One such situation is a classroom lecture on valence theory in a high school chemistry course. These context-reduced situations are extremely valid when it comes to assessment and evaluation; however, during the instructional cycle, a teacher must make attempts to provide situations where there is a relevant context available to students that can facilitate comprehension and, in turn, output.

The second continuum in Cummins’s model considers communicative situations to the extent that they are cognitively undemanding versus cognitively demanding. In a cognitively undemanding situation, CLD students process small amounts of information requiring little cognitive engagement. An academic example of such a situation in language arts would be a classroom discussion of a story that is illustrated by a Big Book, which is shared among class members. In a cognitively demanding situation, CLD students deal with significant amounts of complex information that they are asked to process and assimilate. Such a situation typically demands tremendous cognitive engagement. An example of such a situation might be one in which a teacher asks students to identify, analyze, and discuss at least five major themes of the novel *Moby Dick*.

In describing the development of communicative competence or proficiency, Cummins (1991) integrated the two continua in an intersecting manner in order to create four quadrants describing situational language demands (see Figure 2.1). Quadrant A distinguishes a context-embedded, cognitively undemanding communicative situation. Quadrant B defines a context-embedded, cognitively demanding communicative situation. Quadrant C characterizes a context-reduced, cognitively undemanding communicative situation. Finally, quadrant D describes a context-reduced, cognitively demanding communicative situation.

As a language learner develops greater communicative competence or proficiency, tasks that were once cognitively demanding become less demanding, and the understanding that once required heavy contextual support becomes more easily comprehensible with fewer paralinguistic cues. As the learner acquires a second language, the before-and-after charting of the language demands of a particular situation will reveal a shift from the bottom right quadrant (quadrant D) to the top left quadrant (quadrant A). For example, when a CLD student first moves to the United States and begins to learn English, writing a paragraph that lists three factors that led to the U.S. Civil War would most likely be an extremely context-reduced, cognitively demanding situation. However, if that student is schooled in the United States for several years through various academic environments that directly or indirectly address U.S. history, writing the same paragraph could prove a less context-dependent and more cognitively undemanding situation.

The most important understanding that teachers can gain from this theoretical framework is that what may appear to a teacher as a relatively simple task may actually be quite demanding in a cognitive sense for the CLD student. This is often the case for a student who does not have the prior knowledge and the second language capacities necessary to successfully complete the task. To develop cognitive,
academic language competence or proficiency in a second language (L2), CLD students need to participate in a highly contextualized, language-rich instructional environment generated by a curriculum that focuses on meaning construction and cognitive, academic language development. Subsequent chapters of this text provide an in-depth exploration of ways to foster such an environment for content and language learning.
As these examples illustrate, the cognitive dimension encompasses a variety of challenges for students acquiring a new language. Many of these challenges involve not just the cognitive dimension but also the sociocultural and linguistic dimensions. These challenges must be addressed during all phases of lesson delivery for teachers to meet the unique and individual needs of the learner.

**Cognitive Processes**

No less important to the success of the CLD student are the key processes of the cognitive dimension. Many of these cognitive processes are summarized in Table 2.1. Interest in cognitive processes has caused researchers to explore the potential value of learning strategy development for CLD students (e.g., August, Calderón, & Carlo, 2002; Calderón, 2007; Chamot & El-Dinary, 1999; Chamot, 2009; Chamot & O’Malley, 1994; Cohen, 2011; Garcia, 1998; Herrera, Perez, & Escamilla, 2010; Jimenez, 1997).

Learning strategies are the patterns of thinking or goal-driven activities that help the learner attain targeted learning outcomes. The notion of a cognitive approach to learning strategies is grounded in a constructivist perspective on comprehensible input that Krashen (1982) proposes for L2 acquisition. Television and movies in a second language may cause anxiety if they are not contextualized or are not viewed at intervals with time for group discussion.

Better yet, Mrs. Bailey might use video segments for meaningful development of an integrated or thematic unit. Pally (1994) argues that the potential for learning is much higher when the medium is maximized in this fashion. Mrs. Bailey might also have the students videotape special moments from lessons, such as presentations, performances, or discussion circles, and then share them with their family members.

**dilemmas of Practice 2.1**

Mrs. Bailey, a tenth-grade history teacher at Carver High, frequently encourages her CLD students to watch one hour of television in English daily. She also shows movies in English to her CLD students. Are television and movies in the second language a good source of comprehensible input for second language acquisition?

Television and movies can be useful for promoting second language acquisition if they are connected to grade-level content. **Contextualization** is essential when using television and movies in the classroom, and these types of media should be connected to content objectives. Although some teachers feel that simply submerging students in the second language is an effective way of enhancing their linguistic capabilities, Mrs. Bailey may be doing a disservice to her adolescent CLD students. Snow and colleagues (1976) argue that, without support and guidance, adolescents are neither emotionally receptive nor able to interact productively with others in order to achieve the $i + 1$ level of comprehensible input that Krashen (1982) proposes for L2 acquisition. Television and movies in a second language may cause anxiety if they are not contextualized or are not viewed at intervals with time for group discussion.

Better yet, Mrs. Bailey might use video segments for meaningful development of an integrated or thematic unit. Pally (1994) argues that the potential for learning is much higher when the medium is maximized in this fashion. Mrs. Bailey might also have the students videotape special moments from lessons, such as presentations, performances, or discussion circles, and then share them with their family members.

