GIPE | RICHARDS

Multiple Paths to LITERACY

Assessment and Differentiated Instruction for Diverse Learners, K–12

NINTH EDITION

Ninth Edition

MULTIPLE PATHS TO LITERACY

Assessment and Differentiated Instruction for Diverse Learners, K–12

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As always, I dedicate this work to Charlie,
my parents (miss you, Mom and Dad), and my loyal companion,
Cocoa, who has survived another edition with me, her third.

I dedicate this work to my husband, Paul, my two sons,
my four grandchildren, and my great grandchild.
Thanks also to my two daughters-in-law.

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About the Authors

Joan P. Gipe is Research Professor Emeritus from the University of New Orleans and Lecturer Emeritus from California State University, Sacramento. She is currently engaged in online mentoring for Walden University's EdD program. After graduating from the University of Kentucky with a BA and an MA in education, and Purdue University with a PhD emphasizing reading education, Joan spent many years working with learners of all ages: in Kentucky as a reading specialist, in Indiana as a fifth-grade teacher, and in several university contexts as faculty, supervisor of student teachers, department chairperson, coordinator for teaching enhancement, university/school liaison for professional development schools, coordinator of field-based teacher education cohorts, and now mentor for numerous doctoral students engaged in research toward the Ed.D. Many publications, including this text, share with the professional community what was learned during this career. Joan now resides in the charming town of Healdsburg, California, nestled in the heart of Sonoma County's Wine Country. She savors life there with her husband and her four-legged companion, Cocoa, a field spaniel, who earned an Honorable Mention in Sonoma County's Best in Show.

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Brief Contents

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Preface

Teaching is very hard work. It requires a view of oneself as a lifelong learner. Our best teachers also view themselves as researchers, constantly questioning their methods and trying new ideas that might help them meet the needs of all the students entrusted to them. Our best teachers resist efforts to work mainly as technicians of a particular program; rather, they deserve to be recognized as valued and trusted professional educators capable of making instructional decisions that benefit their students. Throughout this text we hope to demonstrate the profound respect we have for teachers as knowledgeable, thinking professionals.

Just as classroom teachers are continually developing as professionals, so are we, as authors of this text. Between editions we read professional literature, attend conferences and webinars, work with students who struggle with literacy, and discuss ideas with colleagues for the express purpose of identifying the methods and theories related to literacy assessment and instruction that represent the best of what is known in the field of literacy education. As in prior editions, we offer information based on the most current research in the field and the best thinking of literacy experts representative of a variety of viewpoints to present a comprehensive look at what we educators can do to help all learners, of all ages, achieve literacy. A continuing goal is also to provide teacher education students, classroom teachers, literacy coaches, and reading teachers with a guide and a resource for meeting the needs of their diverse learners, including English learners and students with special needs found in most classrooms throughout the United States. The use of quality multicultural literature as a means to help learners broaden their understanding of their own and others' cultures remains a recommendation of this edition, and one that is practical in educating for a democratic society.

In this edition, we continue to strongly support a view of literacy development that includes multiple forms of literacy. From text-based forms to technology-related literacy to visual literacy and the performing arts, incorporating a variety of forms is essential to meeting the needs of learners in today's world. The conceptual framework that best illuminates this view is Howard Gardner's (1983, 1999) multiple intelligences (MI) theory, which provides the foundation for the instructional recommendations made in this edition. Also, MI theory supports differentiated instruction, and this text describes analytic teaching as essential to achieving effective differentiation. The conceptual framework offered by MI theory is also consistent with the response to intervention (RTI) paradigm. The similarity between RTI and the analytic process needs to be recognized as all U.S. states and the District of Columbia now support, at some level, implementation of a tiered academic and behavior framework like RTI (17 states as of 2013 require RTI). Additionally, the underlying premise of the text has been, and remains, an emphasis on making literacy education equally available for all students, a premise consistent with another topic discussed, that of Universal Design for Learning (UDL). In this edition, we make explicit what has been an underlying premise in earlier editions—that is, an emphasis on educating students in ways that make literacy education equally available for all students. For example, in a new chapter we show how the arts can provide support to the literacy learning of all learners, including those from low socioeconomic circumstances, learners who struggle academically, and those who are culturally, racially, and linguistically diverse. Such a

focus is certainly consistent with the concept of differentiated instruction and multiple intelligences theory.

We have made a conscious effort to present techniques appropriate to, or easily modified for, any grade level from primary through secondary school. Students can experience difficulty at any point in their literacy development. Difficulty might be first noticed when students are asked to read expository text that requires strategic reading behaviors different from reading narrative text. Difficulties also occur with expository writing, or academic writing. We recognize that competence in reading and writing is critical to entry into the world of knowledge and societal power. In fact, our hope is for all students to acquire the skills, knowledge, and dispositions needed to respond to their public responsibilities as citizens. We also hope to help teachers empower all students to enjoy the confidence that good readers and writers share, identify and solve problems of social injustice, and act as wise consumers and decision-makers in our technologically advancing society. This we see as the main task of literacy instruction.

What Is New in This Edition?

We continue to provide teachers with an analytic approach consistent with RTI and techniques for (1) recognizing learners' literacy strengths and needs, (2) identifying learners' special needs, (3) planning and differentiating instruction that considers the special talents and learning preferences of their students, and (4) meeting the Common Core State Standards. New to this edition are the following elements.

- **A new chapter for supporting K-high school students' literacy development through the arts** that offers arts theory, teaching strategies, and students' arts/literacy connections, explains how the Common Core State Standards affirm the arts, and how the Every Student Succeeds Act supports the arts as a core academic subject.
- **A new section on disciplinary literacy has been added to Chapter 13** to address the needs of teachers responsible for content-area learning, and the current emphasis on text complexity and increased use of informational text at all grade levels.

- **A new explicit connection to students with special needs** is made in each Part II chapter titled Spotlight on Learners with Special Needs, similar in format to the current Spotlight on English Learners. Teachers need to be aware of strategies effective for students with special needs, including ELLs.
- **A new section on neurological disorders**, in Chapter 4, addresses obsessive-compulsive disorder (OCD). Often teachers confuse ADHD with OCD, but they are different disorders. Knowing the characteristics of both disorders should help to clarify any confusion.
- **Separate assessment chapters have been condensed into one chapter containing material on both summative and formative assessments.**

- **New attention to IRI administration and** can be found in Chapter 5, the assessment chapter.
- Updates were made throughout the text for content and references. **Updates to the References include updates to new editions cited and the addition of nearly 100 current references.**

How Is This Edition Organized?

For teachers to effectively build cooperative learning communities and provide opportunities for critical thinking and problem-solving—important goals in a democratic society—they first need to know their students' learning profiles. The bulk of this text explains how to profile students through assessment, identify their individual needs and learning preferences, and address students' needs in a variety of ways. The organization of this text supports these important teaching goals.

The text is divided into two major sections: Part I, "Foundations," and Part II, "The Major Domains." Part I presents the fundamental dimensions of literacy, the concept of civic literacy, prevalent views about literacy instruction, and the goals of effective literacy programs; describes analytic teaching and the analytic process as data-driven decision making and their relationship to differentiated instruction and RTI; summarizes perspectives on linguistic diversity as related to literacy education; discusses factors that influence literacy learning, such as physical and developmental, psychological, and environmental correlates; and describes ways to assess and evaluate literacy performance, using both summative and formative means. Part II provides specific information on instructional techniques and integrating multiliteracies through visual and communicative arts. The literacy domains addressed are early literacy; literacy development through the arts; oral and written language, including spelling and academic writing; word recognition; reading vocabulary; reading comprehension; comprehending narrative text; expository text and disciplinary literacy; and study skills, including test-taking strategies. The extensive coverage of research-based instructional techniques for all literacy domains and applicable to all grade levels is a particular strength of this text, with a comprehensive listing of these strategies highlighted on the inside covers of the text.

The chapters in Part I are best studied in the order presented, whereas the chapters in Part II are independent of one another and can be studied in any order. The text organization corresponds especially well to a course organization that includes action research, a field experience, or a practicum or clinic experience. Although the basis of the text is well supported by research and theory, the overall flavor of the text remains applied and practical.

Special Features

Certain format features aid learning from the text. Each chapter begins with a list of learning objectives and important vocabulary words. The terms listed as important vocabulary for each chapter are boldfaced within the text for quick location. There is also a glossary that provides definitions for these boldfaced terms. These features aid the reader in preparing to read each chapter and in studying the material, and they aid the instructor in anticipating topics that may need additional explanation or hands-on experience. Within each domain chapter, margin notes make explicit connections between teaching practices or strategies

and the specific Common Core State Standard(s) a strategy addresses. In addition, within each domain chapter there are Spotlight on English Learners and Spotlight on Students with Special Needs features that highlight particularly effective strategies for learners who are still learning English, or who have a specific disability or other special need.

The Assessment Resources found in the appendixes provide a compendium of assessment tools for both teachers and students. These tools include materials for assessing instructional environments, determining students' areas of literacy strength and instructional need, examining readers' attitudes toward reading and self-concept, determining spelling development, analyzing writing samples, communicating student progress to parents, self-assessment for phonics terminology, and many more. A glossary and index are provided for quick reference.

Supplements for Instructors

The following supplements comprise an outstanding array of resources that facilitate learning about reading assessment and differentiated instruction. For more information, ask your local Pearson Education representative or contact the Pearson Education Faculty Field Support Department at 1-800-526-0485. For technology support, please contact technical support directly at 1-800-677-6337 or http://247.pearsoned.com. Many of the supplements can be downloaded from the Instructor Resource Center at www.pearsonhighered.com/irc.

Help your students get better grades and become better teachers.

Instructor's Resource Manual and Test Bank. For each chapter, the instructor's manual features a summary of important concepts and terms with their definitions, in-class activities, field-based activities, and journal questions. The summary gives an overview of what is discussed in each text chapter. The important terms highlight the major concepts of each chapter. The in-class activities provide ideas for experiences that can be accomplished within the university setting to enhance understanding of the concepts presented in the text. The field-based activities help build professional portfolio materials. The journal questions help students engage personally with the concepts. The manual also provides resource pages that can be used either as handouts or as transparency masters. The test bank provides multiple-choice questions for each chapter (available for download from the Instructor Resource Center at www.pearsonhighered.com/irc).

Acknowledgments

Thanks to colleagues and students across the country, and to the staff at Pearson Education, this text is now in its ninth edition. Suggestions for improving the instructional strategies offered and the explicit text connections to differentiated instruction come from a variety of valuable sources. First, the feedback from my own students from the University of New Orleans and California State University, Sacramento, over the years, as well as from other instructors and students who used the previous editions provided the impetus for the changes in this edition. I sincerely thank all who offered suggestions for this new edition. Second, I extend a special thank you to reviewers Lisa Bauer, Wilmington College; Carolyn R. Fehrenbach, Pittsburg State University; Margaret Phillips, Tiger Creek Elementary, Tunnel Hill, GA; and Tobi Thompson, Northeastern State University. Your thorough and thoughtful reviews and comments were invaluable in the development of this new edition. Special

thanks to Janet C. Richards (USF) for agreeing to serve as coauthor for this edition. Without her help and encouragement it is unlikely there would have been a ninth edition. Special thanks also to John G. Barnitz (UNO) for being the contributing guest author of Chapter 3 for this and the past eight editions. Many thanks to Stephanie Branson, doctoral candidate at the University of South Florida, Tampa, in Curriculum and Instruction with a dual specialization in Literacy Studies and Elementary Education, for her assistance in updating references for this edition. She is also responsible for updating the Instructor's Manual for this ninth edition. Stephanie's research interests and specializations include how digital literacies are enacted in and out of the classroom and professional development practices across the lifespan. Much appreciation to Dr. Stephanie Lemley of the Mississippi State University for her contribution of the section on disciplinary literacy in Chapter 13. Special recognition goes to my friend, Devon Metzger, for his failure to keep me from completing a ninth edition (try again)! Lastly, thanks also to the many Pearson personnel involved in seeing this edition to fruition. I hope all of you who use this text find the result appealing, helpful, and a valuable resource.

