

Rhode Island Department of Elementary and Secondary Education Comprehensive Literacy Plan

2012

Developed in collaboration with
Education Development Center, Inc.
and the Rhode Island State Literacy Team

ACKNOWLEDGEMENTS

The Rhode Island Department of Elementary and Secondary Education would like to thank the following educators for their assistance and diligence throughout the developmental process of the Rhode Island Comprehensive Literacy Plan.

Members of the State Literacy Team

Dawn August

Dunn Institute

Linda Filomeno

Woonsocket Public Schools

Diane Girard, Co-chair

Rhode Island Department of Education

Jessica Lavallee

Providence Public Schools

Susan Manocchia

Narragansett Public Schools

Colleen O'Brien, Co-chair

Rhode Island Department of Education

Alicia Reniere-Castle

Coventry Public Schools

Shannon Stanton

South Kingstown Public Schools

Susan Zoll

Ready to Learn Providence

Brita Beitler

Portsmouth Public Schools

Shayna Fox

Beacon Charter High School

Tracy Lafreniere

North Smithfield Public Schools

Diane Lebrun

Burrillville Public Schools

Kimberly McCaughey

Pawtucket Public Schools

Beverly Paesano

Providence College

Laura Snyder

Brown University

Diane Tourangeau

West Warwick Public Schools

Carrie Appel, Beacon Charter High School

Nancy Daley, Narragansett Public Schools

Denise Dvorak, Portsmouth Public Schools

Deborah Foster, The MET High School

Donald Holder, Bryant University

Sharon Lee, Rhode Island Department of Education

Robert Measel, Rhode Island Department of Education

Pamela O'Day, East Bay Collaborative

Michele Palermo, Rhode Island Department of Education

Beth Salzillo, East Providence Public Schools

Mary Ann Snider, Rhode Island Department of Education

Celeste Bowler, West Warwick Public Schools

Kathleen Desrosiers, Warwick Public Schools

Lisa Foehr, Rhode Island Department of Education

Colleen Hedden, Rhode Island Department of Education

Emily Klein, Rhode Island Department of Education

Phyllis Lynch, Rhode Island Department of Education

Janine Napolitano, North Providence Public Schools

William Oehlkers, West Bay Collaborative

Carol Repucci, South Kingstown Public Schools

David Sienko, Rhode Island Department of Education

Elaine Zagrodny, Woonsocket Public Schools

Additionally, the Rhode Island Department of Education is appreciative of the many educators who provided feedback for the *Comprehensive Literacy Plan* during the public review period.

CONTENTS

APPENDICES	i
TABLES.....	ii
INTRODUCTION.....	1
1. ESSENTIAL UNDERSTANDINGS OF LITERACY	4
Foundations of Literacy	5
2. SUPPORTING ALL LEARNERS IN LITERACY.....	8
RTI Tier 1: Core Reading Instruction.....	8
Culturally and Linguistically Diverse Students	10
Importance of Student’s Home or First Language.....	11
Instructional Models for Educating ELs.....	13
Important Considerations.....	14
Engaging Families in Literacy Development	17
3. COMPONENTS OF LITERACY: SPEAKING AND LISTENING.....	20
• Implications for Classroom Instruction	23
4. THE PROCESS OF READING	25
Proficient Readers	28
5. COMPONENTS OF LITERACY: READING.....	30
Language Development.....	31
• Implications for Classroom Instruction	35
Print Knowledge	37
• Implications for Classroom Instruction	39
Phonological and Phonemic Awareness.....	39
Skills Most Important for Reading Acquisition	40
• Implications for Classroom Instruction	41
Word Identification and Recognition	44
Alphabetic Knowledge.....	45
The Alphabetic Principle	45
Decoding and Phonics.....	46
Irregular and High-frequency Words.....	46
Spelling	47
• Implications for Classroom Instruction	48
Fluency (and Reading Practice)	53
• Implications for Classroom Instruction	55
Vocabulary Development.....	59
How Vocabulary Knowledge Develops	59
• Implications for Classroom Instruction	61
Text Comprehension.....	68
Text Types	71
• Implications for Classroom Instruction	74
Motivation and Engagement	78
Motivation Influences Engagement.....	80
• Implications for Classroom Instruction	80
6. COMPONENTS OF LITERACY: WRITING	83
Reciprocity of Reading and Writing	83
Development of Writing	84
Factors That Influence Writing	87
• Implications for Classroom Instruction	91

7. CONTENT-AREA LITERACY	99
Foundational Content Literacy	99
Adolescent Literacy	99
Important Considerations	101
Academic Vocabulary	101
• Implications for Classroom Instruction	102
Comprehension	105
• Implications for Classroom Instruction	107
Text Considerations	109
• Implications for Classroom Instruction	110
Writing	110
• Implications for Classroom Instruction	111
Motivation and Engagement	113
• Implications for Classroom Instruction	114
21st Century Literacies	116
• Implications for Classroom Instruction	117
8. COMPREHENSIVE SYSTEM OF ASSESSMENT FOR LITERACY	119
Reading	119
Facets of a Comprehensive Assessment System in Reading	119
Classroom Instructional Assessments	120
Intervention Assessments	122
Writing	123
9. LITERACY INTERVENTION	126
RTI: Tier 2 and Tier 3 Supplementing the Core	127
RTI: Personal Literacy Plans	128
Needs of Struggling Readers	129
Emotional Life of Struggling Readers	130
• Implications for Interventions	131
RTI and Struggling Writers	141
RTI and Culturally and Linguistically Diverse Students	142
10. GROWING PROFESSIONALLY: TEACHER PREPARATION, PROFESSIONAL DEVELOPMENT, AND SCHOOL LEADERSHIP	144
Characteristics of Effective Teaching	144
Knowledge and Skills Needed for Literacy Instruction	145
Early Care and Education	145
Primary Literacy Instruction	146
The Shared Responsibility of All Educators	148
The Continuum of Practice	149
Entering the Profession	149
Induction	150
Professional Development	150
Follow-up and Continuous Feedback	151
School Leadership	157
Expectations for Early Care and Education Leadership	158
Expectations for K–12 Administrators	159
GLOSSARY	161
CITED WORKS	164

APPENDICES

Appendix A

[Planning and Evaluation Tool for Effective Schoolwide Reading Programs – Revised \(PET-R\)](#)
[Doing What Works: School Planning Template: Literacy](#)
[Planning and Evaluation Tool for Effective School-Wide Literacy Programs](#)

Appendix B

[Elements of Effective Adolescent Literacy Programs](#)

Appendix C

[A Consumer’s Guide to Analyzing a Core Reading Program Grades K-3: A Critical Analysis](#)
[Guidelines for Selecting a Core Reading Program](#)

Appendix D

[Rhode Island Program Models for Educating English Language Learners](#)

Appendix E

[The Many Strands that are Woven into Skilled Reading](#)

Appendix F

[Teacher Resource: Phonics](#)

Appendix G

[Teacher Resource: Fluency](#)