**What other strategies involving media or technology might Mrs. Bailey use to help her CLD students learn English? What does it mean to contextualize media and technology appropriately within your classroom practice or your future practice?**
learning as a proactive and dynamic process. According to this view, learning involves selecting information, organizing it, relating it to prior knowledge, using it in appropriate contexts, and reflecting on the process (Chamot, 2007; Chamot, 2009; Chamot & O’Malley, 1994; Gagné, 1985).

Research and analysis suggest that a focus on learning strategies with CLD students holds much promise for supporting their development of English literacy skills as well as high-order thinking skills. Key research findings include:

- More proficient CLD students use more strategies more frequently than less proficient second language learners (Chamot & El-Dinary, 1999; Cohen, 2011; García, 1998; Jimenez, García, & Pearson, 1996).
- More proficient CLD students better monitor their comprehension than less proficient students (Chamot & El-Dinary, 1999; Jimenez et al., 1996).
- More proficient CLD students use more effective strategies (or the same strategies more effectively) than less proficient learners (Chamot & El-Dinary, 1999; Cohen, 2011).
- Through explicit instruction and modeling, CLD students can learn to use new learning strategies (Chamot & O’Malley, 1996; Cobb, 2004; Gersten, 1996; Jimenez, 1997).
- Transfer of learning strategies can occur between languages (García, 1998; Goldenberg, 2008; Jimenez et al., 1996; Wolfersberger, 2001).
- When CLD students make strategic use of both languages to construct meaning from text, they have greater comprehension (Cummins, 2000; Fox, 2003; García, 1998; Jimenez, 1997; Jimenez et al., 1996; Walqui, 2012).

Chamot and O’Malley (1994) have summarized three broad categories of learning strategies: cognitive, metacognitive, and social/affective. Although the classification scheme for learning strategies has been modified more recently to address instructional purposes (see Chapter 9 of this text and Chamot, 2009, for additional details), these three categories illustrate the cognitive processes that CLD students use to construct meaning. Cognitive learning strategies are among the first described. These strategies typically involve the mental or physical manipulation of the material to be learned. For example, a student might physically separate items to be learned into groups (words, grammar rules, etc.), or he or she might mentally categorize information using a graphic organizer in order to create a more relevant organization for long-term memory. Among specific cognitive strategies highlighted by Chamot and O’Malley are resourcing, grouping, note taking, and elaboration. Elaboration of prior knowledge involves the mental manipulation of new information. In this process, a language learner compares new information with known information and draws analogies from her or his existing background knowledge. Accordingly, the cognitive strategy of elaboration applies to all four literacy domains: listening, speaking, reading, and writing. By first assessing the prior experiences and knowledge that CLD students bring to the classroom and then guiding them to make curricular connections to those experiences and understandings, teachers
encourage students to elaborate on their prior knowledge. Cognitive learning strategies set classroom conditions for the students to take ownership of their learning. Students who are taught to capitalize on using cognitive learning strategies that are effective for their personal learning often are much more successful in acquiring a new language regardless of context. It is important that both EFL and ESL teachers understand the significance of modeling, rehearsing, and supporting the use of learning strategies in their classroom.

Social/affective learning strategies highlight the interconnectedness of the cognitive and the sociocultural dimensions of the CLD student biography and may involve the learner as an individual or the learner in interaction with another or others. At the individual level, one such strategy is using self-talk as a means to increase self-confidence. Chamot and O’Malley (1994) argue that self-talk benefits students because it tends to reassure students and lower their anxiety levels, thereby lowering the affective filter. At the interactive level, social/affective learning strategies include cooperation and questioning for clarification. According to Chamot and O’Malley, “Asking questions for clarification is particularly critical for ESL students because they will so often need to exercise this skill in their grade-level classrooms” (1994, p. 63). This strategy enables students to obtain additional explanations for clarification or verification of their understanding from peers or the teacher. Teachers may promote these social/affective strategies by fostering a communicative learning environment in which CLD students are encouraged to voice their concerns and interact with others in content learning, regardless of their L2 abilities. From our own work both in U.S. schools and abroad, we have learned that social/affective strategies are the most underutilized tools for increasing student engagement, communication, and application of the English language.

Metacognitive learning strategies relate solely to the student and his or her own cognitive processes. Planning, monitoring, and evaluating the learning process represent further subdivisions of metacognitive strategies. Culturally and linguistically diverse students use metacognitive strategies to understand and enhance their learning processes. At the level of planning, metacognitive strategies include advance organization, organizational planning, selective attention, and self-management (Chamot & O’Malley, 1994). The selective attention strategy emphasizes metacognitive planning for specific words, phrases, images, or types of information that contribute to learning.

The metacognitive strategies involving literacy development include monitoring comprehension and monitoring production (Chamot & O’Malley, 1994). As CLD students monitor comprehension, their metacognition focuses on whether they understand what they are listening to or reading. If the students do not understand,
they apply corrective strategies to construct meaning. As CLD students are speaking or writing, they monitor production to ensure that the language being produced is understandable to others. Students can then evaluate the extent to which they met their goals by reflecting on and self-assessing their learning at the end of the task.

**Snapshot of Classroom Practice 2.3  Learning Strategies**

**Cognitive Learning Strategy**
This student uses a word wall with words and images to assist him with his daily journaling. All students are allowed to take these words back to their seats to aid them in their writing.