Joan P. Gipe

chapter one

Fundamental Aspects of Literacy Learning

learning objectives

After you have read this chapter, you should be able to:

1.1 Identify literacy processes and discuss how the various literacy processes interact.

1.2 Explain the importance of literacy teachers educating for a democratic and global society.

1.3 Describe several characteristics of your own philosophy about teaching and learning literacy.

1.4 Describe the two major goals of an effective literacy program.

vocabulary alert

The vocabulary listed here is not meant to overwhelm, but is comprehensive of the concepts found within the chapter. For this list, and all the others that accompany each chapter, you might find the following steps helpful. First, review the entire list. If you see words that are mostly new, you know you will need to spend more time with the chapter. If you find the list contains many familiar concepts, you will need to spend less time. Know that your instructor has access to a quiz on these terms to correspond to each chapter. You might wish to request to take these quizzes before or after you study each chapter to gauge your understanding of these important chapter concepts. Also, be aware that these terms can be found in the glossary of this text, as well as defined within the context of the chapter where the word appears in boldface type.

academic literacy
aesthetic reading
alliterates
balanced approach
best practices
bottom-up approach
civic literacy
Common Core State Standards (CCSS)
content-area literacy
disciplinary literacy
early reader
efferent literacy
emergent literacy
emergent reader
fluent reader
language
language comprehension
language production
morphology
phonology

pragmatic cue system
proficient reader
recreational literacy
schematic cue system
semantics
syntax
top-down approach
viewing
visual language
visually representing

As teachers, we are concerned with creating classrooms that are places of learning for *all* our students. Such classrooms, and the schools that house them, are responsive to issues of social justice and democratic values (Dewey, 1916). By explicitly educating for democratic life in a global society, we will empower our nation's youth to participate "in community life and take actions that balance the rights of individuals with the collective needs of society" (Robelen, 1998, p. 1). Teachers charged with literacy instruction are in a unique position to have a significant impact on students' development as literate and wise citizens (Hall & Piazza, 2008; Reidel & Draper, 2011). Certain skills, knowledge, and dispositions are needed for participation in a democratic society. Most of these capabilities come under the heading of critical thinking and inquiry skills, but others reflect a disposition that strives for the common good or the high moral ground. A few of the most important skills and dispositions related directly to literacy instruction are:

- Knowing how to ask questions, what to ask, and when to ask
- Being able to consider multiple points of view on an issue or situation
- Being capable of evaluating information, arguments, or data for accuracy, biases, and legitimacy
- Having broad and deep multicultural understandings
- Knowing how to read the implied message
- Being able to communicate clearly both in speaking and in writing

In addition, teachers recognize that students of all ages sometimes need alternative and supplementary instruction to support their literacy development. Such assistance is one of the most important tasks facing classroom teachers at all levels. Providing this assistance is challenging because paths to literacy development are as unique and distinct

Table 1.1 Foundational Theories Relevant to Upcoming Chapters

Schema Theory	Cognitive-Based Theory	Sociocognitive Theory	Transactional Theory	Transactional-Sociopsycholinguistic Theory
• All knowledge is organized into units • Units, called schemata, contain stored information • A system for understanding reality • Affects the way information is interpreted or comprehended • Continues to change as new information is received	• Internal aspects of attention • Alertness refers to active attempt to access schemata • Selectivity is the ability to attend only to relevant information • Limited capacity refers to having only so much cognitive energy to expend	• Involves negotiation between students, teacher, and classroom community • Puts emphasis on the sociocultural setting	• Nature of language is dynamic • Meaning happens during the transaction between reader and texts • Meaning can change in different contexts or with different readers	• Incorporates the previous theories • Reader has a highly-active role • Schemata are changed through transactions with text as meaning is constructed • What the reader knows, who the reader is, what values guide the reader, and the purposes and interests of the reader ultimately create meaning

as our students. Hands-on activities, computer technology, music, art, drama, group work, and self-evaluation, as well as creative writing and reading material of one's choice, can each allow pupils with varying strengths and needs to cultivate their literacy development.

As the conceptual framework for this text, multiple intelligences theory (Gardner, 1983, 1999) encourages us to perceive the best in learners and to appreciate that there are various ways to reach a common goal. Multiple intelligences theory is especially relevant to anyone who recognizes that learners are unique individuals, each with his or her own natural strengths and preferences for learning. All learners can benefit from a variety of pathways to literacy. By looking for the diverse ways in which learners demonstrate what they know and how they think best, educators will begin to appreciate each learner's individual learning profile. In addition, we summarize in Table 1.1 relevant theories underlying the content in the upcoming chapters.

Literacy Processes

The development of literacy is complex and multidimensional; it involves reading, writing, speaking, listening, viewing, visually representing, and thinking. Being literate is much more than being able to decode print. How the various processes work together is not clear, but we present the processes that usually interact during literacy learning in the following sections.

Literacy Is a Language Process

The sophisticated system through which meaning is expressed is **language**. The symbol systems of a language can be oral, written, or visual. Language enables individuals to communicate—to give and receive information, thoughts, and ideas.

Giving information is called **language production**, which can be oral, written, or visual; receiving the information is **language comprehension**. Speaking, therefore, is the production of oral language; listening is the comprehension of oral language. Similarly, writing and reading are the production and comprehension, respectively, of written language. As young children learn to read and write, they already give and receive information by speaking and listening. Likewise, **visually representing** and **viewing** are the production and comprehension of visual language. For instance, producing a chart or a drawing can visually represent a learner's comprehension of text, while understanding the symbols found in visual media refers to viewing. Young children who have experience responding to picture books also have a background of producing and comprehending **visual language** (meaning in images) that can be further developed through instruction (Leland, Ociepka, & Wackerly, 2015; O'Neil, 2011; Park, 2012). Reading, writing, speaking, listening, viewing, and visually representing comprise the language arts and are mutually supportive, so they must be seen as interrelated and developing concurrently. To summarize, reading, listening, and viewing share common receptive and constructive processes; and writing, speaking, and visually representing share common expressive processes.

Components important to the development of oral and written language are phonology, syntax, morphology, and semantics. Briefly, **phonology** is the system of speech sounds; **syntax** refers to word order and the way words are combined into phrases and sentences; **morphology** is the internal structure of words and meaningful word parts (prefixes, suffixes, word endings and inflections, compound words); and **semantics** refers to meaning or to understanding the concepts represented by the language.

A firm language base—resulting from many hours spent experiencing oral, written, and visual language through activities such as telling stories or sharing books—is crucial to literacy growth and facilitates further reading and writing development. The language heard by participating in these activities becomes source material for written expression. Fortunately, all students bring to school a wealth of language and cultural experiences from which teachers can build literacy. Additionally, language is only really meaningful "when functioning in some environment" (Halliday, 1978, p. 28). Therefore, language users develop a **pragmatic cue system**—rules related to the use of language in social or cultural contexts. For example, consider the sentence "This is cool," which can be interpreted several ways depending on the context of the situation. Consider the two different meanings of the sentence if it were spoken by a person tasting some coffee that has just been served, or by two teenagers enjoying a rock concert. Similarly, one might say in an informal conversational setting, "Nice to meet ya"; in a more formal context, such as an academic gathering, this statement might become, "It is a pleasure to meet you." Further discussion of language cue systems can be found in Chapter 5.

Because language is so critical as an underlying process for success in literacy, students who are linguistically diverse require special attention. We discuss this topic in more depth in Chapter 3.

Literacy Is a Cognitive Process

Cognition refers to the nature of knowing, or the ways of organizing and understanding our experiences. The system of cognitive structures that represents knowledge about events, objects, and relationships in the world is called a *schema* (pl. *schemata*). The formation of concepts is basic to cognition. The more experience learners have with their environment and the richer their environment, the more concepts they develop. A limited conceptual development affects literacy growth. For instance, even if a reader correctly pronounces the words in a written text, understanding is hindered unless those words represent familiar concepts. Active involvement with their world provides students with

the necessary background for concept development and, ultimately, for literacy development and formation of the schematic cue system. The **schematic cue system** is defined as information from an individual's prior knowledge or personal associations with both the content and the structure of the text. For example, reading about a familiar topic or within a familiar format (for example, narratives) allows readers to use their schematic cue system. Schema theory and cognitive development are crucial to reading comprehension and are discussed in more detail in Chapter 11.

Literacy Is a Psychological or Affective Process

The student's self-concept, attitudes in general, attitudes toward reading and writing, interests, and motivation to read and write affect literacy development. Each of these factors is closely related to the student's experiential background in home, school, and community and the feelings associated with those experiences, which can have long-term impacts. For example, many adults who dislike reading point to some traumatic reading event as the cause (such as round-robin reading, which refers to reading aloud before their peers without previous practice).

Psychological factors are crucial to literacy development. Students must have the desire to learn or improve an area of literacy; unless they experience success, they tend to avoid the literacy situation. This is only human nature; all of us avoid the things we do poorly, or that we associate with negative feelings. On the other hand, success will encourage risk taking—an important step for learners who struggle.

Developing a positive self-concept and attitude is often the most important part of a student's literacy program. This component of literacy is discussed in more detail in Chapters 4 and 5.

Literacy Is a Social/Cultural Process

Learners are influenced by their social culture. For example, the various forms of oral literacy that connect generations of families, such as stories told around the dining table during holidays, provide a basis for using literacy as a tool in learning how to relate to others. Even past social experiences can influence present reading. An adult reader fondly recalls being read to by a parent at bedtime and now carries on that literacy tradition with his or her own child. In addition, the meaning that readers bring to text reflects the knowledge, attitudes, concerns, and social issues of their particular communities or cultures at a particular point in time. This explains how books read several years ago might now be reread with completely different understandings or appreciations.

Language and culture also play a critical role in building social capital (daSilva Iddings & Reyes, 2017; Kibler, Palacios, Simpson-Baird, Bergey, & Yoder, 2016). *Social capital* refers to the connections within and between social networks that allow one to achieve success in the workings of a community or in society. For example, preserving traditional ethnic values while becoming bilingual enables immigrants both to integrate socially and maintain solidarity and often leads to academic success (Song, 2016). Civic literacy is another aspect of literacy as a social process and is the foundation by which a democratic society functions. **Civic literacy** is the knowledge of how to actively participate and initiate change in one's community and in the whole of society.

Probably the most common application of literacy as a social and cultural process occurs through discussion, or dialogue, as it relates to comprehension and learning from text through reading, speaking, and listening. Sharing what has been read obviously requires a social interaction with at least one other person. There is increasing evidence that students who participate in small-group discussions such as literature circles, book clubs, or reader response groups, acquire a deeper understanding of the text, increase

higher-level thinking and problem-solving ability, and improve communication skills (Fredricks, 2012; Peterson, 2016). Communication skills are an important foundation for civic literacy, as they will enable the discussion, agenda setting, debating, and coalition building necessary for democratic participation in a multicultural and global society.

On the other hand, in multicultural classrooms where the conventions for conversation might vary among cultures, misunderstanding can easily occur. Children come to school knowing the rules for communicating used in their home culture. For example, a shoulder shrug that means "I don't know" to the child can be misinterpreted by the teacher as "I don't care." Therefore, it is incumbent on the teacher to become familiar with the cultural values and traditions represented by the students in the classroom.

Literacy Is a Physiological Process

Anticipating a literacy act activates certain language and cognitive processes (nonvisual information). Depending on the specific literacy act, certain physical processes are also activated. For the reading act, the brain must receive printed stimuli (visual information) that normally enter through a visual process. If the reader is blind, the stimuli may enter through a tactile process, as in using braille, or through auditory means, as in listening to a taped reading. Under normal circumstances the reader must be able to focus on the printed stimuli, move the eyes from left to right, make return sweeps, discriminate likenesses and differences, and distinguish figure–ground relationships. In addition to visual acuity, physiological factors include good health, auditory acuity, and neurological functioning. Physiological (including neurological), psychological, and environmental factors are discussed further in Chapter 4.