Appendix H

[Teacher Resource: Vocabulary](#)

Appendix I

[Questions for Professional Reflection on Reader and Task Considerations](#) (access document by scrolling to the “Activities” section on the webpage)

[Protocol for Measuring Text Complexity](#)

Qualitative Measures Rubrics

[Qualitative Measures Rubric for Literacy Text](#)

[Qualitative Measures Rubric for Informational Text](#)

Appendix J

[Teacher Resource: Text Comprehension](#)

Appendix K

[Sample Student Technology Survey](#)

[Website Evaluation](#)

Appendix L

[Key Principles for Crafting Interventions for English Language Learners \(ELLs\)](#)

Appendix M

[Teacher Knowledge and Skills: Instruction across the Components of Literacy](#)

TABLES

Table 2.1: Benefits of family-school partnerships.....	19
Table 4.1: Characteristics of proficient readers.....	28
Table 5.1: Milestones for receptive and expressive language.....	32
Table 5.2: Categories of words to recognize automatically	47
Table 5.3: Three dimensions of fluency	54
Table 6.1: Types and purposes of writing	87
Table 6.2: Instructional elements to improve adolescent writing skills.....	95
Table 7.1: Components of effective vocabulary instruction.....	103
Table 7.2: Strategies to support adolescent literacy.....	106
Table 7.3: Strategies to support content-area learning.....	108
Table 10.1: Taxonomy of teacher knowledge for teaching reading	147
Table 10.2: Taxonomy of teacher knowledge for teaching writing	147
Table 10.3: Literacy coaching activities	153
Table 10.4: Characteristics of effective coaching.....	155
Table 10.5: Murphy’s model of literacy leadership.....	159

INTRODUCTION

To teach all students, we must teach each student.
—Kame’enui, 2002

Developing a literate citizenry includes mastering the skills needed for the literacy demands of the twenty-first century and nurturing a passion for reading and acquiring new knowledge. The Rhode Island Department of Elementary and Secondary Education (RIDE) is deeply committed to ensuring literacy proficiency for ALL students. RIDE has demonstrated this strong dedication to educational excellence and effectiveness by adopting the 2010 *Common Core State Standards*, revising Rhode Island’s [Basic Education Program Regulations \(2009\)](#), and developing the Rhode Island Department of Education’s [Transforming Education in Rhode Island: Strategic Plan, 2010–2015](#). These three initiatives are grounded in an understanding of literacy development that has evolved through research and practice.

The *Rhode Island Department of Elementary and Secondary Education Comprehensive Literacy Plan* (2011; hereafter *The Comprehensive Literacy Plan*) serves to expand and revise the *Rhode Island PreK–12 Literacy Policy* (2005), the *K–3 Rhode Island Reading Policy* (2000), and the Rhode Island Literacy and Dropout Prevention Act of 1987 (Title 16, Chapter 16-67-1).

The development of the *Rhode Island PreK–12 Literacy Policy* reflected scientific research about literacy development, intervention, and the prevention of reading difficulties; drawing on confirmed studies about how all students best develop literacy and how effective instruction ensures that virtually every student attains proficiency. The policy called for instruction that was designed to meet the needs of individual students by being easy to use, flexible, and engaging, while incorporating strategies, methods, and resources that ensure literacy success for all. Additionally this policy articulated that **all** teachers, preK–12, are responsible for literacy instruction.

English literacy development is a dynamic process and is influenced by individual differences in general language proficiency, age, English oral proficiency, cognitive abilities, previous learning, and the similarities and differences between the first language and English.
(August & Shanahan, 2006, p. 5)

It is Rhode Island's belief that a comprehensive approach to literacy includes the following:

- Explicit and systematic instruction of language development, phonological awareness, word identification and recognition, phonics, fluency, vocabulary development, and print concepts. This includes a strong focus on teaching literature and informational text, language, and comprehension that includes developing a balance of oral and written language skills across all content areas and grade levels, utilizing 21st Century Literacies (i.e., proficiency in the tools of technology with an awareness of the incumbent ethical and social demands, along with the ability to organize, evaluate, think critically, and solve problems.)
- On-going assessment that informs teaching, ensures accountability, and guides effective interventions and supports
- Proven intervention processes and programs which provide support for at-risk literacy students

At the time of publication, the purpose of the *Rhode Island PreK–12 Literacy Policy* was to broaden, beyond the primary years, the focus on literacy acquisition and instruction and extend it through grade 12. The earlier belief that students need literacy instruction only in the early grades has been significantly reshaped by the research, which confirms that literacy learning is an on-going process. In fact, during the middle and high school years, most students refine and rethink their reading preferences; with appropriate instruction and support they become increasingly more sophisticated readers of informational text and solidify their own literacy habits.

The Comprehensive Literacy Plan of 2011 provides a foundation for and serves to unify all state literacy initiatives for students from birth through grade 12. These initiatives include, but are not limited to the following:

- The [Common Core State Standards for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects](#)
- [Rhode Island Early Learning Standards](#)
- [World-Class Instructional Design and Assessment \(WIDA\) Consortium](#)
- [New England Common Assessment Program \(NECAP\) for Grades 3–8 and 11 \(through 2013–2014\)](#)
- [Partnership for Assessment of College and Careers \(PARCC\) for Grades 3–11 \(beginning 2014–2015\)](#)
- [Literacy Section {L-6-2.0}](#) of the *Regulations of the Rhode Island Board of Regents for Elementary and Secondary Education: K–12 Literacy, Restructuring of the Learning environment at the middle and high school levels, and proficiency based graduation requirements (PBGR) at High Schools (March 2011)*
- [Personal Literacy Plan Guidelines](#) (RI General Law 16-7.1-2 and Board of Regents Regulations)

All Rhode Island local education agencies (LEAs) are expected to utilize *The Comprehensive Literacy Plan* to serve as the foundation of their literacy efforts and to maintain congruence among and across curriculum, instruction, and assessment. In addition, institutions of higher education involved in teacher preparation are expected to use *The Comprehensive Literacy Plan* to inform and augment course and program decisions at both the undergraduate and graduate levels. As a result, this policy will influence the pre-service and in-service training of all teachers educated and/or employed in the state of Rhode Island.

1. ESSENTIAL UNDERSTANDINGS OF LITERACY

Literacy is traditionally defined as the ability to read, write, speak, and listen in order to communicate with others effectively. Literacy also involves the ability to think and respond critically. The Rhode Island Literacy and Dropout Prevention Act of 1987 (Title 16, Chapter 16-67-1) lists these same skills of literacy: reading, writing, speaking, and listening and includes mathematical computation. In general, this act expands the definition of literacy to include the ability to use reading, writing, and mathematics effectively to learn subject matter, as well as the capacity to process complex information across content areas.