(Courtesy of Amanda Ryan, Ft. Riley, Kansas)

**Social/Affective Strategy**
Through cooperation, these students are able to gain multiple perspectives on the key vocabulary words of the lesson.

(Courtesy of Heather Lofflin, Lawrence, Kansas)

**Metacognitive Learning Strategy**
A student uses a vocabulary foldable to organize his learning of new terms.

(Courtesy of Jenny Wilk, Lawrence, Kansas)
Cognitive Dimension: Implications for Classroom and School Practice across All Contexts

The teacher’s thorough understanding of the CLD student’s prior schooling, language experiences, or knowledge base enables informed instructional planning. Students’ prior schooling experiences may vary by country of origin and type of school (e.g., private versus public school). Proactive teachers explore the environment of prior schooling, language use and exposure to the target language outside the classroom, and the teaching styles used. Since these experiences greatly influence preferred learning styles, effective teachers use this information to gauge CLD student responses to the new environment and make decisions based on the information they have gathered about the learner and classroom community.

Assumptions about the knowledge base that CLD students bring to the classroom are common. A student’s limited English proficiency does not imply a limited knowledge base. Conversely, even though CLD students come to school with rich knowledge and experiences, educators cannot assume that all students come with the same knowledge and experiential backgrounds. In a culturally rich classroom, insightful teachers pay particular attention to the extensive prior learning and experiences of each student. For example, although a student who has just arrived in the United States from Bosnia or Cambodia may know little about the U.S. Civil War, she or he may have an extensive understanding of the realities of civil war as well as its socioeconomic impact on a country. Such a student may possess a much richer understanding than students who have spent their entire lives in the United States. Similarly, a student from Costa Rica may have extensive personal knowledge of the rain forest. Teachers might capitalize on such knowledge in a lesson on climate. Think about the student in the Voices from the Field 2.1 and reflect on your own past experiences.

Reflective teachers use informal conversations (translated as necessary) with the CLD student (or family caregiver) to avoid assumptions regarding prior learning and cognitive development. These teachers maximize such conversations to understand the extensive and rich experiences that their students bring to the classroom. Such practices facilitate accommodative instructional planning and eliminate redundancy. As meaning has a great impact on whether information and skills will be learned and stored, teachers strive to make curricular connections to students’ past experiences, not just their own (Sousa, 2011). Acknowledging students’ background knowledge is illustrated by watching this video.
Voices from the Field 2.1

The Reward of Student

“One of the students that made incredible gain last year in academic knowledge was a newly arrived female senior from Mexico. When she arrived, she was definitely in the silent period. Not only was she vocally silent, but she was silent, so to speak, in the other areas of reading and writing, too. A veteran district ESL instructor tested her by using the IPT test. Her results showed that she was a non-English reader, writer, and speaker.

Partway through the first quarter, I began questioning her diagnosed level according to the IPT tests. She was making gains that seemed way too fast. I went downstairs to the counselor’s office and we pulled her academic transcript from Mexico. She had been very successful in Mexico and she had even taken English classes for three years there! So next, I set up a meeting and invited her and her father. She was still fairly silent and her father started by translating for her. He then challenged her to try to use some of the language skills she had already learned from school in Mexico and speak. She did hesitantly at first, but as the meeting went on she grew in courage and began communicating more and more.

Once we discovered where she was at in her content knowledge through the use of more authentic assessments than the IPT test, I was able to help her achieve in a greater way. She completed all of her credits and graduated with a 4.0 her senior year. She is now enrolled in a community college.

This situation showed me many things. One is that I should never underestimate what a student is capable of, despite his or her score on a standardized test, because given the right support, that student can really excel. Another is that it is so important to authentically assess my students and not rely heavily at all on standardized test scores. This student accomplished much more than any other student in that graduating class who may have scored higher than her on a standardized test. She went from underachieving, without much motivation, to being very successful and even helping the other CLD students in the class.”

James Callahan, high school teacher

theory into Practice 2.1

Three broad categories of learning strategies emphasized in the literature on methods for CLD students are cognitive, metacognitive, and social/affective (Chamot & O’Malley, 1994). These strategies are a product of cognitive theory (Gagné, 1985; Shuell, 1986) and research on learning strategies (O’Malley & Chamot, 1990). In regard to learning strategies, Chamot and O’Malley (1994) have argued that (1) active learners are better learners, (2) academic language learning is more effective when it is supported by learning strategies, and (3) learning strategies transfer to new tasks. Metacognitive learning strategies primarily relate to the student and his or her own planning, monitoring, and evaluating of cognitive processes. The metacognitive learning strategy of selective attention encourages students to listen or read selectively, scan, and find specific information such as key words, phrases, ideas, linguistic markers, and more.

What are the implications of this metacognitive learning strategy for literacy development among CLD students? In what ways might you teach CLD students to maximize this learning strategy in their literacy development? What do you anticipate would be the most difficult aspect of the strategy to teach? How might you overcome this difficulty?
Reflective teachers find an appropriate balance through instruction that is cognitively demanding yet comprehensible. They take into consideration the cognitive–developmental level of the student while making necessary accommodations for his or her level of L2 proficiency. Such a balance will enhance student success in the classroom. Just as an assessment of prior knowledge or cognitive skills should guide planning for cognitively demanding instruction, teacher monitoring for L2 proficiency and stage of second language acquisition (SLA) should guide the comprehensibility of instructional input. Empathetic teachers recognize that comprehensible input should flow from the student’s current language abilities, as suggested by his or her stage of SLA (these stages of SLA are detailed in the next chapter). Incomprehensible instructional input increases the need for reteaching and slows the student’s progress toward language and academic growth. Instruction that targets comprehensible input involves frequent checks for understanding. Figure 2.1 provides a useful tool for assessing the balance to be targeted between cognitively demanding and comprehensible instruction.