Literacy Is an Emerging Process

Emergent literacy is a term describing the transformation that occurs when young children, having been exposed to printed material, actively construct for themselves how oral, written, and visual languages work. Viewed from the child's perspective, early literacy learning (the topic of Chapter 6) is as much a social activity as it is a cognitive one. Researchers such as Teale and Sulzby (1989), who have observed children in their homes and communities, provide the basis for the insights found in Figure 1.1. These insights have implications for the early literacy learning environment and strongly imply a need to connect reading and writing instruction more closely than has been traditionally done. These important components of effective literacy instruction are discussed in Chapters 6 and 8.

Emergent literacy also supports the view that literacy develops continuously over time when children are helped to explore and interact with written language (Piasta, 2016; Pollard-Durodola, et al., 2011). Children develop from what many refer to as **emergent readers**—readers who engage in pretend reading and who are just beginning to understand the nature and meaning of print—to **early readers**—readers who are learning strategies for word recognition and comprehension; to **proficient readers**—who demonstrate skills, strategies, and reading achievement appropriate to their age and grade level; and finally to **fluent readers**—those who read comfortably with both accuracy and comprehension at levels beyond normal expectations. To further specify, emergent readers are beginning to understand letter–sound relationships for consonants and the use of context clues as an aid to word identification. Early readers understand letter–sound relationships, including vowels; recognize common rimes (for example, *–an*, *–ake*); are able to segment multisyllabic words; and use context clues. Proficient readers understand structural clues in words, such as prefixes and suffixes along with Greek and Latin roots, and can combine the use of context to determine both pronunciation and meaning of words.

Figure 1.1 Insights with Implications for the Early Literacy Learning Environment

1. Literacy begins at birth as children encounter print in their environment (for example, alphabet books, being read to, labels, signs, logos, computer screens, tablet displays). Experimentation with writing begins as scribbles.
2. Children view literacy as a functional activity. Their experiences show literacy events as ways to get things done (such as reading a recipe to bake cookies, writing a grocery list, paying bills online, viewing a city map to find a particular street).
3. Aspects of literacy development occur simultaneously in young children and in relationship to oral language development. As reading and viewing experiences influence oral language, writing and drawing experiences influence reading. Similarly, developing reading ability influences writing. Thus, each of these areas provides support for the development of the others.
4. Children learn through active involvement, constructing for themselves an understanding of written language. Through a process of trial and error, of forming and testing hypotheses about the symbols used in written language and the sounds used in oral language, children learn how written language works. Their emerging knowledge is revealed by their attempts at spelling.

Approaches to Literacy Instruction

As knowledge about the ways in which humans learn has increased along with knowledge about the emergence and development of literacy, essentially three approaches to literacy instruction have evolved—top-down, bottom-up, and balanced. Each approach choice is influenced by one's beliefs about literacy instruction. For example, proponents of a **top-down approach** believe that students should be exposed to a form of literacy instruction more like the process of learning to talk, in which experimentation and approximation are accepted and encouraged. Learning activities are based on students' interests and needs and are placed in meaningful contexts. Students are encouraged to integrate new information with what they have already learned. Fragmenting and fractionalizing areas of literacy learning are avoided, so not only are reading, writing, listening, speaking, viewing, and visually representing integrated *within* language arts instruction, they are often integrated *across* the curriculum. In other words, learning is not subdivided into artificial subject-area time periods but is often organized around themes. Such classrooms generally encourage students to take an active part in their own learning with much cooperation and collaboration among students and teachers. Evaluation focuses on what learners *can* do, not on what they *cannot* do.

Proponents of a **bottom-up approach** focus on the products of reading and writing. They believe there are important subskills related to reading and writing that students must learn before becoming adept in the area of literacy (for example, recognizing long and short vowel sounds, stating main ideas, drawing conclusions, comparing and contrasting, identifying pronouns, writing adverbial clauses, using guide words). They emphasize that learning the code for written language is a key subskill in learning to read. Teaching subskills and then assessing student mastery of subskills are common activities found in such programs as well as a set of basal reading materials. Advocates of a bottom-up approach believe that without specific and direct subskills instruction, many students may not become proficient readers.

Many educators find something of value in both these approaches and talk about balance in reading instruction. Blair-Larsen and Williams (1999) defined a **balanced approach** as "a decision-making approach through which a teacher makes thoughtful decisions each day about the best way to help each child become a better reader and writer" (p. 13). But a balanced approach is not just a blending of the two previous approaches. Rather, a teacher who uses a balanced reading approach would appropriately emphasize different aspects of literacy instruction at different times. In other words, the teacher decides when to focus on skills, strategies, materials, or social or emotional support learners might need. Skills instruction provided within meaningful contexts according to students' needs would characterize a balanced approach.

With the existence of these differing approaches, it is clear there is no one best way to develop literacy. For teachers to be able to meet the literacy learning needs of all students, we must continuously seek greater knowledge about literacy development. Recent insights from research on literacy development are readily shared in the form of scholarly works, conference presentations, and reports available online. This knowledge base has led to the use of the term **best practices** in literacy instruction. Figure 1.2 lists 10 research-based practices that are descriptive of the methods and techniques discussed throughout this work.

One of our goals for this text is to help you better match learners with strategies. We attempt to do this by providing a wide variety of strategy options, as well as how the arts might be integrated within literacy instruction (see Chapter 7). (Also, inside the front and back covers of this text, strategies are listed by category.) We also need to regularly reexamine our personal beliefs and knowledge about literacy instruction. Through continued professional reading and teaching experience, belief systems and knowledge about learning change; as belief systems change and knowledge increases, instruction will change accordingly. These changes are never easy, and they take time.

We encourage you to examine the professional literature and formulate your own beliefs about literacy instruction so that you can better evaluate suggestions in this and

Figure 1.2 Ten Best Practices for Literacy Instruction

1. Teach reading for authentic meaning-making literacy experiences: for pleasure, to be informed, and to perform a task.
2. Use high-quality literature.
3. Integrate a comprehensive word study–phonics program into reading/writing instruction.
4. Use multiple texts that link and expand concepts.
5. Balance teacher- and student-led discussions.
6. Build a whole class community that emphasizes important concepts and builds background knowledge.
7. Work with students in small groups while other students read and write about what they have read.
8. Give students plenty of time to read in class.
9. Give students direct instruction in decoding and comprehension strategies that promote independent reading. Balance direct instruction, guided instruction, and independent learning.
10. Use a variety of assessment techniques to inform instruction.

Source: Gambrell and Mazzoni (1999, p. 14).

other texts, in published reading programs, and in federal regulations and legislative mandates. Your beliefs will help you make decisions about what to teach and how best to teach. Don't be afraid to change your beliefs or your instructional practices as you read more and gain experience working with students. Practice informs theory, and a continuous cycle of interaction between practice and theory begins. Every teaching experience helps us construct knowledge about teaching and learning.

Two Major Goals of an Effective Literacy Program

When planning a literacy program, a teacher is responsible for addressing long-term goals for student literacy achievement. These goals generally fall into two categories:

1. Academic literacy
2. Recreational literacy

Academic Literacy

Academic literacy consists of two major types of literacy: content-area literacy and disciplinary literacy. **Content-area literacy** focuses on the skills students need to learn subject matter. The skills and strategies for learning from textbooks and other forms of scholarly or informational oral, written, or visual language are generalized, meaning they can be applied to any of the content areas. Rosenblatt (1991, as cited in Harris & Hodges, 1995) referred to this type of literacy as **efferent**, meaning "the attention is focused on abstracting out, analyzing, and structuring what is to be retained after the reading, as, e.g., information, logical argument, or instructions for action" (p. 69). Some teacher objectives for content-area literacy might include (1) increasing proficiency in strategies for comprehending what one reads; (2) expanding sight vocabulary and improving ability to decode words; and (3) instructing to locate and organize information and to understand the special and technical vocabularies of the various content subjects.

Disciplinary literacy focuses on the unique ways reading and writing are used by the experts in a specific discipline such as science, social studies, mathematics, or literature (Shanahan & Shanahan, 2012). As defined by McConachie and Petrosky (2010), disciplinary literacy "involves the use of reading, reasoning, investigating, speaking, and writing required to learn and form complex content knowledge appropriate to a particular discipline" (p. 16). For example, "historians study past events through an examination of primary documents and secondary sources; whereas scientists analyze, especially, exacting experimental and observational evidence and logic. Mathematicians focus on the implications of a set of axioms or self-evident truths or givens; whereas literature explores fictional or imaginational representations of human relations or development. These foundational differences in the disciplines require differences in texts and language and therefore differences in approaches to reading and writing" (Shanahan & Shanahan, 2012, p.12). Teacher goals for disciplinary literacy include providing students with authentic opportunities to think critically, use inquiry and academic language, work collaboratively and learn by doing (Chauvin & Theodore, 2015). (See Chapter 13 for more on disciplinary literacy.)

Both types of literacy are necessary to help the 21st-century student become prepared for career or college, as clearly seen in the **Common Core State Standards (CCSS)**

that were developed using former state standards, research results, and ideas from scholars, departments of education, professional organizations, K–12 and college educators, parents, and students (Common Core State Standards Initiative, n.d.). We present useful strategies for academic literacy in Chapter 13.

The intent of the CCSS is to provide consistent standards nationwide indicating appropriate benchmarks for all students regardless of where they live. Additionally,

> the CCSS convey the disciplinary literacy principle that each discipline has a specific approach to literacy knowing and learning. They imply that content area teachers in secondary grades are best suited to teach reading in their respective disciplines because of their knowledge of the content and implicit knowledge of the structure and language of their discipline (Fang & Schleppegrell, 2008). For example, history teachers are best positioned to teach students how to read and write about history, just as English teachers are best suited to teach students how to read literature and write literary analyses. (Zygouris-Coe, 2012, p. 38)

While we understand that not all states adopted the CCSS, we also know that all states have specified educational standards to guide teachers on what to teach. These educational standards stress using assessment data to drive instructional decisions, but they only provide guidance for what is to be taught, not how teachers should teach, and they are not prescriptions for particular approaches. The means teachers' choice to achieve the CCSS, or any state standards, will still reflect their individual philosophies about literacy instruction, and the way teachers combine theory and practice will determine the effectiveness of the literacy program. The teacher is the key to the success of any instructional program.

Effective teachers keep abreast of new developments in literacy instruction and maintain access to professional organizations through their publications and conference attendance. For example, the International Literacy Association (ILA) is devoted to furthering understanding of literacy development and assists all educators through their publications (*The Reading Teacher, Journal of Adolescent and Adult Literacy*, and *Reading Research Quarterly)*, regional and national meetings, and their online resources. See the Recommended Websites at the end of this chapter.

Recreational Literacy

Recreational literacy deals primarily with affective dimensions: fostering positive interests, attitudes, and habits concerning the areas of the language arts—reading, writing, speaking, listening, viewing, and visually representing. If teachers and others fail to encourage the desire for literate behavior in children and young adults, specifically reading, many students will become **aliterates**: people who can read but choose not to. Too often the learning environment works against instilling a love of reading or, at the very least, an appreciation for its value in a democratic and global society. Building positive attitudes toward reading and writing (recreational literacy) and developing the skills necessary for obtaining information and engaging in the reading and writing practices that are unique to a discipline such as science, social studies, mathematics, or literature (academic literacy) are both critical for developing an informed citizenry.