The fundamental responsibility of our schools is to provide each student with the instruction needed to become literate members of society. “In this age of information literacy, our students will become adults in a working world that expects them to be capable problem solvers, collaborative decision-makers, and creative communicators operating in a communication age where information is available at their fingertips” (Benson, 2003). Thus, students need to move beyond basic literacy to become language users who are critical and creative thinkers and able to enrich their own lives and function in a changing world. Guided in part by the research-proven conviction that literacy skills are applied across content areas, this plan expects content-area teachers—including those in history/social studies, science, and technical subjects—to integrate literacy throughout their instruction.

The strategies and skills of effective reading, writing, listening, and speaking are best taught and learned through an integrated approach within meaningful contexts. Thus it is critical for all educators to understand each of the essential elements of literacy and incorporate them into a comprehensive approach to literacy instruction. Rhode Island’s *Basic Education Program Regulations* (2009) “charges each LEA to ensure that its students are provided with a comprehensive program of study that is guaranteed and viable in each content area from pre-kindergarten through grade 12 (PK-12) so that its students are prepared for post-secondary education or productive employment” (G-13-1.1). These regulations provide detailed guidance for curriculum, instruction, and assessment.

**REFER TO APPENDIX A AND B FOR TOOLS TO ASSIST IN PLANNING
AND EVALUATING SCHOOL LITERACY PROGRAMS.**

FOUNDATIONS OF LITERACY

The capacity for literacy is inherent in all people. In fact, children begin developing the foundations for literacy at birth. In the first few months of life, they start experimenting with language by making sounds and imitating tones. Children then start learning to use symbols, combining their oral language, pictures, print, and play into a means of communication. Literacy “instruction” begins well before students enter school. Therefore, children who are exposed to a rich variety of language and literacy experiences at home and in early childhood programs will more likely enter school with the skills they need to be successful.

Infants and toddlers grow and develop in all domains when they are supported to explore and discover their world within everyday activities and interactions. Early learning is especially forged through the relationships young children develop with the significant people in their lives—adults, siblings, and other children. These interactive experiences are essential to the developing brain and the formation of a “complex web of visual, language, motor, and social-emotional connections essential for later literacy learning” (Kupcha, 2009). Competency in language and pre-literacy skills begins with high-quality experiences (home, [library](#), and/or school) in all the domains of development: cognitive, social, emotional, and physical. The language or dialect of family members and care givers has a particular influence on early language and literacy development. Non-cognitive domains, such as persistence in learning and motivation, also impact skill development.

REFER TO THE LANGUAGE DEVELOPMENT SECTION OF THIS DOCUMENT FOR A DETAILED PROGRESSION OF LANGUAGE DEVELOPMENT MILESTONES.

A language-rich environment throughout the preschool years influences literacy and cognitive development. Organized play with teachers, families, and other children helps “to develop the whole child, generate knowledge of the larger world and support the development of qualities for lifelong learning” (*Rhode Island Early Learning Standards*, 2003). Preschoolers delight particularly in listening to rhymes and using chants, songs, and other forms of language in their play. A shared understanding of the knowledge, skills, and dispositions that children gain through high-quality early childhood experiences is articulated in the [Rhode Island Early Learning Standards \(2003\)](#).

Convened in 2002, The National Early Literacy Panel determined that specific early literacy skills are important predictors of later conventional literacy skills. [Early Beginnings \(2009\)](#), a guide for early childhood personnel (birth–age 5), presents the panel’s research findings about these specific skills in user-friendly language:

Strong and consistent predictors

- Knowing the names of printed letters
 - Being able to label letters correctly, e.g., that *F* is the letter called “eff”
- Knowing the sounds associated with printed letters
 - Understanding that the sound /f/ goes with the letter *F*
 - Or knowing that the letters *A* and *T* at the end of words are pronounced “ah-t”
- Being able to manipulate the sounds of spoken language—breaking words apart into smaller sound units, such as syllables or phonemes, adding or deleting sound units
 - Understanding that the word “bulldozer” is made up of three syllables: “bull,” “doe,” and “zer”
 - Or knowing that if you take away the /j/ sound from the word “change,” you get the word “chain”
- Being able to rapidly name a sequence of letters, numbers, objects, or colors
 - When shown a set of numbers, being able to name the numbers in order, quickly and easily
 - Or being able to recognize patterns of objects or colors
- Being able to write one’s own name or being able to write even isolated letters
 - Being able to put one’s own name on a drawing
 - Or being able to correctly write letters that are shown on a set of word cards
- Being able to remember the content of spoken language for a short time
 - Being able to remember simple, multi-step instructions from the teacher; for example, instructions for getting ready for outdoor time: “Clean up the table, put the materials on the shelf, and stand in line at the door.”
 - Or being able to remember earlier parts of a story read aloud to make sense of later parts of the story

Moderate predictors

- Knowing some of the conventions of English print, including how to use a book or other printed materials
 - Understanding that print is read and written from left to right, top to bottom
 - Or knowing the difference between the front and back of a book and that books are read from front to back
- Being able to recognize and identify environmental print
 - Being able to decode or read common signs and logos

ESSENTIAL UNDERSTANDING OF LITERACY

- Or being able to identify product or company names for common products or establishments (e.g., “Target,” “Cheerios”)
- Knowing how to put concepts, thoughts, and ideas into spoken words and understanding other people when they talk
 - Having the vocabulary to be able to talk about topics that interest them, such as insects, dinosaurs, or weather
 - Or being able to have a conversation and be understood because of an implicit understanding of the correct order of words (e.g., the subject of the sentence usually comes first) and the correct form of verbs to indicate things in the past (“she *throws* the ball now; he *threw* the ball yesterday”)
- Being able to see similarities and differences between visual symbols (visual processing)
 - Knowing that capital letters are different from small letters
 - Or being able to pick out the picture of a stop sign from a set of pictures that includes other road signs with other shapes

2. SUPPORTING ALL LEARNERS IN LITERACY

A comprehensive and systematic school-wide literacy instruction and intervention system must be built on the foundation of “a guaranteed and viable curriculum” (Rhode Island Board of Regents, 2009). Because not all learners are alike and some require more time and support, a full range of options that vary in intensity are needed for all students to reach proficiency. This essentially describes response to intervention (RTI)—a multi-step “process for problem-solving” to determine “appropriate support and intervention to supplement and intensify the core curriculum to meet the needs of all learners” (RIDE, 2010).

RTI is “a set of systems and strategies designed to increase the capacity of schools to educate all students and increase student achievement and behavioral success” (Kurns, 2009). RTI is a collaborative effort among all teachers and programs (classroom teachers, special education, Title I, etc.), “not a special education or general education initiative. It is an all-student, all-staff initiative designed to serve all students with responsive systems of supports and interventions” (RIDE, 2010). RTI is Rhode Island’s framework to implement effective practices and match students’ needs with resources. Rhode Island’s RTI process delivers school-wide instruction and support for readers at three tiers.

RTI TIER 1: CORE READING INSTRUCTION

Successful approaches to literacy instruction are systematic: they work in a planned and logical sequence to teach reading. Any effective approach will break the complex process of reading into manageable skills that build on each other. As students’ skills develop and become automatic (“automaticity”), the focus for both teacher and student begins to shift from decoding to meaning (NRP, 2000).