The Academic Dimension of the CLD

Student Biography

The academic dimension of the CLD student biography involves those readily apparent aspects of the curriculum and instruction that students receive in their matriculation from prekindergarten classrooms to high school graduation and beyond. Less apparent but equally critical to this dimension is an understanding of the differential academic challenges that CLD students encounter, especially those that relate not only to curriculum and instruction but also to academic policy. This dimension also accounts for those processes that are crucial to successful academic performance in the public schools. Culturally and linguistically diverse students must not only master a second language but also develop the academic language necessary to perform well in the subject-area domains.

Global Connections 2.3

In EFL contexts, curriculum often reduces language learning to a set of phrases for conventional use. Current trends in EFL are beginning to move to a more literacy-based teaching in order to prepare students to more fully participate in additional academic activities. This focus necessitates a holistic approach to understand the challenges students will face as they transition from programs where language is taught for social purposes to those where learners are moving toward global citizenship.

Academic Challenges

The range of multifaceted academic difficulties that CLD students frequently encounter in schools is formidable and is exemplified by those challenges summarized in Table 2.2. Many of these challenges intensify with each succeeding grade level and increasingly test students’ academic language abilities. These academic challenges (see Table 2.2) can be categorized according to those that primarily relate to issues of curriculum and instruction or those
### Table 2.2 Academic Dimension of the CLD Student Biography

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Processes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Curriculum and Instruction</strong></td>
<td>Transfer of academic knowledge and skills from L1 to L2</td>
</tr>
<tr>
<td>Reductionist curriculum often driven by a strict focus on high-stakes</td>
<td>Integration of concepts learned and to be learned across academic</td>
</tr>
<tr>
<td>assessments</td>
<td>disciplines</td>
</tr>
<tr>
<td>Inadequate opportunities for classroom interactions involving academic,</td>
<td>The resolution of knowledge gaps</td>
</tr>
<tr>
<td>especially domain-specific, language</td>
<td>based on current and prior curriculum and academic experiences</td>
</tr>
<tr>
<td>Content-area assessments</td>
<td>Academic language development in L2 (a process of at least three</td>
</tr>
<tr>
<td>• Inordinately product- versus process-centered</td>
<td>dimensions of the CLD student biography)</td>
</tr>
<tr>
<td>• Decontextualized, often standardized</td>
<td>• BICS/CALP distinction</td>
</tr>
<tr>
<td>• Sometimes norm- rather than criterion-referenced</td>
<td>Domain-specific capacity building for academic performance</td>
</tr>
<tr>
<td>• Frequently focused on declarative versus procedural knowledge</td>
<td>• To address domain-specific:</td>
</tr>
<tr>
<td>• Typically lack opportunities to demonstrate critical thinking</td>
<td>• Discourse organization</td>
</tr>
<tr>
<td>Lack of readiness among subject-area and grade-level teachers for the</td>
<td>• Grammatical forms and structures</td>
</tr>
<tr>
<td>differential academic learning needs of CLD students</td>
<td>• Vocabulary</td>
</tr>
<tr>
<td>Disproportionate number of CLD students placed in special education and</td>
<td>• Academic language skills</td>
</tr>
<tr>
<td>remedial classrooms and the curricular difference between those settings</td>
<td></td>
</tr>
<tr>
<td>and grade-level classrooms</td>
<td></td>
</tr>
<tr>
<td>Academic presentation formats of content-area textbooks</td>
<td></td>
</tr>
<tr>
<td>• Technical vocabulary</td>
<td></td>
</tr>
<tr>
<td>• Vocabulary with domain-specific meanings</td>
<td></td>
</tr>
<tr>
<td>• Unfamiliar grammatical structures</td>
<td></td>
</tr>
<tr>
<td>• Complex discourse organization</td>
<td></td>
</tr>
<tr>
<td>• Assumptions about prior knowledge and experiences</td>
<td></td>
</tr>
<tr>
<td>grounded in the dominant culture</td>
<td></td>
</tr>
<tr>
<td><strong>Academic Policy</strong></td>
<td></td>
</tr>
<tr>
<td>Language learning as a remedial focus versus language</td>
<td></td>
</tr>
<tr>
<td>acquisition as a subcomponent of content-area academic learning</td>
<td></td>
</tr>
<tr>
<td>Lack of recognition or reward structures for process gains as well as</td>
<td></td>
</tr>
<tr>
<td>incremental gains in academic performance and product-measured</td>
<td></td>
</tr>
<tr>
<td>improvement</td>
<td></td>
</tr>
<tr>
<td>Criterion- and assessment-based exclusion from gifted and talented</td>
<td></td>
</tr>
<tr>
<td>programs</td>
<td></td>
</tr>
</tbody>
</table>