Learners who engage in recreational reading are also engaging in *aesthetic reading* (Rosenblatt, 1978). This type of reading focuses attention on the emotional and psychological dimension of literacy. According to Rosenblatt (1978, as cited in Harris & Hodges, 1995), **aesthetic reading** is "what is being lived through, the idea and feelings being evoked during the [literacy] transaction" (p. 5). As Goodman and Marek (1996) state:

> Schools have already produced too many people who can read but do not choose to do so . . . . Teachers must patiently help . . . students to find reading materials that give them personal satisfaction and pleasure. They must help them realize that reading is something they

> can do when traveling, when waiting, when there is some time available for a quiet, personal activity, or when there is nothing interesting on television or nobody to talk to. Students must reach the point where they choose to read when there is nobody to make them do it before educators can really claim success. (p. 20)

Some example teacher objectives for recreational reading include (1) providing students with the opportunity to practice reading in a relaxed atmosphere, (2) sharing good literature with students, and (3) making provisions for students to share books with one another. To achieve these objectives, teachers will want to provide their students with quality children's literature that includes a variety of ethnic groups (including African, Asian Pacific, Latin, Mexican, and Native American). "Multicultural affirmations are especially important for students from divergent cultures" (Hoover & Fabian, 2000, p. 475). Students achieve better when given materials and themes relevant to their cultures (Freire, 1992). Because classrooms are so diverse, all students can then learn about other cultures in addition to feeling pride in their own culture, and gain an understanding of our American society, as well as a sense of what constitutes social justice (Kim, 2015). For teachers working in today's increasingly diverse classrooms, providing and sharing children's literature that reflects their students' own cultures is imperative for effective communication (Sciurba, 2014), as well as reading about story characters who are marginalized, such as children with physical disabilities, those who are homeless, LGBTQ youth, and those with nontraditional families (Dinkins & Englert, 2015; Logan, Watson, Hood, & Lasswell, 2016; Moller, 2016; Wilkins, Howe, Seiloffie, Rowan, & Lilly, 2016).

The two goals of an effective literacy program should be maintained and balanced at least throughout the elementary school years, although emphasis may change according to the literacy needs of the students. Both goals are equally important for students' literacy growth at all levels of education because when readers engage in both aesthetic and efferent reading, they develop a fuller understanding of the disciplines they study.

In the remainder of this text we focus on helping teachers expand their repertoires of methods, materials, and techniques for supporting students as literacy learners and as active, effective citizens living in a democracy; analyzing their specific strengths and needs; and providing appropriate instruction. A process to help teachers plan literacy instruction that meets their students' needs is addressed in a discussion of the analytic process, analytic teaching, and the analytic teacher (Chapter 2). Chapter topics range from gathering and interpreting relevant information and differentiating instruction (Chapters 2 through 5) to the implementation of effective instructional techniques for the major domains of literacy learning (Chapters 6 through 14). Many useful assessment and instructional procedures for early literacy development, supporting literacy through the arts, integrating reading and writing, word recognition, meaning vocabulary, comprehension, strategic reading, and study skills are provided. Ideas and examples of literacy instructional strategies for English language learner (ELLs) and learners with special needs are also integrated throughout the domain chapters.

Summary

To provide effective literacy instruction for the wide range of abilities and talents found in today's diverse classrooms, teachers must be able to recognize that their students' literacy behaviors signal how best to assist and support their learning efforts. In this chapter we reviewed the processes of literacy and three approaches to literacy instruction, and discussed the importance of teachers developing a personal philosophy about literacy instruction. We also identified two major goals of an effective literacy instructional program. Teachers can achieve these goals in a variety of ways, depending on their individual beliefs about literacy.

Recommended Websites

The Theory of Multiple Intelligences

Explore these sites for introductory information and current research on the multiple intelligences as well as self-assessment surveys.

Effective Teachers of Literacy: Knowledge, Beliefs, and Practices

Access to an article reporting on the results of research into the characteristics of teachers who effectively teach literacy to elementary school.

Common Core State Standards Initiative—Official Site

This site provides the rationale for the CCSS, as well as the standards themselves.

Schools Moving Up—WestEd

This research, development, and service agency works to promote education excellence and improve learning. WestEd offers free webinars to assist teachers in implementing initiatives such as the Common Core State Standards. Most of the webinars are archived so attendance is not a requirement to access the content and resources provided in the webinars.

ILA's Standards for Reading Professionals—Online Version

ILA's revised 2017 standards for reading professionals can be found on this site.

How to Choose the Best Multicultural Books, and Carol Hurst's Children's Literature Site

These sites contain a wealth of information about children's literature and ways to use the recommended books in the classroom.

Read Across America—Official Site

To encourage recreational reading, participate in this annual event for promoting literacy development. Several valuable book lists are also provided, as well as other ideas for making reading fun.

International Literacy Association—Official Site

This is the website for the world's leading organization of literacy professionals.

Because Internet links often go offline, the best way to locate up-to-date resources and working links for topics of interest is to conduct a search using your favorite search engine and key words and phrases for the desired information. For this chapter, you can find relevant sites using *reading process, emergent literacy, multiple intelligences, academic literacy*, *disciplinary literacy*, *teacher effectiveness*, and *theoretical orientation to reading* to name a few.

chapter two

The Analytic Process

Preparation for Differentiating Instruction and Data-Driven Decision-Making

learning objectives

After you have read this chapter, you should be able to:

2.1 Define, describe, and justify the analytic process, and then contrast it with assumptive teaching.

2.2 Discuss the similarity between the analytic process and the response to intervention (RTI) framework.

2.3 Describe analytic teaching and its relationship to differentiated instruction.

2.4 Explain the importance of ongoing teacher observation as a function of the analytic teacher.

2.5 Compare and contrast the teaching models of nondirective and direct instruction.

2.6 Differentiate teacher objectives and correlated student learning objectives.

2.7 Discuss the difference between didactic and discovery teaching.

2.8 Contrast problem-solving questions and facilitating questions.

vocabulary alert

The vocabulary listed here is not meant to overwhelm, but is comprehensive of the concepts found within the chapter. For this list, and all the others that accompany each chapter, you might find the following steps helpful. First, review the entire list. If you see words that are mostly new, you know you will need to spend more time with the chapter. If you find the list contains many familiar concepts, you will need to spend less time. Know that your instructor has access to a quiz on these terms to correspond to each chapter. You might wish to request to take these quizzes before or after you study each chapter to gauge your understanding of these important chapter concepts. Also, be aware that these terms can be found in the glossary of this text, as well as defined within the context of the chapter where the word appears in boldface type.

action research	assumptive teaching	diagnosis
analytic process	deductive teaching	didactic teaching
analytic teaching	design thinking	differentiated instruction

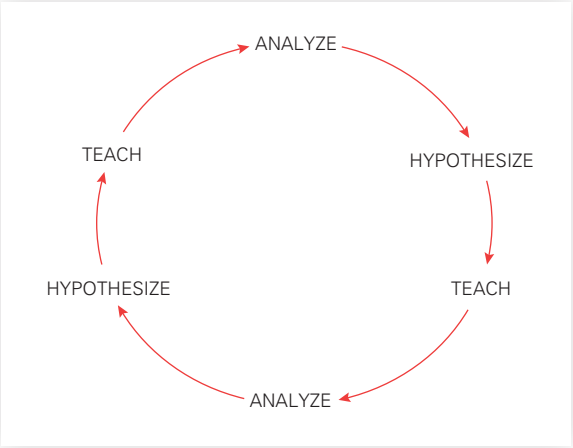
direct instruction
discovery teaching
evaluation activity
facilitating questions
guided practice
independent practice
inductive teaching
learning profile
nondirective teaching
paradigm
problem-solving questions
readiness
reflective thinking
response to intervention (RTI)
structured practice
teachable units
teaching hypothesis
tiered activities
transactive
transfer of training

Today's teachers are under enormous pressure to ensure that their students achieve high academic standards whether these students are native speakers of English or have other special needs. Federal and state mandates, including the Common Core State Standards (CCSS) Initiative (National Governors Association Center for Best Practices, Council of Chief State School Officers, 2010), combine to place a heavy layer of accountability on teachers, especially in areas of literacy and mathematics.

Today's educators, however, also realize there is no social justice in denying the uniqueness of learners. If all students are to reach their full potential, their unique needs must be addressed within a learning environment that engages them in meaningful activities and at their individual levels of ability. Rather than rely on test instruments, even nonstandardized ones such as informal reading inventories, teachers should initially gain insights into students' literacy abilities by observing their individual competence in areas such as oral reading, story retellings, written summaries, answers to key questions, and background knowledge. Thus, teachers must become more analytical, better observers of their students, and more knowledgeable about literacy learning and various methods for literacy instruction. To meet these demands, classroom teachers in any curricular area can use the **analytic process**, defined here as a systematic way to help teachers observe and assess aspects of literacy learning in their students, identify areas of strength and need for individual students, and provide instruction for specific literacy domains. Figure 2.1 presents a graphic representation of the analytic process cycle.

The analytic process we describe in this chapter reinforces the principle of using assessment data to drive instructional decision-making, which is also the rationale behind the CCSS.

Figure 2.1 The Analytic Process



Additionally, the **Response to Intervention (RTI)** initiative (U.S. Department of Education, 2006) further validates the analytic process as RTI strives to identify struggling readers early enough to enable them to achieve to the point that they do not need special education services. The analytic process also mirrors a mind-set similar to **design thinking**, which is a solution-focused approach to solving problems (Lahey, 2017).

The key elements of design thinking are to understand what the student needs; to seek to meet those needs by gathering, organizing, and making sense of data; and to try another idea when one idea or hypothesis does not work out. These elements fit well within the analytic process paradigm. Teachers who apply the analytic process will be better able to provide responsive reading instruction for all their students.

Justification for The Analytic Process

Problems Associated with Assumptive Teaching

Sometimes teachers make inappropriate assumptions about the literacy status of their pupils. Herber (1970) called the resulting instruction **assumptive teaching.** Although teachers make many unfortunate specific assumptions, most fall into two general categories.

First, teachers often assume their pupils need to learn something when, in fact, they already have learned it. When this assumption is made, those pupils are in a minimal-growth instructional setting. The teacher may spend a great deal of time and energy teaching something that is already known to those students. This situation leads to student boredom, inattentiveness, and disruptive behavior. Second, teachers may assume their pupils have learned something when, in fact, they have not. Making this assumption regularly leads to learning deficits causing students to slip into a no-growth instructional setting. Similarly, teaching a lesson well does not guarantee that pupils learn; student learning must be confirmed. Figure 2.2 lists common assumptions that teachers should try to avoid.

Assuming too much about students can lead to a mismatch between the learner and the instructional program. For example, if a sixth-grade teacher gives everyone in the class a sixth-grade text at the beginning of the school year, the teacher has assumed that all the students are reading at the level of the text and will profit from instruction at this level. This is a dangerous assumption to make. Teachers must verify that each student in the class can respond appropriately to assigned reading materials.

Similarly, faulty assumptions about individual students can lead to inappropriate teaching. Consider the following example: A fifth-grade teacher accurately determines each student's *instructional reading level* (grade level of material that is challenging but not frustrating for the student to read successfully with normal classroom instruction). Two boys are reading at a third-grade level, according to test results. The teacher gives both boys appropriate reading materials, assuming that instruction can proceed in a manner similar to that of a typical basal reading program, in this case, guided reading followed by reviewing the stories and workbook exercises at the third-grade level. This teacher has done well in finding each boy's proper instructional reading level but has failed to pursue the *reasons* why each boy is unsuccessful with age-appropriate material. One boy may

Figure 2.2 Twenty Common Assumptions Classroom Teachers Should Avoid

1. Assuming all students in a particular grade read at that grade level
2. Assuming a child's test score reflects his or her instructional level
3. Assuming difficulty with word analysis will correct itself by grade 4 or 5
4. Assuming the previous teacher spent time developing independent reading habits
5. Assuming a particular child is ready for a particular skill lesson
6. Assuming grades from one teacher mean the same as grades from another teacher
7. Assuming whole-group instruction is the best way to provide literacy instruction
8. Assuming all instructional strategies are effective for all students
9. Assuming all teachers use a variety of materials and methods for literacy instruction
10. Assuming children will learn a new skill without direct instruction
11. Assuming a published reading program provides a complete literacy program
12. Assuming students who struggle with reading can use material on their frustration level
13. Assuming students who master reading skills are competent readers
14. Assuming children who read well choose to read often
15. Assuming all instructional materials are equally effective and appropriate
16. Assuming children's literacy abilities are maintained, unchanged, over school breaks
17. Assuming working relationships between teacher and pupils do not influence literacy growth
18. Assuming all children learn in the same way
19. Assuming a class average that meets or exceeds the norm on a standardized test means no one in that class has reading deficiencies
20. Assuming teachers never make unfortunate assumptions

be reading at a third-grade level because he is having difficulty with word meanings and comprehension, whereas the other boy may be having difficulty recognizing the printed form of the words. Each boy needs supplementary instruction designed for his particular reading needs. After the teacher provides appropriate-level materials, deeper analyses of strengths and weaknesses within that level are essential to avoid inappropriate teaching assumptions.