This process of introducing each skill in turn, with continued support for fluency and comprehension throughout the grades, is what constitutes a carefully constructed reading curriculum. The first tier of the RTI framework, known as “core instruction” or “first instruction,” is provided by classroom and content-area teachers and uses research-based strategies. Time and necessary repetition are needed for the acquisition of each skill. The more effective this core instruction, the less teachers need to supplement and modify instruction for the majority of learners (Simmons & Kame’enui, 2003).

For students to leave a state of pre-literacy and become emergent readers, teachers must provide explicit instruction in phonemic awareness, which creates in students an understanding of letter-sound correspondence and the eventual ability to sound out words. Gradually, students grow in their ability to automatically recognize words and then towards fluency, increased vocabulary development, and

deeper comprehension. The process represents a continuum of complexity that is grounded in basic decoding skills and moves toward increasingly complex levels of comprehension. Each step in the process is essential, and “students cannot and should not bypass any critical skills necessary for fluent and meaningful reading just because of their chronological age” (Moats, 2001). Reading skills build upon each other—a student is unable to read a chemistry textbook without using comprehension strategies and cannot begin to comprehend content without knowing the vocabulary. However, from an instructional viewpoint, it is equally important to remember that teaching reading is a revolving process of modeling for students and coaching, a process that guides and supports student practice and then encourages independent application (Weaver, 2002). This process necessarily circles back and repeats as the decoding and comprehension demands on the student become more complex.

A school-wide commitment to reading is essential to ensure literacy for all students. This commitment is especially important during the later grades including high school, when the need to understand increasingly complex texts intensifies—and the consequences of failed comprehension become dire. A focus on reading across the curriculum, essentially facilitating reading and writing within all content areas, is a proven and vital response to this need for all students. Even those “students who have the ability to read words fluently or who are capable readers in one discipline or genre can struggle in another subject” (RIDE, 2003). Students who have no trouble reading history may struggle with mathematics, for example, “because they don’t have a working knowledge of the text structure, vocabulary, or the underlying concepts and big ideas of the discipline” (RIDE, 2003).

Every discipline has its own vocabulary and set of strategies for thinking about its subject matter. Each unique vocabulary and set of strategies needs to be taught directly in order for students to be successful. “It takes someone who knows mathematics well to effectively help someone build meaning and understanding of the content contained in a mathematics text. It takes someone who knows science well to effectively help someone build meaning and understanding of the content contained in a science text” (RIDE, 2003). Increasing a student’s ability to read assignments “increases the depth and breadth of the content the student is able to cover efficiently” (O’Brien, Stewart, & Moje, 1995).

Inherent within this first tier of core instruction is the assumption that [Universal Design for Learning](#) (UDL) is the foundation for teaching, learning, assessment, and curriculum development. “The central practical premise of UDL is that a curriculum should include alternatives to make it accessible and appropriate for individuals with different backgrounds, learning styles, abilities, and disabilities in widely varied learning contexts. The ‘universal’ in universal design does not imply one optimal solution for everyone. Rather, it reflects an awareness of the unique nature of each learner and the need to accommodate differences, creating learning experiences that suit the learner to maximize his or her ability to progress” (Rose & Meyer, 2002). Mere access to materials and information does not equate to access in learning for all.

REFER TO APPENDIX C FOR GUIDANCE IN SELECTING CORE READING PROGRAMS. FOR FURTHER INFORMATION, REFER TO SUBSEQUENT SECTIONS WITHIN THIS DOCUMENT: "THE PROCESS OF READING," "THE COMPONENTS OF LITERACY: READING," AND "CONTENT-AREA LITERACY."

CULTURALLY AND LINGUISTICALLY DIVERSE STUDENTS

Ensuring culturally and linguistically diverse (CLD) students access to core literacy instruction becomes increasingly important as the number of these students in the United States continues to increase. Minorities are predicted to represent 39 percent of the total population by the year 2020, while achievement gaps continue to persist for many of our students from culturally and linguistically diverse backgrounds.

In order to effectively educate CLD students, it is imperative that educators approach instruction from a culturally competent perspective. Cultural competence is defined as a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals and enables them to work effectively in cross-cultural situations (Cross et al., 1989; Isaacs & Benjamin, 1991).

It is impossible to prepare tomorrow's teachers to succeed with all of the students they will meet without exploring how students' learning experiences are influenced by their home languages, cultures, and contexts; the realities of race and class privilege in the United States; the ongoing manifestations of institutional racism within the educational system; and the many factors that shape students' opportunities to learn within individual classrooms. To teach effectively, teachers need to understand how learning depends on their ability to draw connections to what learners already know, to support students' motivation and willingness to risk trying and to engender a climate of trust between and among adults and students. (Darling-Hammond & Garcia-Lopez, 2002, p. 9)

School systems need to address five essential elements if they are to create educational environments that reflect cultural competence; each system must (1) value diversity, (2) have the capacity for cultural self-assessment, (3) be conscious of the inherent dynamics within cross-cultural interactions, (4) institutionalize cultural knowledge, and (5) develop adaptations to service delivery that reflect an understanding of diversity between and within cultures. Further, these five elements must be

manifested in every level of the service delivery system, in attitudes, structures, policies, and services (Cross et al., 1989; Isaacs & Benjamin, 1991).

Students who speak a language other than English in their homes live in all areas of Rhode Island. In general, the languages and cultures of students are valuable resources to be incorporated into schooling (Escamilla & Hopewell, 2010; Goldenberg & Coleman, 2010; Garcia, 2005; Freeman et al., 2002; Gonzalez et al., 2005; Scarcella, 1990). The first task of teachers is to become aware of, honor, and build upon their students' personal histories and cultures (Peregoy & Boyle, 2001). Then, teachers need to provide instruction that "focuses on using language as the primary tool for intellectual and academic development" (Gibbons, 2002).

Within the population of culturally and linguistically diverse students, English learners (ELs)¹ are those "linguistically and culturally diverse students who have been identified through reliable and valid assessments as having levels of English language proficiency that preclude them from accessing, processing, and acquiring unmodified grade level content in English, and thereby, qualifying for support services" (WIDA Consortium, 2004). Rhode Island is a member of the World-Class Instructional Design and Assessment (WIDA) Consortium, and utilizes the *ACCESS for ELLs* (Assessing Comprehension and Communication in English State-to-State for English Language Learners), an assessment used annually to measure the English language proficiency of ELs across the state. *ACCESS for ELLs* was developed by the Center for Applied Linguistics in collaboration with the [WIDA Consortium](#).