that relate mostly to academic policies (especially those formulated at the district level). Among the academic challenges involving curriculum and instruction are product- versus process-centered assessments in the content areas, the presentation formats of content-area textbooks, and inadequate opportunities to practice domain-specific academic language. Academic policy challenges for CLD students include a compensatory focus on language learning, a lack of recognition or reward structures for process gains, and virtual exclusion from gifted and talented programs.
From the standpoint of curriculum and instruction, one of the most contemporary and harmful academic challenges for language learners is the trend toward increasingly reductionistic curricula driven by a strict focus on high-stakes assessments at the national, state, and local levels. National reform agendas in the United States, which came to the forefront with the No Child Left Behind Act of 2001 (NCLB, 2002), continue to drive current educational agendas. Although these initiatives are implemented to increase accountability, as measured by high-stakes assessments, it is often at the expense of low socioeconomic status (SES) and CLD students. Such efforts have been the trend for a number of years, not only at the national level but also in states across the country.

Several researchers have tracked, studied, and analyzed the outcomes of many such reform initiatives (Abedi & Dietel, 2004; Bastian, Fruchter, Gittell, Greer, & Hoskins, 1986; Berlak, 1999; Darling-Hammond, 1992, 2007; Earl & LeMahieu, 1997; Lieberman & Gromlink, 1997; McLaren, 2007; McNeil, 2000a, 2000b). In general, these outcomes indicate that school and practitioner accountability systems that are directly linked to high-stakes assessments yield a number of problematic consequences, especially for students in schools with high percentages of low SES and CLD students. First among these consequences is a predictable tendency among educators, whose performance evaluations and employment may depend on student standardized test scores, to teach to the test (Berlak, 1999; McCarthy, 2008; McNeil, 2000b). This focus on facts and decontextualized processes, in turn, leads to teacher- and district-initiated efforts to substitute commercial test-preparation materials for the regular curriculum (Earl & LeMahieu, 1997; Jones, Jones, & Hargrove, 2003; McNeil, 2000b). Such substitutes for the regular curriculum prevent many educators from using their professional knowledge of the subject and of the students to provide cognitively, academically, and linguistically rich instruction that speaks to the sociocultural realities of our society.

Indeed, this setting aside of teachers’ professional knowledge and capacities yields a reductionist curriculum that is inordinately focused on basic skills, redundant workbooks, drill-and-practice approaches to instruction, rote memorization of decontextualized facts and declarative knowledge, isolated practice of computations, and repetitive routines that target the retention of basic test-taking strategies.

In turn, this “dumbing down” of the curriculum yields notable consequences for students, especially low SES students and CLD students, whose likelihood of academic success is profoundly threatened and challenged (Ketter & Pool, 2001; McNeil, 2000a, 2000b; Menken, 2009). According to McNeil (2000b), who researched the outcomes of high-stakes testing and reductionist curricula, the major content areas (especially reading, writing, and mathematics) show evidence of such consequences. In the area of reading, the teachers she studied reported that curriculum reductionism and concentrated test-preparation actually hampered students’ ability to “read for meaning outside the test setting”
(McNeil, 2000b, p. 3). Teachers who participated in her research reported that students:

- Were undermined in their ability to read sustained passages
- Exhibited a reduced capacity to read longer works
- Had so internalized the format for reading test skills that many had not formed the habits necessary to read for meaning and comprehension

In the area of writing, the teachers whom McNeil studied reported that students, especially low SES students, had become so programmed to basic skills of the test format for the persuasive essay that what they wrote was “of virtually no importance; conforming to the form was the requirement, and the students practiced every day” (2000b, p. 4). In this situation, teaching to the test ingrained in students the necessity of form and structure to the detriment of communication.

Of perhaps greatest concern are McNeil’s (2000b) findings regarding the impact of a reductionist, test-focused curriculum on the mathematics skills and capacities of low SES and CLD students. Her findings indicate that instruction driven by this curriculum did not focus on critical capacities such as problem conceptualization, selection among possible approaches, or metacognition about the procedural knowledge used to solve the problem. Instead, teachers were prompted (consistent with the notion of teaching to the test) to emphasize reductive mathematics, computational accuracy, familiarity with basic operations, and test-taking strategies.

As these examples illustrate, a reductionist curriculum driven by the anticipated performance of students, their teachers, and their schools in high-stakes assessments poses a formidable obstacle to the school success of CLD students. Academic challenges, whether most directly related to curriculum and instruction issues or to policy issues, demonstrate that the success of language learners in the content areas involves much more than the question of whether the student is willing to learn English.

In addition, a misunderstanding of the role of native language in a student’s academic development can limit a CLD student’s academic growth potential. In fact, the findings of Saville-Troike (1984) strongly suggest that for many complex challenges and tasks in the academic areas, CLD students may actually be delayed in their development by the insistence that such challenges be addressed in the target language (i.e., English). Her findings indicate that CLD students are more successful in addressing such complex cognitive tasks in their own native language. Among such challenges are the context-reduced tasks of reading, writing, drawing inferences, and forming schemata. When these challenges are targeted in the native language, the skills attained and the processes learned will then transfer...
Likewise, Kersaint, Thompson, and Petkova (2009) argue that CLD students should be allowed to use their native language as a resource for learning mathematics. When teachers encourage students to first process information in the language in which they are most familiar, students are able to utilize their existing mathematical knowledge to enhance their concept development. Then students can focus on communicating their new understandings in English. Regardless of the content area, an academic environment that maximizes social interaction among students to build both native and target language proficiency among CLD students facilitates the transfer of content, processes, and strategies from L1 to L2.