Assumptions have features similar to hypotheses. Both terms connote a hunch or a notion about something. They differ in that the word *assumption* implies that the hunch is accepted or taken for granted, whereas the word *hypothesis* always implies tentativeness and the need for verification, after which acceptance or rejection occurs.

The Analytic Process Paradigm and the RTI Framework

A loose and unstructured literacy instructional program, based on unverified assumptions, often perpetuates literacy problems in the classroom. Employing the analytic process alleviates many of the unfortunate results of faulty teacher assumptions. The reason is that the analytic process follows a **paradigm**, or pattern. The teacher (1) analyzes literacy behaviors, (2) forms teaching hypotheses, (3) teaches, and (4) reexamines literacy behaviors (refer to Figure 2.1). This paradigm can be expanded to allow for necessary

specificity in terms of individual strengths and difficulties and also to allow for *teacher* self-assessment. The process is simple in that it parallels a natural instructional progression. As you will see later in this chapter, however, this process can become quite intricate when implemented, and it requires a knowledgeable teacher—one who knows what to look for and how to interpret behaviors observed.

Much like response to intervention, which is a multitiered system of supports (MTSS), the analytic process uses data in a systematic way to indicate an instructional pathway that might best benefit students. Response to intervention is also a data-driven approach that integrates assessment and intervention using a three-tiered prevention system. Tier I is the primary level of prevention, which means the teacher provides high-quality instruction that meets the needs of most students in the classroom so academic difficulties and behavior problems are prevented. Tier II is the second level of prevention for which the teacher provides evidence-based interventions for students who are demonstrating deficiencies but who are not more than two years below grade level. Tier II is also called the *strategic academic level* because the intervention consists of general education as in Tier I but adds personalized interventions for those students who need more. Tier III is the tertiary level of prevention for which targeted interventions are required, perhaps provided by a specialist in addition to the teacher, for students who are performing more than two years below grade level. Tier III is also called the *intensive academic level* because intervention is targeted to the needs of an individual student. Another key component of RTI is ongoing progress monitoring, which is analogous to the analytic process cycle of analyze, hypothesize, teach, analyze.

Analytic Teaching: Teaching for Democracy and Social Justice

Analytic teaching supports all literacy learners by recognizing their unique strengths, interests, and competencies, and by meeting their specific instructional needs. Analytic teaching is rooted in assessment (not necessarily testing) and offers ways of observing and determining students' literacy development that respect students as naturally creative persons who possess a broad range of human aptitudes and who learn in diverse ways. Irrespective of one's beliefs about literacy instruction, analytic teaching begins with a teacher's firm convictions that:

1. All students can learn and have the capabilities to become successful readers and writers.
2. Diversity has value within the classroom community because it prepares students to function in a society where people must work and learn together across culture, ethnicity, language ability, and gender.
3. All students deserve opportunities to develop their unique competencies and strengths.
4. Students who are afforded varied ways of interrelating new information and concepts with previously acquired background knowledge, or schemata, will have greater opportunities to reach their full potential.

Analytic teaching consists of activities that foster student–teacher communication, student choice, student discovery, student self-expression, and student engagement. Analytic

teaching is democratic teaching; it encourages students to construct meaning from their interactions with print, set goals for achievement, acquire new literacy concepts, enhance their problem-solving abilities using their preferred combinations of aptitudes, and assume some responsibility for evaluating their own achievements and instructional needs.

Analytic teaching is also highly consistent with a focus on differentiated instruction. **Differentiated instruction** is designed to engage students at all grade levels through their different learning modalities and interests by using varied rates of instruction and/or varied degrees of complexity (Imbeau & Tomlinson, 2010; Tomlinson, 1999, 2001). Principles like those that guide analytic teaching also guide differentiated instruction:

1. The teacher focuses on the essential concepts, principles, and skills of a subject area.
2. The teacher attends to student differences.
3. Assessment and instruction are inseparable.
4. The teacher modifies content, process, products, and the learning environment.
5. All students participate in respectful work.
6. The teacher and students collaborate in learning.
7. The teacher balances group and individual norms.
8. The teacher and students work together flexibly.

The analytic process is the first step toward differentiating instruction because, being rooted in assessment, it will reveal the readiness or skill levels, the interests, and the learning preferences of the students. This information is critical for the teacher who wishes to differentiate, or "personalize," instruction (Tomlinson, 1999, 2001). Refer to Table 2.1 for an instructional planning approach to differentiating instruction.

By expanding their instructional repertoire to include ways to give learners more choices in learning activities, teachers can ensure increased student engagement and motivation (Toshalis & Nakkula, 2012). (See also the websites on personalized learning at the end of this chapter.) Armstrong (2000, p. 41) provides characteristics of instructional strategies that link to the learning preferences described in Table 2.1.

- Listen to it, talk, read, or write about it (narrational).
- Draw, sketch, color, or visualize it (aesthetic).
- Dance, act it out, build a model of it, or create some other physical activity related to it (hands-on).
- Create a song or chant about it, find music that illustrates it, or put on background music while learning it (aesthetic).
- Relate it to a personal feeling or inner experience, or reflect on it (foundational/existential).
- Conceptualize it, quantify it, or think critically about it (logical, quantitative/numerical).
- Teach it, work on it with another person or group of people (social).
- Connect it to living things and natural phenomena (aesthetic).

The best advice for achieving differentiated instruction is start small to build confidence.

Table 2.1 An Instructional Planning Approach to Differentiating Instruction

Learning Preferences	Description	Example Literacy Activities
Narrational	For students who enjoy learning through stories, in either linguistic or film form	"Tell the story of what you saw (or heard)." "Work with a partner to create a story for the pictures you drew."
Quantitative/ Numerical	For students motivated by numbers and their patterns and operations	Creation of triangle poems or some of the "formula" poems (e.g., haiku)
Logical	For deductive thinkers	Syllogisms (e.g., teacher covers the *th* in the word *that* and points to the *at*, and says, "If this word is /at/, and if this word starts like the *t-h* in /the/, then the word is /th/ + /at/, or /that/.")
Foundational/ Existential	For learners attracted to the "larger" questions	"Why is reading important?" "How can it affect your life?" "How does reading make you feel?"
Aesthetic	For learners drawn to works of art or features in nature that represent symmetry, balance, and harmony	"Describe the shapes of the letters/words. How are they alike/different?" "Choose some music that could accompany this story."
Hands-on	For students who learn when active and fully engaged	Manipulating letter cubes to form words: "How many words can you make out of the word *student?*" "Design a dance that shows the meaning of the word *swarm*."
Social	For learners who function best in a group setting	Participating in literature circle discussions with a variety of job roles over time

The Analytic Teacher

Analytic teachers are committed to teaching for democracy; that is, they work hard to ensure that they and their students work together as a community of learners, sharing their individual talents and special ways of solving problems. They help students think critically, question, consider a variety of perspectives, and gain multicultural understandings. Analytic teachers are good listeners; they listen to their students' ideas and encourage them to share opinions. They often use whole-class meetings in which students and teacher face one another in a seated circle to foster group communication and facilitate student–teacher communication (Glasser, 1969, 1975).

Analytic teachers are also reflective practitioners who constantly examine their own teaching and learning. It is well documented that **reflective thinking** (questioning and trying to solve educational problems in a thoughtful and deliberate manner) helps teachers make quality decisions about students and their instruction. For example, analytic teachers determine what their students already know about reading and writing, and they figure out what concepts and cognitive tasks are causing confusion for students.

Analytic teachers are most concerned with teaching all their students effectively—not with covering a specified amount of reading material or teaching a predetermined number of writing lessons. Thus, analytic teachers are decision makers—teachers who adapt programs to their students' needs. They engage in **action research,** or systematic inquiry, into their teaching practices to gather information about how their methods affect student learning (Mills, 2011). Using the analytic process is one way to engage in action research: analyze (or assess), hypothesize, teach, and analyze. Analytic teachers

constantly observe their students to determine how their students learn best, to recognize what their students are ready to learn next, and to watch for the emergence of reading and writing patterns and achievements. Observation also helps the teacher assemble instructional materials. In fact, materials for literacy instruction (basal readers, developmentally appropriate literature, content-area texts, pictures, art and creative bookmaking supplies, and magazines) are more wisely assembled *after* students' literacy instructional strengths, needs, and interests are determined (see Chapter 5 for more on observation).

Analytic teachers make notes about what they observe and often develop abbreviated case studies for students who are struggling. For example, one seventh-grade teacher made the following notes:

> Eric remains a struggling reader in second semester, seventh grade. The QRI informal reading inventory estimated his reading level to be several levels below seventh grade. During the administration of the inventory, Eric looked at titles and predicted the content of the upcoming passage that he would read. Eric was quite talkative and cooperative throughout the inventory. His reading was fluent and generally true to the text, with a word accuracy rate of about 89 percent. However, it was difficult making sense of his retelling of the passages. Although his oral reading was reasonably accurate, his comprehension was minimal. Eric's notion of reading seems focused only on fluency. Because of his apparent ease and confidence with oral reading skills, he believes he is a good reader and sees no need for strategy instruction to help with his comprehension.

The questions in Figure 2.3 reflect some that this teacher might ask. In addition, the teacher might ask:

> What additional information do I need to meet Eric's needs?
>
> How might I differentiate instruction for Eric?

Figure 2.3 Questions for Professional Decision-Making

A teacher might ask the following questions during the course of one school day while reflecting on various students:

1. Is this student reading as well as he can? If not, why? What reading or writing instructional technique might help? Will an individual conference help? Will peer tutoring help? What are this student's unique talents and aptitudes? How can I build on this student's personal interests and particular talents and strengths to enhance his reading and writing abilities?
2. Should this student remain in the reading group that is exploring poetry? If so, what additional instructional techniques may enable her to grasp the ideas and concepts represented (for example, artwork, writing, peer discussions, dramatization, composing a melody, researching the lives of some poets)?
3. What quality literature selections could I use to introduce our unit on immigration?
4. How can I plan literacy activities that will stimulate my passive learners?
5. What are effective literacy activities for English language learners that will encourage their use of oral language?
6. What lesson modifications can I make to help my students with special needs?
7. How can I motivate my students to become avid, wide readers and/or enthusiastic writers?
8. How can I structure the classroom environment to provide a blend of learning experiences that promote all students' growth in reading and writing?

Such questions will help teachers determine appropriate assessments that will inform instructional planning for their students. To differentiate instruction for their students, teachers must be aware of the components of reading, become skilled at being aware of their students' needs, and learn how to be more and more flexible with respect to their use of time, space, and resources. All the remaining chapters in this text serve to assist in achieving these outcomes.

Analytic teachers often work collegially to enhance their teaching skills. Through capacity-building activities such as professional learning communities or networks, peer coaching and lesson study, analytic teachers grow professionally (Basileo, 2016; Bates, Huber, & McClure, 2016; Bruce, Esmonde, Ross, Dookie, & Beatty, 2010; Hirsch, 2016; Vescio, Ross & Adams, 2008; Weiner & Jerome, 2016). These collegial activities help teachers increase not only their subject-matter knowledge and their knowledge of instruction, but also their ability to observe students—an ability crucial to analytic teaching.

Analyzing Components of Literacy Learning to Assist Differentiated Instruction

Literacy learning is recognized as a process that is complex, dynamic, and **transactive** (learners actively construct meaning as they interact with print); to represent its components in isolation and in static form is a distortion of the process itself. Some distortion is acceptable, however, if it helps teachers attain the level of specificity needed for direct and/or differentiated instruction. Additionally, teachers must examine the kinds of materials students read and the nature of the methods, materials, and tasks they use in the classroom, as well as the social and cultural environment of the classroom (see Appendix A for an instructional environment self-assessment survey). Such analysis can lead to changes in a teacher's methods, materials, tasks, and approach.