Importance of Student's Home or First Language

Students' home, school, and community experiences influence their language development (Nieto, 2008; August, 2006; Payne, 2003; Collier, 1995). In fact, the degree of students' native language proficiency is a strong predictor of their English language development (Snow, Burns, & Griffin, 1998). The home language ability of some of our students is highly developed and includes phonemic awareness, knowledge of phonics and alphabetic principle, fluency, vocabulary, and a high level of text comprehension. For these students, as Goldenberg (2008) states, reading achievement in the second language can be promoted by learning to read in the home language. Students are then able to draw upon their metacognitive, metalinguistic, and metacultural awareness to develop proficiency in additional languages (Cloud et al., 2009; Bialystok, 2007; Chamot & O'Malley, 1994; Bialystok, 1991; Cummins, 1978). This phenomenon is referred to as the transfer principle and is the pivotal theory upon which bilingual education is structured. The transfer principle is equally applicable to English as a Second Language (ESL) programs in that students who enter an ESL classroom as capable and critical readers in their home language will transfer those skills and strategies to English reading. These learners will be able to make the transition to learning in and through English with

¹ EL and ELL are synonymous terms.

sufficient instruction in vocabulary and the structure of the English language. It is critical to note, however, that when teaching English to ELs, “explicit attention must be given to developing students’ receptive skills in listening and reading, as well as to their productive skills in speaking and writing” (Valdés, 2001).

ELs develop language proficiency in listening, speaking, reading, and writing interdependently but at different rates and in different ways (Gottlieb & Hamayan, 2007; Spolsky, 1989; Vygotsky, 1962). Research has shown that it is important to integrate all four domains into content-area instruction, as well as to allow time for oral language practice (Short, 2006). Many EL students may enter school with a highly developed oral vocabulary in their home language but have little or no reading skills. These students may have no recognition of the sound-symbol correspondence of any language nor recognize any sight vocabulary. EL students may also have no repertoire of comprehension strategies. Unfamiliarity with text, whether it is with vocabulary or the structure of text itself, makes it difficult or impossible for them to engage with a text; the reader may not be able to predict, question, infer, and/or use language or contextual cues to assist the reading comprehension process. Cummins (2000), Gibbons (2002), Gonzalez (1999), Valdés (2001), and Ovando, et al. (2002) argue that those students whose first experience learning to read occurs in a second language need particular scaffolds that provide an opportunity for them to do the following:

- Build the background and experiential knowledge that a particular text might require for critical understanding
- Develop vocabulary in English in order to be able to extract information and discuss and question, both orally and in writing
- Link new concepts to known information in the home language to increase text comprehension

The fastest growing EL populations are students who are born in the United States of immigrant parents (Batalova, Fix, & Murray, 2007). Their language may be a combination of the home language and a working knowledge of English. These students may have a highly developed oral English vocabulary, including a breadth of vocabulary that enables them to engage in some reading and to navigate in social settings, such as the playground and other places where they interact informally with peers. They bring a wealth of experiential knowledge to their reading experiences. However, they also may lack the depth of language that they need to address the academic complexities they face in school. If their language knowledge is an amalgam of their home language and English and there is a mismatch between the two languages, students who are born in the United States of immigrant parents may be at a disadvantage for success in reading tasks and thus spend many of their school years trying to catch up (Snow et al., 1998). Research shows that the most successful literacy programs are those that focus on high-quality instruction in literacy skills and strategies, in addition to providing instructional supports for oral language development in English (August, 2006).

Instructional Models for Educating ELs

Current federal law requires that all ELs be provided with an educational program that ensures their access to the core curriculum and opportunities for English language development. However, state laws govern program requirements. Before 1974, ELs did not receive systematic assistance for their language needs. This approach, known as “sink or swim,” in which ELs were given the same instruction as their English-speaking peers without modification, was outlawed by the U.S. Supreme Court as a violation of language-minority children’s civil rights in *Lau v. Nichols*, 414 U.S.563 (1974). *Castañeda vs. Pickard* (5th Cir., 1981) established three criteria for evaluating the adequacy of a district’s program for EL students:

1. Is the program based on an educational theory recognized as sound by some experts in the field, or is it considered by experts as a legitimate experimental strategy?
2. Are the programs and practices, including resources and personnel, reasonably calculated to implement this theory effectively?
3. Does the school district evaluate its programs and make adjustments where needed to ensure that language barriers are actually being overcome?

These three measures help determine if a school district is serving its limited English proficient (LEP) students and if the district’s programs are addressing their needs. Consequently, state and local offices of education decide what programs to offer, depending on the needs of a specific population (Moughamian, Rivera, & Francis, 2009).

Research on instructional models for English learners revolves around the question of whether and how children’s first language should be used in an instructional program. Francis, Lesaux, & August (2006) have addressed this question by studying the impact that language of instruction has on the literacy learning of ELs. They ponder the following: “When a child enters school with limited proficiency in English, the school faces a serious dilemma: How can the child be expected to learn the skills and content taught at the same time as he or she is learning English?” As a result, many different kinds of programs exist; however, two instructional programs are most common:

- **ESL programs** provide instruction in English as a second language and may include native language support
- **Bilingual programs** provide native language instruction in addition to English language instruction

FOR FURTHER INFORMATION, REFER TO APPENDIX D: RHODE ISLAND’S PROGRAM DESCRIPTIONS FOR ENGLISH LANGUAGE LEARNERS.

Important Considerations

Not all culturally and linguistically diverse students are identified as ELs. As a member of the WIDA Consortium, Rhode Island and a group of partner states have worked to design and implement high-quality and equitable educational opportunities for ELs *and* students from culturally diverse backgrounds. Focusing on three major areas—standards and assessments, professional development, and research—the consortium adheres to guiding principles for language development summarized here:

1. Students' languages and cultures are valuable resources to be tapped and then incorporated into schooling.
2. Students' home, school, and community experiences influence their language development.
3. Students draw on their metacognitive, metalinguistic, and metacultural awareness to develop proficiency in additional languages.
4. Students' academic language development in their native language facilitates their academic language development in English. Conversely, students' academic language development in English informs their academic language development in their native language.
5. Students learn language and culture through the meaningful use of language and through social interaction.
6. Students use language in functional and communicative ways that vary according to context.
7. Students develop language proficiency by listening, speaking, reading, and writing interdependently, but at different rates and in different ways.
8. Students' development of academic language and academic content knowledge are interrelated processes.
9. Students' development of social, instructional, and academic language, a complex and long-term process, is the foundation for their success in school.
10. Students' access to instructional tasks requiring complex thinking is enhanced when linguistic complexity and instructional support match their levels of language proficiency.

The consortium has developed [English Language Proficiency Standards](#) for English Language Learners in preK through grade 12, which provide a framework for large-scale state and classroom assessments and differentiated instruction when used in conjunction with student growth data with WIDA [ACCESS](#) and [MODEL](#) assessments.