Academic Processes

No discussion of the academic dimension of methods for CLD students would be complete without an exploration of the processes involved for the students. The right-hand column of Table 2.2 provides an overview of these processes. Some of these processes, like others associated with dimensions already explored, continue to demonstrate the interrelatedness of the four dimensions of the CLD student biography. For example, the processes of academic language development and the transfer of academic knowledge and skills from L1 to L2 emphasize relationships among the cognitive, linguistic, and academic dimensions. Similarly, the processes that seek to integrate concepts from prior knowledge with those to be learned in the content areas again stress both the academic and cognitive dimensions of the CLD student biography.

The process of academic language development in L2 is particularly difficult for language learners. It is also a process that often generates confusion within the learning community. Much of this confusion arises from a lack of understanding about the distinction between basic interpersonal communication skills (BICS) and cognitive academic language proficiency (CALP). That is, the confusion is grounded in the difference between conversational and academic language use. This distinction evolved during the 1970s and 1980s when second language educators and researchers became concerned that CLD students who exhibited second language proficiency in primarily oral and interpersonal communications did not perform well when using their second language in academic contexts (Chamot, 2009; Chamot & O’Malley, 1994). In response to this ambiguity, Cummins (1981) developed a theory describing second language
proficiency in terms of BICS and CALP. Cummins (1994) began to refer to these different constructs of language proficiency simply as conversational language and academic language.

Students who have achieved a conversational level of language proficiency have the ability to communicate interactively in familiar situations in which the context of communication tends to support the meaning of the discourse (Cummins, 1989). Most students in a second language environment can acquire conversational proficiency in two to three years (Diaz-Rico, 2014; Genesee, Lindholm-Leary, Saunders, & Christian, 2006; Ovando, Combs, & Collier, 2011). These language learners appear to be fluent speakers of the second language. However, according to Cummins (1989), students who have acquired only a conversational and not an academic level of proficiency have difficulty when trying to understand and communicate about cognitively complex concepts in the target language, especially in academic contexts.

Competitive performance in the content areas involves more than interpersonal communication skills. Because CLD students must typically communicate in English in the school environment, the content classes such as science, social studies, mathematics, and language arts become their communicative environment (Mohan, 1986). Collier (1995) has argued that such academic contexts demand a deep level of academic language proficiency in L2.

Constructing meaning using unfamiliar academic concepts and new cognitive processes can be difficult for any student. Learning in a second language multiplies the difficulty of the task because students must construct meaning from a less familiar language, unfamiliar academic concepts, and new cognitive processes all at the same time. In routine conversational language uses, a CLD student can focus on meaning construction alone. For academic language uses, a student in an ESL/EFL classroom must negotiate meaning while juggling multiple processes.

Accordingly, instructional support must encompass the development of cognitive and academic language skills in the second language (Cummins, 1989). Informed teachers plan instruction that targets academic language development using the content-area curriculum. As needed, key curriculum concepts are previewed or contextualized. Teachers may also choose to scaffold their instruction. Such scaffolding involves the incorporation of instructional aids, student interaction, and other lesson modifications to ensure that content concepts are comprehensible to language learners.

Academic language proficiency in L2 involves the capacity to understand and produce language that is both abstract and complex. Second language learners who have acquired academic language proficiency have reached an advanced level of language development. The advanced language competencies associated with this development include the ability to understand language in a decontextualized, unfamiliar situation with limited interaction (Cummins, 1989). The CLD students who have acquired academic language in L2 do not require nonverbal cues to construct meaning from a given situation (Chamot, 2009; Chamot & O’Malley, 1994).
Another set of academic processes involves capacity building that is particular to subject-area domains with the goal of enhanced academic performance. This domain-specific capacity building is particularly difficult for CLD students because it typically demands a number of adjustments, each of which varies by subject area and involves increasing academic language proficiency in the second language. These demands require the student to excel in domain-specific adjustments to the following:

- Discourse organization of the domain
- Grammatical forms and structures particular to that domain
- Specialized vocabulary of the domain
- Particular academic language skills necessitated by the nature of the domain

Each of these difficult adjustments for CLD students depends on the content area in question. Some examples from the key content areas illustrate the complexities involved.

In mathematics, adjustments to the vocabulary of the subject domain are often difficult for language learners for at least three reasons. First, the mathematics classroom tends to abound in assumptions concerning students’ prior knowledge of specialized terms such as denominator, subtraction, divisor, and multiplication. Second, terms that have one meaning in one subject domain can assume an entirely different meaning in the vocabulary of mathematics; such terms include quarter, column, product, rational, even, and table (Chamot, 2009; Chamot & O’Malley, 1994). Finally, the vocabulary of mathematics tends to encompass a variety of homophones (words that sound like other common words) and can be especially troublesome for CLD students who are unaccustomed to the new language. Examples of such domain-specific homophonic pairs include angle and ankle, addition and audition, and factor and factory (Garbe, 1985). Accordingly, reflective teachers review the academic curriculum for vocabulary that may be problematic for CLD students. These teachers are then in a proactive instructional position to preview, scaffold, or contextualize this vocabulary as needed to enhance the academic development of CLD students.