Levels of Analysis and Correlative Diagnostic Questions

Following observation of literacy behaviors, three levels of analysis help answer the question, "What strategies and lessons should I plan to help my students?" Each level has a correlative diagnostic question, and some questions have important related subquestions. A summary of the levels of analysis and correlative diagnostic questions can be seen in Figure 2.4, followed by a detailed description of each level. These questions and levels of analysis can also be used as a record-keeping tool or diagnostic tool for monitoring student progress (Appendix B). Because literacy learning is complex, teachers should always approach analysis of literacy behaviors with the knowledge that the resulting hypotheses may be imprecise or only partially correct. During the teaching phase, hypotheses and instructional practices can be verified, modified, and further adapted to the needs of the students. This again points out the integrated nature of instruction and assessment. Ongoing assessments provide the data that drive instructional decision-making.

Level 1: Determining Lack of Success in Literacy. At the initial level of analysis, only one diagnostic question needs to be answered:

- Is the learner experiencing a lack of success in literacy?[1]

A teacher may find the answer to this question in several ways. To see how well the learner can read, the teacher listens to the student read. Informal reading inventories

[1]Note that for this question, as with all the diagnostic questions that follow, a follow-up question needs to be asked: "Under what conditions or in what situations?"

Figure 2.4 Summary of Levels of Analysis and Correlative Diagnostic Questions

Level 1: Determining Lack of Success in Literacy

- Is the learner experiencing a lack of success in literacy?

Under what conditions or in what situations?

(*Note:* This question should be asked after *every* diagnostic question that follows.)

Level 2: Determining the Domain(s) in Which Difficulty Occurs

- Does the learner demonstrate underdeveloped oral or written language ability?
- Does the learner have difficulty with word recognition?
- Does the learner have difficulty with comprehension of narrative text?
- Does the learner have difficulty with comprehension of expository text or with study skills?

Level 3: Determining the Area(s) within the Domain(s)

Oral and Written Language Ability

- Does the learner demonstrate underdeveloped oral (i.e., speaking or listening) and written language ability, to include spelling?

Word Recognition

- Does the learner have a limited sight vocabulary and a word recognition strategy?
- Does the learner have difficulty with word analysis (i.e., visual analysis and decoding)?
- Can the learner reassemble (or blend) word parts that have been visually or auditorily analyzed?
- Does the learner have knowledge of word morphology (structural analysis)?
- Does the learner have difficulty using context clues?
- Can the learner use a dictionary to assist word recognition?

Comprehension and Strategic Reading for Narrative Text

- Does the learner have a limited meaning vocabulary?
- Does the learner have difficulty with thinking or problem-solving skills associated with comprehension of narrative text, such as identifying story features, predicting events, or evaluating a character's actions?
- Does the learner have difficulty recognizing his or her own inability to understand what was read?
- Does this apparent comprehension problem result from difficulty with word recognition?
- Does the learner's apparent comprehension problem result from difficulty in strategic reading for expository text or study skills?

Comprehension and Strategic Reading for Expository Text and Study Skills

- Does the learner have difficulty with content-specific vocabulary?
- Does the learner have difficulty with content-specific skills, such as reading visual displays, formulas, or other unique symbols?
- Does the learner have difficulty recognizing whether the text is meaningful to him or her?
- Does the learner have difficulty locating information?
- Does the learner have difficulty organizing information?

Physical, Psychological, and Environmental Factors

- Does this learner demonstrate the influence of a physical factor?
- Does this learner demonstrate the influence of a psychological factor?

Figure 2.4 *continued*

- Does this learner demonstrate the influence of an environmental factor?
- Has this learner had opportunities for reading and writing related to his or her needs and interests?
- Does the learner have a negative attitude toward reading/writing?
- Does the learner lack interest in reading/writing?
- If someone asked this learner, "What is reading?" or "What is writing?" would the response be one that would please me?
- Is my curriculum so skills oriented that this learner never has the opportunity to read or write for his or her own purposes?
- Have I examined my own beliefs and attitudes about the way this learner might need to learn?
- Have I explored alternative instructional approaches that might benefit this learner?

and use of running records are common means of assessing reading behaviors (see Chapter 5). As part of compiling a learning profile for each student, teachers are strongly advised to assess (collect information about) their students' literacy abilities using the trade books, textbooks, basal readers, and skill-development books available in the classroom.

Another indication of literacy ability may be the student's scores on a standardized achievement test, usually readily available in the student's cumulative folder. The teacher may notice a discrepancy between a student's reading scores on an achievement test and mathematics achievement test scores. Reading difficulties *may* be indicated if the mathematics scores are higher. Achievement test scores alone may also suggest further analysis if, for example, the scores on the vocabulary and comprehension subtests vary significantly.

A teacher might also look for patterns in a student's achievement records. One pattern could reveal a student whose test results indicate that from the beginning of literacy instruction, the student failed to achieve as rapidly as average intellectual ability would warrant (that is, one year's growth for each year in school). Such a pattern might indicate the influence of a physical, psychological, or environmental factor (see Chapter 4). Aspects of emergent or early literacy might also be examined (see Chapter 6).

Another pattern might indicate the student had a successful beginning, but progress gradually slowed. This second pattern may not be recognized until a student has already experienced difficulty. Teachers must be alert to the proportionate gains that a student makes through the years, as in the following example: Six-year-old Jody makes satisfactory progress through first grade, and her end-of-the-year test shows an average level of achievement. By the end of second grade, Jody's achievement is slightly below average. At that point, Jody's teacher might feel concern about her progress or decide that her score merely reflects the imprecise nature of tests. When the third-grade test reveals that Jody is further below average, however, this teacher should recognize the pattern and decide that Jody needs assistance.

A third pattern could indicate the student had a successful beginning, but progress suddenly dropped. Satisfactory progress followed by a sudden drop may have several causes: an omission of instruction; an emotional factor interfering with the student's learning rate, such as a recent divorce or a death in the family; or something as simple as the student not feeling well on the day of the test. In any case, the teacher should continue with the analytic process to pinpoint possible learning gaps.

Within the RTI framework, the teacher would always ask the Level 1 questions corresponding to the Tier I level of prevention. The remaining levels in the analytic process are useful for both Tier II and Tier III levels of prevention. If the teacher determines at Level 1 that a student is not having success in some aspect of literacy learning, then the teacher will need to move to Level 2 and Level 3 questions.

Level 2: Determining the Domain(s) in Which Difficulty Occurs. Once teachers have identified students displaying difficulty in their literacy development, they must begin to determine where the difficulty lies. Literacy development can be characterized by the following four major domains: *oral and written language ability, word recognition, comprehension of narrative text*, and *comprehension of expository text and study skills* (this last domain is often referred to as "reading to learn," or content-area reading). Four primary diagnostic questions to be answered are:

- Does the learner demonstrate underdeveloped oral and/or written language ability?
- Does the learner have difficulty with word recognition?
- Does the learner have difficulty with comprehension of narrative text?
- Does the learner have difficulty with comprehension of expository text or with study skills?

When the answer to a question in Level 2 is no, analysis in that domain ends. When the answer to a question is yes, that domain is analyzed further to define the difficulty more precisely. If the answer to all the questions in Level 2 is no, the teacher must consider other factors and may require the help of a specialist to meet the student's needs. If the answer to several of the questions is yes, the teacher should consider whether difficulty in one domain is influencing another and, if so, provide instruction in the dominant domain. Physical, psychological, or environmental factors may also be involved (see Chapter 4).

Level 3: Determining the Area(s) within the Domain(s). Experts disagree about dividing the domains into smaller segments. Some label the segments differently, and others resist the separation process even for the purpose of analysis. Thus, neither empirical data nor the consensus of experts directly supports the way the domains will be segmented here for analytical purposes.

Nevertheless, the domains are divided into smaller parts for communication and instructional purposes. From a practical point of view, you should be aware that these areas are discussed at length in the literature, that the category labels can be found in many texts on literacy instruction, and that these smaller **teachable units** are acknowledged and used in many literacy instructional systems today. Even for those with a holistic philosophy, the search for answers as to why a student experiences lack of success with literacy tasks must include consideration of these areas so that appropriate instructional opportunities can be provided.

Oral and written language ability. This component of literacy development lies at its core and is of concern when a student performs very poorly on assessment instruments or when a beginning reader has trouble with simple reading tasks. It is a major focus for students who are English learners; learners whose first language is not English. A correlative diagnostic question to be asked when a student performs so poorly is:

- Does the learner demonstrate underdeveloped oral (that is, speaking and/or listening, or phonemic awareness) and/or written language ability, to include spelling?

Teachers at all levels should ask themselves whether their students have the oral and written language competencies needed for a particular reading or writing task, whether students are native speakers of English or nonnative speakers of English reading in their native language or reading English. As the concept of emergent literacy implies, oral and written language competence develops only in a learning environment that provides students with frequent opportunities to use language and to hear or see language being used in meaningful, communicative contexts. Teachers of English learners (also referred to as English language learners—ELLs, or limited English proficient—LEP) are especially interested in providing appropriate language environments (see Chapter 3).

Word recognition. If a student has difficulty with word recognition, more specific information must be sought by asking the following diagnostic questions:

- Does the learner have a limited sight vocabulary?
- Does the learner lack a word recognition strategy?
- Does the learner have difficulty with word analysis (that is, visual analysis and decoding, or phonics)?
- Can the learner reassemble (or blend) word parts that have been visually or auditorily analyzed?
- Does the learner have knowledge of word morphology (structural analysis)?
- Can the learner use context clues to assist word recognition?
- Is the learner able to use a dictionary to assist word recognition?

Answers to these questions tell the teacher where to begin an instructional focus or the content that needs to be differentiated for certain students. Chapter 9 details these areas of word recognition and provides suggestions for assessment and instruction. The key point to remember here is that any area(s) associated with word recognition can be out of balance for a student. When the imbalance becomes too great, some learners demonstrate word recognition difficulties so severe that they cannot reach the heart of reading—comprehension.

Comprehension and strategic reading for narrative text. When a student demonstrates poor comprehension, carefully consider these diagnostic questions:

- Does the learner have a limited meaning vocabulary?
- Does the learner have difficulty with thinking or problem-solving skills associated with comprehension of narrative text, such as identifying story features, predicting events, or evaluating a character's actions?
- Does the learner have difficulty recognizing his or her own inability to understand what was read?

Answers to these questions help the teacher determine a starting point for differentiating the content of instruction and choosing appropriate instructional strategies.

Some students, especially in the early elementary grades, appear to have trouble with comprehension when the difficulty actually lies in the domain of word recognition. Therefore, when students of any age are experiencing difficulty typically associated with primary-grade students, teachers should ask:

- Does this apparent comprehension problem result from difficulty with word recognition?

Similarly, especially in the upper grades, an apparent comprehension problem may in reality reflect difficulty with strategic reading of expository text and/or study

skills. If the student is experiencing difficulty with content-area material, this question is suggested:

- Does the learner's apparent comprehension problem result from difficulty in strategic reading for expository text and/or study skills?

This and the preceding question should probably be considered transitional questions. They demonstrate how reading comprehension overlaps the other domains discussed. Chapters 10, 11, and 12 provide suggestions for assessment and instruction in the domain of comprehension and strategic reading for narrative text.

Comprehension and strategic reading for expository text and study skills. When students have problems in the domain of strategic reading for expository text and study skills, ask these questions:

- Does the learner have difficulty with content-specific vocabulary?
- Does the learner have difficulty with content-specific skills, such as reading visual displays, formulas, or other unique symbols?
- Does the learner have difficulty recognizing whether the text is meaningful to her or him?
- Does the learner have difficulty locating information?
- Does the learner have difficulty organizing information?

The answers to these questions help the teacher decide what instructional content is needed and choose appropriate instructional strategies. Chapters 10, 13, and 14 provide suggestions for assessment and instruction in the domain of comprehension and strategic reading for expository text and study skills.