Effective instruction, which is important for every student, is particularly important for English learners (Goldenberg, 2008). This instruction involves the direct, explicit teaching of the components of literacy. The characteristics of high-quality instruction for ELs include the following:

- Providing scaffolds in how to use strategies, skills, and concepts

- Utilizing small-group instruction
- Adjusting the teacher’s own use of English to make concepts comprehensible
- Utilizing visuals—including pictures, diagrams, and charts—for instruction
- Selecting and incorporating students’ responses, ideas, examples, and experiences into their lessons
- Providing students time to respond, extra instruction, practice, and review
- Asking questions to ensure comprehension

(Gersten & Geva, 2003)

Along with using effective instructional strategies, teachers need to provide access to standards-based academic content. They need to consider the age and needs of individual students in order to provide authentic, age-appropriate instruction. Finally, teachers need to engage students in meaningful literacy activities that include the processes of reading and writing.

FOR FURTHER INFORMATION, ACCESS THE WIDA CONSORTIUM WEBSITE: www.wida.us

Academic language

All culturally and linguistically diverse students face similar challenges and require similar scaffolds for cultural literacy, vocabulary building, and comprehension strategies. Developing academic language and content knowledge involves complex and interrelated processes (Gibbons, 2009; Collier & Thomas, 2009; Gottlieb et al., 2009; Echevarria et al., 2008; Zwiers, 2008; Gee, 2007; Bailey, 2007; Mohan, 1986). To effectively reach all students, educators need to understand how students’ patterns of communication and various dialects affect their classroom learning (Willis, 2000).

Academic language, which refers to the vocabulary and word meanings that are used in the classroom and in textbooks, is fundamental to academic success in all domains. Academic language can be a challenge for ELs across content areas, and most educators agree that ELs, particularly those in the upper grades, need explicit instruction in academic English in order to access the core curriculum. According to Rivera (2008) “proficient use of—and control over—academic language is the key to content area learning.” Recent research strongly supports intensive, interactive instruction in English language development for all English learners as an important part of improving ELs’ literacy (Gersten et.al., 2007).

FOR FURTHER INFORMATION, REFER TO ACADEMIC VOCABULARY IN THE “CONTENT-AREA LITERACY” SECTION.

Building and activating background knowledge

As Gibbons (2002) reminds us, “there are considerable differences between families within any particular cultural group.” In order to teach all students, including ELs and students from culturally and linguistically diverse backgrounds, teachers cannot view them only as a significant instructional group; they need to teach them as the individual students they are. Moll, Amanti, Neff, and Gonzalez (1992) describes the “funds of knowledge” that ELs bring to school. These schemata—generally related to family, home, religion, and the workplace—often represent untapped resources. When teachers learn about the background knowledge of each student, they can integrate it into classroom reading tasks. In order to fully develop the literacy skills and strategies of culturally and linguistically diverse students, it is critical that teachers draw on students’ experiences and background when selecting texts, for example, and during text-related discussions, and encourage student choice for independent reading.

Clearly, teachers need to build on the active knowledge that CLD students bring to the reading experience, at whatever level and in whatever language (Valdés, 2001; O’Malley & Chamot, 1990). In addition to making connections to content, teachers can also support culturally and linguistically diverse students by “frontloading” new learning, which involves creating activities—discussions, presentations, and readings, for example—that activate the knowledge that students already possess and will need to use in reading a text, or activities that build the knowledge that students do not have but need to possess in order to be successful. Effective frontloading activities provide a framework for supporting and organizing students’ use of new concepts and strategies throughout their reading of text (Wilhelm, Baker, & Dube, 2001). Reading instruction for CLD students in general requires that all teachers—both the EL specialists and any general education teacher working with these students—teach language learning and metacognitive strategies as part of the curriculum.

Teachers who are successful with diverse learners are able to fashion lessons that are directly linked to students’ cultural experiences, reflect local values and traditions, and demonstrate some understanding of culturally determined preferences for thinking and interacting (McREL, 1999).

Content-area learning

ELs must have access to the entire curriculum, regardless of the amount of English they bring to the reading experience. For them and for culturally and linguistically diverse students, the most effective approach to reading instruction integrates and connects language and content (Valdés, 2001; O’Malley & Chamot, 1990; Cummins, 2000; Ovando et al., 2002). Two directions of research—on recommended practices to promote mainstream academic literacy development across the content areas at the secondary level and on effective content-area instruction of ELs—overlap substantially. Together they suggest that general education teachers who use effective practices for content-area

literacy development will be using many of the practices that are recommended for those trained to work with ELs (Meltzer, 2005).

General education teachers can help ELs make the connection between language and content by providing instructional adjustments and modifications to students. These can include using text with content that is familiar to students, building the student's vocabulary in English, using the primary language for support, promoting directed/guided interaction among ELs and English-speaking students, and providing extra time for learning (Goldenberg, 2008). Ultimately, individual teachers are responsible for the second-language development of their students. When scaffolding learning to support EL students, teachers need to do the following:

- Link with and build on what students bring to school: their language, culture, understandings, and experiences
- Provide the kinds of support that enable ELs to learn successfully through collaboration with their teachers and with other students
- Willingly "hand over" to students the responsibility of using what they have learned independently, in new contexts and for their own purposes (Gibbons, 2002).

FOR FURTHER INFORMATION, REFER TO THE "CONTENT-AREA LITERACY" SECTION.

ENGAGING FAMILIES IN LITERACY DEVELOPMENT

In order to produce a literate society, schools must construct opportunities for family engagement. Research confirms that a family's involvement in a child's education predicts that child's academic achievement and social development as he progresses, beginning with early care and education and continuing through high school (Weiss et al., 2006; Caspe et al., 2007; Kreider et al., 2007). Schools must recognize families as partners in the education of their children and provide opportunities for family members to encourage and support student learning. It is also critical that families be informed frequently of their child's literacy progress.

Hess and Holloway (1984) identified five broad areas of family functioning that may influence literacy development at all grade levels:

- **Placing a value on literacy.** By reading and writing themselves, families encourage their children to read and write.
- **Expressing expectations for achievement.** If they understand what is expected of them, children are more likely to reach toward achieving those expectations.

- **Having reading materials available.** Literacy experiences are more likely to occur in homes that contain books for children and adolescents, as well as other reading and writing materials. Libraries may serve as a resource for engaging families in literacy development.
- **Reading together.** Literacy is the result of social interaction, of discussing the ideas contained in the printed word.
- **Making opportunities for verbal interaction.** By discussing ideas, children and adolescents extend their repertoire of ideas and determine their own opinions.

Findings from the [Harvard Family Research Project](#) confirm the value of both formal and informal connections between families and educational settings. Three family involvement processes are confirmed effective in encouraging children's learning and socio-emotional development:

- **Parenting:** the attitudes, values, and practices of parents in raising children
- **Home-school relationships:** the formal and informal connections between the family and educational setting
- **Responsibility for learning:** parenting that places an emphasis on activities in the home and community that promote children's learning

Early care and education programs (e.g., library and community outreach) recognize that they alone cannot prepare children for kindergarten; they need the support of families and communities. Parents need to participate in preschool activities; families and educators need to communicate regularly. These connections positively influence young children's outcomes. Parents can exert this positive influence by attending parent-teacher conferences, participating in extended class visits, and helping with class activities. This type of participation is associated with the development of a child's language, self-help, social, motor, adaptive, and basic school skills (Marcon, 1999).