The domain of science is exceptionally demanding on the academic language skills and capacities of CLD students. Scientific inquiry requires students to propose and defend hypotheses, or arguments, and to use complex linguistic structures and advanced reasoning. These linguistic structures often prove exceedingly complex for second language learners (Anstrom, 1998; Chamot, 2009; Chamot & O’Malley, 1994; Rosebery, Warren, & Conant, 1992). Teachers can assist language learners in this domain by teaching metacognitive strategies that focus the students’ attention not only on the products of academic thinking but also on the processes.

In the language arts domain, the variety of texts and materials used often demands extraordinary capacity building for academic performance among CLD
students. Earlier discussion in this chapter highlights the many ways in which students can maximize past experiences and prior knowledge to make sense out of texts and draw meaning from learning materials. Yet, CLD students in the language arts classroom often are asked to read and comprehend (at a high level of complexity) texts and materials that are culturally unfamiliar, use complex vocabulary, involve
convoluted themes and propositions, rely on antiquated syntax, or are grounded in culturally different writing genres (Anstrom, 1998; August & Hakuta, 1997; Escamilla, 2000; Coyne, Kameenui, & Carnine, 2010; Sasser, 1992). Effective teachers help CLD students with these difficulties by using differentiated instructional strategies such as:

- Preteaching culturally different concepts
- Previewing key vocabulary
- Webbing or otherwise illustrating major themes
- Discussing the ways in which writing genres can differ

As these examples demonstrate, there are a number of content areas in which domain-specific capacity building for academic performance involves difficult processes for the CLD student. Such processes dramatically illustrate the interconnectedness of the four dimensions of the CLD student biography: the academic, the cognitive, the linguistic, and the sociocultural. Think about the strategy depicted in Figure 2.2; in what ways does it support the four dimensions?

**Academic Dimension: Implications for Classroom and School Practice**

Reflective teachers avoid a reductionist approach to lesson planning. Often, educators associate a limited ability to speak the language of instruction with an inability to perform academic tasks at grade level. Teachers both in EFL and ESL classrooms sometimes use materials that are reductionist and unmotivating, such as drill-and-practice methods for language learning or content-area teaching. However, CLD students often are able to learn grade-level academic language and concepts when the curriculum (or instruction) is appropriately adapted to accommodate CLD learners. Effective teachers provide all learners with culturally, academically, cognitively, and linguistically rich instruction. High expectations for the academic performance of all students are realistic when this instruction is appropriately adapted and modified for CLD students.

Insightful teachers know that the BICS/CALP distinction is crucial to the academic success of language learners. If CLD students are to build academic language proficiency, then the academic curriculum must serve as the content for language instruction. Effective teachers maximize accommodative strategies to adapt the curriculum and classroom instruction for students’ CALP development in L2. For example, teachers can examine the curriculum to identify the key academic vocabulary to teach in lessons. This vocabulary can then be previewed before each lesson. Teachers should isolate critical concepts to teach from the content-area curriculum. They can then modify and scaffold instruction to teach these concepts in a comprehensible manner. Such modifications might include photo illustrations of concepts, hands-on activities with manipulatives, heterogeneous peer group learning, and more.
### Figure 2.2

**From Pictures to Words**

<table>
<thead>
<tr>
<th>What I See . . .</th>
<th>What I Think . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>Picture #1</td>
<td>Picture #1</td>
</tr>
</tbody>
</table>

**Classroom Directions:**

- Select appropriate pictures to support the inductive acquisition of key vocabulary terms.
- You can copy pictures from the text or pull images from other sources (e.g., the Internet, magazines, newspapers, books, picture cards).
- Show students the preselected images one at a time (allow a few minutes for students to complete the “What I See . . .” and “What I Think . . .” handout).
- Encourage students to reach into their permanent memory folder to get to all the words that they can think of.
- Make sure to utilize the question prompts as students work on the handout by asking them to describe all the things they see in the picture as well as what they think of when they look at the picture.
- After students have completed the handout, read a passage from the text that defines the meaning of the words in context and have students match the picture to the appropriate part of the text.
- Have students discuss in pairs or small teams how they are matching the pictures before discussing them as a whole group.
- Next, show students the actual dictionary definitions for the words and have them again match the pictures to the appropriate definition.
- Be sure to have students discuss in pairs or small teams how they are matching the definitions before discussing them as a whole group.
- Finally, show students the actual words and ask students which pictures they think match the words, based on what they have written.
- To make sure all students have a chance to provide a rationale, have them individually or in pairs or small teams create a group statement that explains how and why they matched the pictures to the words.

The ongoing use of peers or small teams supports CLD students’ language and academic development throughout this activity.

*Source: From Socorro Herrera; Kevin Murry; Robin M Cabral (2007) Assessment Accommodations for Classroom Teachers of Culturally and Linguistically Diverse Students published by Kansas State University. Copyright © 2007 by Kansas State University. Reprinted by permission.*
### Connect, Engage, Challenge

#### CONNECT

**Review and Reflect on the Reading**

1. What does it mean to contextualize a learning environment, and what does it involve? Reflect on and discuss the ways in which your socialization has or has not prepared you to contextualize learning.

2. What is the primary origin of students’ preferred learning styles? Should all instruction target the preferred learning style of the CLD student? Why or why not?

3. List at least three characteristics of a constructivist learning environment. In what ways is such an environment beneficial for CLD students?