Additional factors. Almost any physical, psychological, or environmental influence may impede literacy development. For example, an inadequate background of experience or one divergent from most of the students in the class can seriously affect comprehension, attitude toward reading, and perhaps the acquisition of word recognition strategies. These influences that exist outside the literacy domains (see Chapter 4) must be considered independent entities that may adversely affect *any* area of the school curriculum, not just literacy. These outside influences warrant considerable study and are more appropriately pursued in advanced and specialized coursework typically found at the graduate level.

Correlative diagnostic questions associated with physical, psychological, or environmental factors include:

- Does this learner demonstrate the influence of a physical factor?
- Does this learner demonstrate the influence of a psychological factor?
- Does this learner demonstrate the influence of an environmental factor?
- Has this learner had opportunities for reading and writing related to her or his needs and interests? (In other words, is the learner possibly a "victim" of the curriculum or of poor instruction?)

Disinterest in or poor attitudes toward reading and writing hinder literacy achievement. Teachers must ask questions about their students' attitudes and interests, their own teaching practices, and the curriculum itself, regardless of the literacy domain being addressed:

- Does the learner have a negative attitude toward reading/writing?
- Does the learner lack interest in reading/writing?

- If someone asked my students, "What is reading?" or "What is writing?" would they respond in a way that pleases me?
- Is my curriculum so skills-oriented that students never have the opportunity to read or write for their own purposes? (See Appendix A for an instructional environment survey.)
- Have I examined my own beliefs and attitudes about the way this learner might need to learn?
- Have I explored alternative instructional approaches that might benefit this learner?

The answers to the correlative diagnostic questions for these additional factors are typically obtained through observation, surveys, interviews, and reflection.

Basic Steps in the Analytic Process

In this section we provide detailed information on the basic steps involved in the analytic process. Use these steps to answer the questions posed for any of the domains, areas, or specific tasks mentioned earlier. The paradigm for the analytic process (refer to Figure 2.1) will now be expanded.

Analysis of Literacy Behaviors: Diagnosis

Steps 1 and 2 together are roughly equivalent to **diagnosis,** or identification, of literacy difficulties from behaviors. The outcome can range from a global diagnosis, as determined by the first and second levels of analysis, to identification of specific areas of difficulty represented by the third level. The specific areas identified must then be translated into teacher objectives and, ultimately, an instructional plan. Thus, the decisions that teachers make about instruction using the analytic process will be data-driven decisions.

Step 1: Gathering information. Many sources of information about students are available to teachers. Some of those sources include: the learner; records (containing relevant medical information, test scores, grades); discussion with others who have observed the student in the classroom (such as a previous teacher) and outside the classroom (such as parents); work samples (daily oral and written work, dated material such as portfolio work); and additional assessment measures (results of informal reading inventories, interest and attitude surveys, teacher-made and classroom-based measures). Assembling all available information possible about students to better understand their strengths and needs is called *assessment*. This information can be compiled into a learning profile for each student and is valuable when planning differentiated instruction. This first step involves teacher action; the next step represents the teacher's thought processes.

Step 2: Evaluating the information. In step 2, teachers judge the quality of the information gathered. They try to establish students' instructional reading levels, find a pattern or set of behaviors indicative of students' strengths and needs, and identify possible areas for development or assistance. If only such information as standardized test scores is available, teachers must verify these scores through other means. Most often, teachers use classroom-based measures. Chapter 5 discusses specific assessment tools, and later chapters provide additional suggestions for classroom-based assessment of particular areas (see also the many appendixes to this text).

Generation of Possible Teaching Hypotheses

Step 1: Determining alternatives. After teachers have identified what assistance students need, they next consider how best to provide that assistance. Numerous instructional procedures are available, and many of these will be detailed in the following chapters. For now, simply consider a **teaching hypothesis** to be a tentative instructional focus based on students' identified educational needs.

Step 2: Selecting a tentative hypothesis. The teacher evaluates the alternatives generated in step 1 and decides how to differentiate an instructional plan to best meet the needs of the students. This decision may be influenced by information regarding students' interests, learning preferences, self-concepts, or other factors. The teacher then develops or selects learning activities and the teaching phase begins.

Teaching

Although differentiated literacy instruction may be designed for individuals' needs, it is usually carried out in groups. By providing group instruction to students with similar needs, classroom teachers are implementing effective classroom management. Additionally, there are many alternative models of teaching, all with specific purposes and the power to help students learn (Joyce, Weil, & Calhoun, 2008; 2014). Different purposes or outcomes require different teaching models, so it is important for teachers to develop and use a large repertoire of teaching models. "When teachers are able to use different pedagogical approaches, they can reach more students in more effective ways" (Gardner, 1999, p. 168). Two quite different models are presented here—the nondirective teaching model and the direct instruction model.

These examples represent ends of a continuum from student-centered (nondirective) to teacher-centered (direct). At times, teachers need to use both models as well as others in between to reach all learners.

Nondirective Teaching. The **nondirective teaching** model is an ideal choice when the instructional purpose is to help students set personal educational goals. "The nondirective teaching model focuses on facilitating learning . . . . [Nondirective teaching occurs when] the environment is organized to help students attain greater personal integration, effectiveness, and realistic self-appraisal . . . the teacher's goal is to help them understand their own needs and values so that they can effectively direct their own educational decisions" (Joyce et al., 2000, p. 288). This model is accomplished primarily through a nondirective interview, basically a conversation in which the teacher mirrors students' thoughts and feelings. By using reflective comments, the teacher raises the students' consciousness of their own perceptions and feelings, thus helping them clarify their ideas. The nondirective interview has five phases.

Phase 1: Defining the helping situation. The teacher encourages free expression of feelings. Students who have not been successful in literacy learning are likely to have some feelings about their struggles. For example, a student who is having difficulty with writing may feel tense or defensive when asked to write. The teacher's first step is to help the learner release those feelings so that other, more positive aspects of his or her writing can be explored. The teacher might say, "When I'm asked to write a report for the school principal, I have a hard time getting started—that makes me feel nervous and panicky. How do you feel when I ask you to write?"

Phase 2: Exploring the problem. Students are encouraged to define the problem while the teacher accepts and clarifies feelings. Once the problem area has been defined (for example, writing), the teacher encourages the student to express both positive and negative feelings and to explore the problem. Some teacher questions or responses might include the following:

- "You say you hate writing because it's too hard. Can you say more about that?"
- "Kind of like it doesn't matter what you do, it always turns out the same."
- "I see."
- "Perhaps you feel you won't succeed."
- "You are saying to me that the problem is . . . ."

Phase 3: Insight. Students discuss problems, and the teacher supports the students. As students discuss their problems and become aware of the reason(s) for their feelings or behaviors, they can begin to see possible solutions more clearly. These new insights help the students set goals. Questions that might be asked at this step include:

- "What is difficult for you as a writer (reader)?"
- "What is easy for you as a writer (reader)?"
- "What do good writers (readers) do?"
- "What are your goals as a writer (reader)?"

Phase 4: Planning and decision-making. Students plan initial decisions, and the teacher helps to clarify possible decisions. This is a difficult step for most teachers, who can readily provide suggestions. It is more important for the student to initiate a plan. Helpful comments might include the following:

- "You would do this because . . . ."
- "It sounds as if your reasons for that are . . . ."
- "What do you think of that?"
- "How might that idea help?"

Phase 5: Integration. In this final phase, students begin to take positive actions. These actions initially may be intermittent and/or unfocused, but eventually they begin to focus on a single area, giving students the direction they need. Thus, students gain further insight and can develop more positive actions. The teacher is supportive and can provide approval statements if genuine progress has been made. Approval statements should be used sparingly, though, to avoid returning to the expectation that the teacher knows best and makes the decisions. Some helpful comments are:

- "That's a very interesting comment and may be worth considering again."
- "I think we are really making progress together."

Because the nondirective teaching model is student-centered, it is less activity-oriented and more a set of principles for interacting with students in response to a situation. Teacher questions and responses are aimed at initiating and maintaining conversation to help students clarify their own thinking. Additional examples are:

- "How do you feel when that happens?"
- "Maybe you feel you will be wrong."

- "It sounds to me as though your reasons for your actions today are (restate student's reasons)."
- "The last idea you had was really strong. Could you explain it some more to me?"

One possible outcome of nondirective teaching is that students will begin to feel more in control of their own learning.

Direct Instruction. **Direct instruction** refers to a model of teaching that is highly structured and teacher initiated. This model can be particularly effective, for example, in helping learners who have difficulty understanding how to read more strategically; the teacher begins the lesson by providing "mental modeling" to share the reasoning processes involved in expert reading (Herrmann, 1988). Direct instruction is necessary in any literacy program. Such lessons are not always completed in one class session. More often, strategies will be learned and practiced over a series of days.

Step 1: Orientation or overview. Students are informed of the purpose of the lesson and the teacher's expectations. The learning task is clarified and student accountability is established.

Step 2: Direct instruction/modeling. The direct instruction model requires that the teacher be *actively* involved in the lesson by first explaining and then modeling or demonstrating the new skill or strategy. Once the strategy to be modeled has been identified, the teacher must plan how to introduce the lesson, what to say while modeling, and how to best show the reasoning process. Usually, a *thinking out loud* technique is used to reveal the actual reasoning process followed by the teacher while engaged in using the skill or strategy. For example, if the strategy is making predictions, the teacher may read a story to the class. After reading the title, the teacher stops, thinks out loud what the story might be about, *and states why*. The teacher proceeds to read the story, stopping and thinking out loud at points that provide information confirming or rejecting earlier predictions and always stating why the prediction was confirmed or not and how the text is helping to change the teacher's predictions. Usually the teacher checks for understanding (CFU) at this point to be sure the students understand what they will be expected to do before they apply the new skill or strategy during practice opportunities.

Step 3: Structured practice. Once the teacher has modeled a strategy, the students must be given the opportunity for **structured practice**—to practice what has been demonstrated with the teacher still directly involved. In this way the teacher begins to determine the accuracy of the teaching hypothesis as well as the effectiveness of the lesson. The teacher is checking to see how accurately students have interpreted the modeling, another instance of checking for understanding. Depending on students' responses, additional modeling may be needed. Often the whiteboard, chart paper, or an overhead projector is used during structured practice so students can see the applications while having access to the teacher's explanations. Routman (2000) refers to this step as *shared demonstration*. The teacher works interactively with the students to ensure that they understand the task.

Step 4: Guided practice. **Guided practice** allows students to apply the new information on their own or in small groups while the teacher is still available. In this phase, the teacher monitors students and provides corrective feedback when necessary. Differentiated activities occur at this step because students do not all need to be working with the same

materials, in the same way, but only with the same concept, strategy, or skill. Thus, both content and process can be differentiated according to students' learning profiles.

Step 5: Independent practice. **Independent practice** provides an opportunity for students to apply what they have learned without the teacher's help. This kind of practice is often done as homework. It gives further information on the accuracy of the hypothesis and the effectiveness of the lesson. If students seem unable or unwilling to participate in independent practice, there are several possible reasons: the initial hypothesis about their needs may be inaccurate, the lesson procedures may need to be revised, or students may not have developed the ability to work independently. In any case, providing independent practice gives the teacher additional information.

Step 6: Evaluation activity. The **evaluation activity** is a way of directly judging the effectiveness of the lesson(s) and the accuracy of the hypothesis. These activities are usually teacher made and relate directly to the kinds of tasks demonstrated in the modeling and practice. If the teaching hypothesis was appropriate and learning occurred, opportunities for further practice or enrichment can be provided; if the hypothesis was not appropriate, alternative hypotheses should be considered and new lessons planned. Students may be given choices in how to demonstrate their new knowledge. In this way, the products of learning can be differentiated.

Reexamination of Literacy Behaviors: Analyze

Step 1: Gathering information. This second examination of literacy behaviors differs in several ways from the first. The first time that the teacher gathers information about a student, it is essentially new information. The second examination of behaviors, however, follows an instructional sequence of events, making the analysis much more dependent on the teacher's insights and observations. This analysis overlaps considerably with the preceding teaching stage: as the teacher teaches, information is gathered. In this sense, the teaching act itself is assessment.