At the elementary level, parental responsibility for learning outcomes falls into four main categories: supporting literacy, helping with homework, managing children's education, and maintaining high expectations (Deering et al., 2004; Hoover-Dempsey et al., 2001; Marchant et al., 2001; Senechal & LeFever, 2002). These four family-involvement processes remain critical for middle and high school youth, as well, specifically in their academic achievement, social development, participation in settings other than school that promote healthy development, and opportunities for college enrollment (Kreider et al., 2007).

"Effectively engaging parents and families in the education of their children has the potential to be far more transformational than any other type of education reform" (National Parent Teacher Association, 2004). Family and school partnerships, based on literacy initiatives, yield the following:

Table 2.1: Benefits of family-school partnerships

Teachers Administrators Schools	<ul style="list-style-type: none"> ➤ More understanding of families ➤ Higher expectations for their students ➤ Better morale ➤ Higher ratings by parents ➤ Better linkages to resources in the community
Students	<ul style="list-style-type: none"> ➤ Higher grades, test scores, and graduation rates ➤ Better school attendance ➤ Greater enrollment in postsecondary education
Families	<ul style="list-style-type: none"> ➤ Improved communication with school community ➤ Better understanding of the scope of the work ➤ Improved attitude towards school and school personnel ➤ More confidence in the school ➤ More frequent enrollment in continuing education to advance their own learning

(Adapted from the National Parent Teacher Association, 2004, and the International Reading Association, 2002)

Schools can be instrumental in helping families understand the importance of literacy in their lives. By developing this understanding, families in turn help their children value reading. Administrators and teachers can become leaders in creating family literacy events and activities designed to assist and involve families in their children’s learning (International Reading Association, 2001). Both schools and teachers can take an active role in supporting family literacy through such activities as developing a school newsletter/brochure and calendar, disseminating recommended reading lists, initiating library programs, arranging a book exchange, hosting classroom family nights, and staging family plays (International Reading Association, 2001).

Overall, parent/family involvement “. . . lead[s] to an increase in at-home communication and an increase in parents’ knowledge about reading” (International Reading Association, 2002).

FOR FURTHER INFORMATION, REFER TO
[READING AND WRITING: RESOURCES FOR PARENTS & FAMILIES](#) AND
PARENT/GUARDIAN SUPPORT RESOURCES, OF APPENDIX F,
THE [RHODE ISLAND PERSONAL LITERACY PLAN \(PLP\) GUIDELINES, 2005](#).

ADDITIONAL INFORMATION IS AVAILABLE AT THE RI OFFICE OF LIBRARY AND INFORMATION SERVICES AT [HTTP://WWW.OLIS.RI.GOV/SERVICES](http://www.olis.ri.gov/services)

3. COMPONENTS OF LITERACY: SPEAKING AND LISTENING

Oral communication, in both expressive and receptive language, is the cornerstone of literacy development and forms the foundation for reading and writing success. All of the elements of literacy are dependent on the strength of the basic oral language skills that students bring to the process of learning to read and write (Bickart, 1998; Snow et al., 1998). Students' success in school is dependent upon how well they are able to comprehend and express the content they have learned. Thus all students will benefit from building academic language and background knowledge through oral language. Research supports the idea that teaching oral language skills can be a way to help students acquire the academic vocabulary needed to access text across content areas. In order for this to happen, students need explicit and systematic instruction in understanding and using communication skills. Resnick and Snow (2009), in the introduction to their book outlining the National Center on Education and the Economy's New Standards on Speaking and Listening, cite three important reasons for children to practice and master their native language:

- Speaking and listening are the foundation skills for reading and writing.
- By asking questions, collaborating and solving problems with others, listening, and speaking, children learn about the objects, facts, people, and ideas that make up their world. These activities prepare them to work eventually with language in texts across content areas.
- Speaking and listening are academic, social, and life skills that are valued in school and the world.

As language develops through socialization and collaboration, a variety of experiences can further expand students' language skills and develop their vocabulary. Vygotsky (1978), whose work played an important role in stimulating current research, viewed learning as integrated and socially based. In this view, classroom learning in language and literacy has three characteristics:

Learning is a social activity. Interpersonal behaviors are the basis for new conceptual understandings.

- **Learning is a social activity.** Interpersonal behaviors are the basis for new conceptual understandings.
- **Learning is integrated.** Strong interrelationships exist between oral and written language learning.
- **Learning requires student interaction and engagement in classroom activities.** Engaged students are motivated to learn and have the best chance of achieving full communicative competence across the broad spectrum of language and literacy skills.

COMPONENTS OF LITERACY: SPEAKING AND LISTENING

The [Rhode Island Early Learning Standards](#) emphasize the importance of purposefully planned instruction and experiences that engage our youngest students in a literacy-rich environment. In the early years this environment fosters language development, natural exposure to books and print, and opportunities for social interactions. Preschool and kindergarten instruction must also build knowledge of phonemic awareness, which is the ability to notice, think about, and work with the individual sounds in spoken words (Armbruster et al., 2001). This instruction must also build awareness of the alphabetic principle. Liberman, Shankweiler, & Liberman (1989) provide evidence that proper application of the alphabetic principle rests on an awareness of the internal phonological structure of words that the alphabet represents.

**FOR FURTHER INFORMATION, REFER TO LANGUAGE DEVELOPMENT IN THE
"COMPONENTS OF LITERACY: READING" SECTION OF THIS DOCUMENT.**

At the elementary school level, oral language remains a critical building block to a student's literacy skills. All students need explicit and systematic instruction in understanding and using oral communication skills. One recommendation made by Shanahan, et al. (2010) as a way for students to develop a deeper understanding of what they are reading is to have teachers guide their students through "focused, high quality discussion on the meaning of text." These types of discussions are critical tools for helping children comprehend text that they encounter in the various content areas. Classrooms with English learners (ELs) and at-risk students who need strong supports to develop their thinking and reading comprehension skills will also benefit greatly from more opportunities to listen to and engage in productive talk in the classrooms (Lesaux, 2008).

The development of speaking and listening competencies continues to be an important focus for instruction throughout the secondary grades as well. The [Common Core State Standards](#) for speaking and listening note the following:

To build a foundation for college and career readiness, students must have ample opportunities to take part in a variety of rich, structured conversations—as part of a whole class, in small groups, and with a partner. Being productive members of these conversations requires that students contribute accurate, relevant information; respond to and develop what others have said; make comparisons and contrasts; and analyze and synthesize a multitude of ideas in various domains. (p. 48)

As students move up in the grades, the text and academic language they encounter becomes more complex, making reading comprehension more difficult. As in the elementary grades, Kamil et al.