4. Explain the concept of elaboration. What are the connections that teachers should be aware of between elaboration and the prior knowledge, skills, and capacities that a CLD student brings to the classroom?

5. What sorts of factors external to the school, especially sociopolitical factors, often lead to reductionist curricula in schools? Reflect on and discuss the teacher’s potential role in countering such influences.

6. What types of learning strategies help CLD students cope with the complex demands of content-area lessons or classes? Describe instructional strategies that a teacher can implement to also aid CLD learners in the subject-area domains.

7. Describe the importance of the relevance of new information to the CLD learner. In what ways do constructivist learning environments emphasize instructional relevance?

8. In what ways might a teacher encourage CLD students to maximize the social/affective learning strategy of asking questions for clarification? Reflect on and explain why the CLD student might not already be comfortable with the use of such a strategy.

#### ENGAGE

**Share What You Learned**

1. Explore various learning tasks for students. Then discuss whether each task is context-embedded or context-reduced and whether each task is cognitively undemanding or cognitively demanding. Chart your findings for each task according to the quadrant described in this chapter.

2. This chapter details three types of learning strategies that CLD students can use to enhance their cognitive development and improve their academic performance. Discuss ways in which an educator might teach each of these three types of learning strategies: cognitive, metacognitive, and social/affective.

3. Among the four dimensions of the CLD student biography, one dimension is frequently neglected. Discuss some of the challenges and processes of this dimension that CLD students must transcend in order to be successful in school.
**CHALLENGE**

*It’s Not Real until You Practice*

**Preservice Teachers**
1. Observe a grade-level class in which CLD students are instructed. What modifications or accommodations is the teacher making to deliver more comprehensible classroom instruction?
2. By observing her or his instructional methods, identify the specific strategies the teacher incorporates to ensure that the content is cognitively challenging for CLD students.
3. Interview a CLD student regarding the learning strategies the teacher incorporates that seem to help the student acquire the language and content more easily.

**In-Service Teachers**
1. Imagine that you are a middle school science teacher who instructs a grade-level class that is composed of native-English-speaking and CLD students who are at varying levels of English proficiency. You are about to begin a unit on volcanoes. What instructional accommodations can you add that will help all students in your class meet the academic standards embedded in the topic?
2. Keeping in mind the various backgrounds of your students, list some of the varied types of learning styles your students bring to the classroom and how you can capitalize on each one with instructional accommodations.
3. Give students a list of challenging or new vocabulary words they will be encountering in a lesson. Once they are in heterogeneous cooperative groups, instruct them to group related words and then create their own categories under which to place these grouped words. They may need to use a thesaurus or dictionary to get some sense of the meaning of the words during this process. Before beginning the lesson, have groups discuss and compare their categories and their rationale for placing specific words in these categories. The purpose of this activity is to activate prior knowledge and stimulate students’ thought processes as they manipulate these words in the context of their own experiences and prior knowledge. This strategy makes vocabulary words more personally relevant and provides a foundation for encountering them in the lesson, which may present a less familiar context.

**Tips for Practice**

**In elementary classrooms, consider:**
- Prompting CLD students to think of different ways to solve problems by asking questions such as “In what other ways could Carina figure that out? Are there other possible solutions?”
- Providing opportunities for students to practice content-area vocabulary through choral reading or paired writing activities.
- Identifying the prior knowledge your students bring to the classroom in order to make connections to the ideas and concepts that you
are teaching through KWL charts, freewriting, observation, and journals.

- Establishing learning centers so that your CLD students can explicitly practice the learning strategies on which you are focusing.
- Using visuals such as timelines, maps, and diagrams to clarify complex concepts as much as possible, specifically in social studies units.

**In secondary classrooms, consider:**

- Modeling or demonstrating the steps of a science experiment as CLD students observe. Then, in cooperative groups, students can discuss and create an outline that includes the main steps that you modeled.
- Identifying where the students in your classroom are from and then using graphic Venn diagrams or T-charts to compare/contrast languages and cultures of your students’ native countries or regions, which can then connect to your social studies/history lesson.
- Having CLD students create a story problem that applies to the new math concepts learned. Students will then trade story problems with another group that will solve the problem.
- Providing closure to your content-area lesson with learning logs for language arts lessons. Learning logs consist of journal entries written by the students, which provide them with an opportunity to reflect on the concepts and processes they have learned. This allows students to solidify their thoughts through writing.
- Helping students monitor their language use. For example, learners need to construct meaning simultaneously as they read for new information. Model expectations of how to complete an academic literacy task by providing questions about the task, how to “fix” comprehension breakdown, how to connect the task to prior knowledge about the topic, and how one might organize the information in the text.
- Emphasize to the students that once a learning strategy has been mastered, they can apply that strategy to other subjects.

**In EFL classrooms, consider:**

- Providing constructivist learning environments where language development is approached in a holistic manner without an overemphasis on grammar and rules, allowing students the opportunities to develop processes, skills, and positive attitudes toward language learning.
- Integrating opportunities for students to practice the target language within the community (local or global) to ensure their engagement in authentic communication experiences.
- Emphasizing reading strategies in the initial stages of language learning. Such efforts increase the value for students of written materials as important sources of language input.
- Focusing on learning strategies as an avenue for language construction, not just reproduction. A strategic and purposeful approach to learning strategies can especially help students identify the nuances of language in order to communicate more effectively.