Step 2: Evaluating the information. Evaluation is based on feedback provided by the instructional sequence. Using this feedback, the teacher must decide whether the lesson was effective and whether the teaching hypothesis was appropriate.

Step 3: Generating possible teaching hypotheses. New hypotheses are needed if the lesson is effective and the desired behaviors are learned. New hypotheses are also needed if the original one was inappropriate because the teacher will proceed to a new lesson. In both instances, this step depends on the teacher's perceptions of the lesson and the results of the evaluation activity.

Step 4: Selecting a teaching hypothesis. Based on *all* the available information, a new hypothesis is selected and a lesson planned. This takes the teacher back into the teaching phase and the whole cycle begins again (refer again to Figure 2.1).

From Teaching Hypotheses to Lesson Plans

Once a teaching hypothesis has been selected, the teacher designs a corresponding lesson plan or set of lesson plans. The lesson plan(s) depicts the way the desired literacy behavior is to be achieved. Good lesson planning addresses three essential elements: (1) specific

learner objectives, (2) learning activities and materials designed to help the learners achieve the objectives, and (3) assessment activities designed to evaluate whether the pupils have achieved these objectives. In addition, lesson procedures, materials, and activities reflective of teaching for democracy would encourage student voice and responsibility. Language arts teachers are familiar with interactive read-alouds, cooperative groups, self-assessment using rubrics, and student choice of reading material (for example, uninterrupted sustained silent reading). Attention to questioning skills, critical and evaluative thinking skills, and considering multiple perspectives is needed to develop literate, thoughtful, and compassionate citizens.

Teachers should also try to provide diversity in learning activities to achieve the lesson objectives, to differentiate instruction, and to address a variety of learning preferences (refer to Table 2.1). For example, many instructional formats are available for teaching initial consonant blends: children's literature (narrational), puzzles and other visual presentations (aesthetic), oral problem-solving riddles (logical), manipulatives or sandpaper tracings (hands-on), songs that teach (aesthetic), and learning games (social). A teacher trying to achieve differentiated instruction can design or adapt a lesson by using **tiered activities** (Tomlinson, 1999), which provide the same essential skills or concepts but in ways that address learners' different strengths and needs. Thus, tiered activities are a way of differentiating instruction by differentiating the process learners use to achieve a common lesson objective or the products learners develop to demonstrate understanding of a concept.

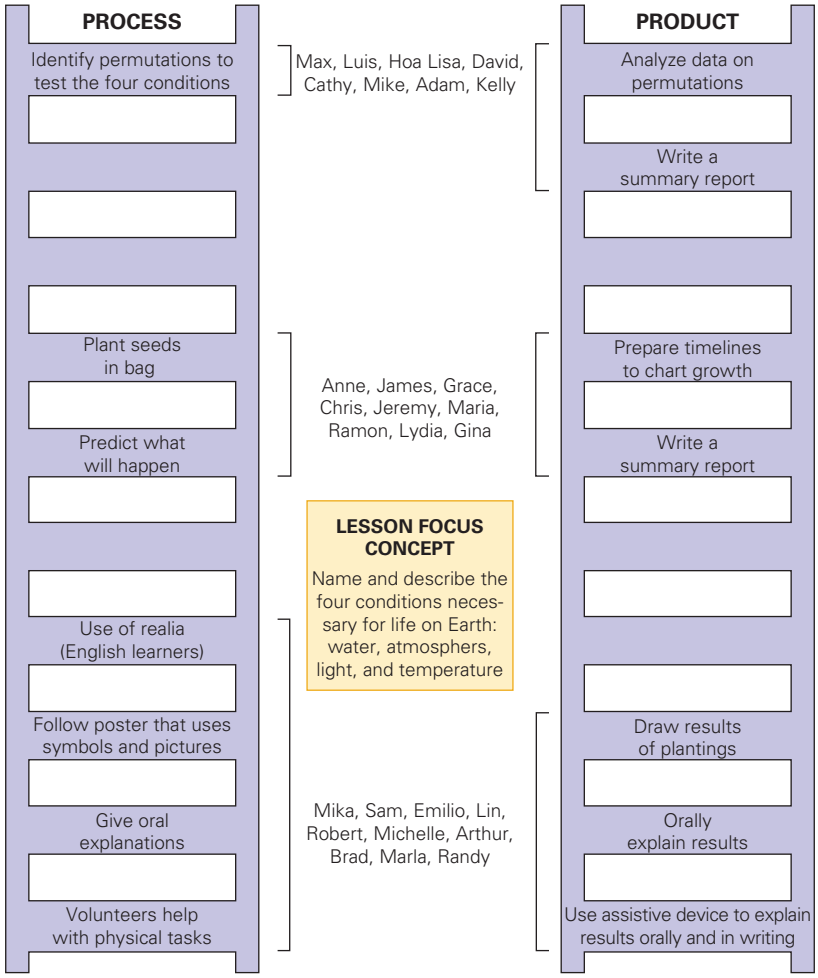
Consider the following guidelines for developing tiered activities:

1. Identify the curriculum standard or objective that will be the focus of the lesson.
2. Think about your students. Know their talents, interests, abilities, and learning preferences.
3. Create one activity that is interesting, requires high-level thought, and clearly focuses on elements that require students to use a key skill to understand a key idea.
4. Draw a ladder, with the top rung representing a very high skill level and understanding and the bottom rung a low skill level and understanding. Decide where on the ladder your activity fits. Is it too challenging for the advanced students, or will it challenge the less-advanced students? In this way, you will see who needs another version of the activity (see Figure 2.5).
5. Revise the activity to create versions that will meet the needs of all your students. This might mean varying the material students use, or varying the ways in which students will express their learning.
6. Match a version of the activity to each student based on his or her needs.

Differentiation of activities based on process is different from flexible grouping. Flexible grouping can be one of the characteristics of differentiated instruction, but the instruction itself must vary in content, process, or product according to students' readiness, interests, or learning profiles to be truly differentiated. It is *not* reasonable to expect that every lesson provides differentiated instruction, but there are points within a unit or topic of study where differentiated instruction can be accomplished. The effective teacher takes advantage of these opportunities and uses a variety of instructional techniques whenever possible, employing varied materials and procedures until learners experience successful evaluations.

The domain chapters (6–14) provide a wide array of instructional techniques to assist in teaching literacy skills and differentiating reading instruction.

Figure 2.5 Differentiated Lessons Portrayed as "Ladder" Activities



Distinguishing Teacher Objectives and Correlated Student Learning Objectives

Teachers, especially beginning teachers, are often understandably confused about lesson objectives because they tend to think about objectives from the teacher's point of view and which content standard or curriculum unit is being addressed rather than from the student learning point of view. To avoid this confusion, teachers can state objectives from both perspectives. When writing *teacher* objectives you can begin with the words "To teach . . ." and specify the content standard you want to address or that the student needs to learn. So, teacher objectives reflect the curriculum standards. The correlated *student learning* objective, which helps the teacher and student focus on student behavior, should be stated in terms of indicators of student performance. Such objectives clarify what is expected of the students and lend themselves to evaluation of the lesson's effectiveness. For an example of a lesson in using context clues, the *teacher* objective might be:

> To teach use of context clues to aid in figuring out words unknown in print.

The correlated *student learning* objective might be:

> At the end of this lesson, students will be given a portion of their group-developed language experience story having five sentences, each containing a blank for a word omitted, followed by three word choices. The students will be able to underline words in the sentences that help in choosing the one word that correctly completes each sentence. Each student should be able to complete 80 percent, or four of the five sentences, accurately.

The correlated student learning objective is the point at which a CCSS is matched to assessment and practice. The CCSS indicates the *what* of the lesson, or the teacher objective, but the *how* of the lesson is seen in the correlated student learning objective.

Writing Student Learning Objectives

Student learning objectives should include three components: (1) the condition, (2) the observable behavior, and (3) the criterion. The *condition* refers to the setting or context in which the behavior will occur. Following are examples:

Using a 250-word section from a social studies text . . .

Given a 10-item worksheet on sequence of events . . .

Given a 100-word paragraph . . .

Using a list of the 12 vocabulary words . . .

During a silent reading of Taro Yashima's book *Umbrella* . . .

The *observable behavior* refers to the behavior that the teacher expects the student to demonstrate. For best results, use verbs that express observable, or overt, behaviors. Although several types of observable, or overt, behaviors can be prescribed, they fall into two broad categories: motoric and verbal. *Avoid* verbs that require unobservable, or covert mental activity because the activity cannot be verified easily. Examples of motoric, verbal, and covert verbs are:

Motoric: point, circle, mark, write, underline, draw

Verbal: say, read orally, tell, retell, paraphrase

Covert: know, learn, remember, decide, participate, listen

Figure 2.6 provides additional observable verbs that are useful for writing student learning objectives.

The primary strength of overt verbal behaviors is their ready accessibility to the teacher in a discussion-recitation setting. Answering the teacher's questions and reading orally are common verbal literacy behaviors. Probably the greatest weakness of overt verbal behaviors is that they do not lend themselves to easy record keeping, particularly in a group or informal setting. Recording overt oral behaviors accurately requires that the teacher work with students individually. This may mean working directly with the student or listening to a taped reading by the student.

Motoric behaviors, especially marking or writing by students, have the advantage of being relatively permanent and readily scored. Motoric behaviors also can be recorded for more than one student at a time. Record keeping can be less time consuming than recording and scoring oral reading behaviors for each student, although interpreting students' written products, to include products such as a PowerPoint presentation, does require time and thought.

Learners who have not had many opportunities to write may find writing words and sentences difficult. Those who experience reading difficulties often write and spell at a lower

Figure 2.6 Useful Verbs for Writing Student Learning Objectives

Suggest	Discuss critically	Justify
Describe	Select	Report
Synthesize	Analyze	Operationalize
Explain	Identify	Differentiate
Obtain	Define	Evaluate
Implement	Tell	Match
Classify	Give examples	Compare
Construct	Contrast	State
Recognize	Predict	Integrate
List	Solve	Recall
Label	Apply	Measure

developmental level than that of their reading level. This consequence is all the more reason for these learners to be given opportunities to write, although the quantity of writing and spelling required for completing an activity might be limited initially until confidence and/or skill increases. Sometimes a drawing with captions can provide evidence of learning. Multiple-choice questions that require marking and questions requiring short written answers are suggested, particularly if a written model is available for copying. If a daily writing journal is employed for instructional practice, students' writing abilities will likely improve more rapidly. (More information about the reading/writing connection can be found in Chapter 8.)

The *criterion* element of a student learning objective serves as the basis for deciding whether the lesson helped learners reach a higher performance level than earlier behaviors indicated. The criterion itself is a matter of subjective judgment, and the teacher needs to consider the fact that certain strategies are learned over a period of time. For example, when a teacher introduces a new strategy, the criterion level, or expected level of performance, may be low, but as students gain practice, this level is raised. For instance, the teacher and Bill agree that Bill needs to self-correct his miscues more often. If currently he never self-corrects, the initial criterion may call for Bill to self-correct "at least once." Later, after he becomes aware of the nature of his miscues (see discussions of Retrospective Miscue Analysis in Chapters 5 and 9), this criterion may be raised to "most miscues will be self-corrected." Examples of criteria are:

- With seven out of ten correct
- With 85 percent accuracy
- At least five times

Here are two examples of complete student learning objectives:

- *Condition:* Following the shared reading of *Bringing the Rain to Kapiti Plain* and a mini-lesson on long *a* spelling patterns,
- *Behavior:* each student will locate and make a list of words from the story that have a long *a* sound.
- *Criterion:* with both of the two long *a* patterns in the story represented (*ai*, *aCE*).

- *Condition:* Given a 200-word paragraph from his language experience story,
- *Behavior:* Hue will read out loud and show evidence of self-monitoring by verbally correcting
- *Criterion:* at least half his miscues.