COMPONENTS OF LITERACY: SPEAKING AND LISTENING

(2008) also found that encouraging high-quality discussion about texts among older students can have a positive impact on reading comprehensions skills. Increasing the amount and quality of open, sustained discussions about reading content has the most consistently positive effect on reading comprehension outcomes (Scammacca et al., 2007). These finding clearly demonstrate that discussion tied to text helps to promote literacy and encourage academic vocabulary more than does conversational language.

The emphasis on oral language is especially beneficial for culturally and linguistically diverse students. Because the receptive language abilities of English learners (ELs) precede their expressive language abilities, they need to spend time listening before they are able to develop their speaking abilities. Students may experience a “silent” period that can be of an indeterminate length. They especially need to hear the language spoken in meaningful contexts in order to acquire it; thus exposure to oral English is crucial. In fact, listening to the language around them and using context to figure out what words mean is primarily how ELs acquire the language. Time spent listening must also be supported visually. Listening and speaking skills provide two of the most important building blocks for the foundation of second-language acquisition and are essential for developing reading and writing skills for both native speakers and second-language learners. In general, for their literacy skills to improve and grow, ELs need daily opportunities, including visual supports, to learn and practice listening and speaking in English within a safe, supportive environment.

Students’ experiences with language in and out of the classroom support and encourage the development of literacy; therefore, students must have significant opportunity to integrate oral and written language in all classrooms. Furthermore, the interplay between speaking and listening continues to evolve as new technologies transform our modes of communication. Thus, instruction within classrooms must reflect this continuous advancement.

FOR FURTHER INFORMATION, REFER TO THE [RHODE ISLAND EARLY LEARNING STANDARDS](#) AND THE [COMMON CORE STATE STANDARDS FOR SPEAKING & LISTENING \(K-5\)](#) AND [\(6-12\)](#) AND LANGUAGE [\(K-5\)](#) AND [\(6-12\)](#).

Implications for Classroom Instruction

Several decades of research show that to become more skilled and confident readers over time, children need multiple opportunities to engage in speaking and listening activities. And to engage successfully in these activities, they need explicit and systematic instruction in the skills involved. From Eisenhart (2007) we know that students learn best in dynamic, interactive learning environments where instruction can be scaffolded for learners who need extra support. While struggling learners require instruction that is more intense, all students require enough time to share and listen to a variety of ideas. A safe, comfortable, and relaxed atmosphere is also critical for the development of productive talk in the classroom and is particularly important for students who may come from backgrounds that differ from the classroom norm.

Language-rich learning environments that provide meaningful contexts should be created to actively engage all students. Different group sizes (pairs, small groups, and whole class) provide opportunities for all students to practice the different thinking and oral skills unique to each configuration, as well as opportunities for students to use academic language. According to Eisenhart (2007) the components of effective oral language instruction for grades K–3 include the following:

- Creating a language-centered learning environment
- Developing listening skills
- Teaching conversational skills
- Promoting auditory memory
- Expanding conceptual knowledge and vocabulary
- Encouraging word consciousness

In the elementary grades, speaking and listening can best be promoted by using these instructional strategies:

Teachers need to give children opportunities to discover the rules of communicating for different purposes and genres—through lots of practice and, at times, through clear instruction. Teachers need to talk about different forms of purposeful talk and help children figure out how to use stories, questions, reports and recitations to accomplish their own academic purposes. (NCEE, 2001, p. 23)

Through conversation with peers and teachers, students gain valuable language skills that are vital for their success in reading and writing. According to Kadlic and Lesiak (2003), it is

Implications for Classroom Instruction

important for teachers to do the following when focusing on the skills of listening and speaking:

- Ask open-ended questions that invite students to expand upon their answers.
- Present new words to expand students' vocabularies.
- Respond to questions and let students take the conversational lead so they build their language skills.
- Gently reinforce the rules of good listening and speaking throughout the day.

Scaffolded classroom talk helps older students deepen their comprehension of text (Wolf, Crosson, & Resnick, 2004). Regardless of reading ability, discussions allow all students to participate and share what they already know, have experienced, or value. During content-based discussions, students use their relevant prior knowledge—cultural and literacy-related—to make connections. Sharing these connections with peers (and teachers) helps students achieve new learning. With practice, students become more proficient, thus “discussions will thrive and comprehension deepen” (Gritter, 2011).

When teachers provide opportunities to discuss texts and content, students demonstrate high literacy achievement (Langer, 2001). Gritter (2011) provides guidelines for implementing effective classroom discussions:

- **Scaffold classroom discussions.** Not all students are comfortable participating in whole-class discussions. Allowing students to explore and discuss topics with a small group is a way to scaffold classroom discussions. Small-group discussions allow students to explore the content more thoroughly and with greater motivations.
- **Teach students how to discuss a topic.** Teacher control needs to fade as students “control” the direction of the discussion. In order to contribute to effective discussions and to create new knowledge, students need to learn the “rules” about discussion. The principles of active listening need to be taught, modeled, and practiced.
- **Teach students to ask high-level questions.** Students need to understand the difference between literal and higher-order questions when discussion requires analysis and evaluation. Teaching them how to ask a question and how to respond using evidence requires time and practice.

FOR FURTHER INFORMATION ABOUT SPEAKING AND LISTENING INSTRUCTION FOR CULTURALLY AND LINGUISTICALLY DIVERSE STUDENTS, ACCESS THE WIDA STANDARDS FRAMEWORK AT [HTTP://WWW.WIDA.US/STANDARDS/](http://www.wida.us/standards/)

4. THE PROCESS OF READING

Reading is acquired through a complex process that requires knowledge of the written alphabet and the sound structure of oral language. In addition, the prior knowledge and experience that a reader brings to the text impacts the meaning gained from the printed page. “Teachers need constantly to remind themselves that reading is always a particular event involving a particular reader at a particular time under particular circumstances” (Rosenblatt, 1991). In order to help students develop the ability to read, all teachers need to know and understand the following:

- That reading is the process of constructing meaning through the interaction of the reader’s existing knowledge, the information suggested by the written language, and the context of reading
- The relationships among reading, writing, speaking, and listening
- The kinds of experiences that support literacy
- That reading develops best through activities that are informed by the purpose and function of reading, writing, and conventions of print
- The role of models of thought that operate in the reading process
- The role of metacognition in reading
- The nature and multiple causes of reading disabilities
- The relationship of phonemic, morphemic, semantic, and syntactic systems of language to the reading process
- The importance of aligning assessment with curriculum and instruction
- The importance of student motivation
- The use of assessments as an ongoing and indispensable part of reflective teaching and learning

(Adapted from NICHD, 2000)

- The role of first-language oral proficiency and literacy in second-language literacy development
- That English literacy development is a dynamic process and is influenced by individual differences in general language proficiency, age, English oral proficiency, cognitive abilities, previous learning, and the similarities and differences between the first language and English

(Adapted from August and Shanahan, 2006)

Successful readers develop over time through a continuous process, as outlined in the stages of reading. Readers move from initial understanding to analysis and interpretation of text. This reading development continues to grow both through explicit and systematic instruction in all areas of reading and through the implicit instruction that occurs through exposure and practice—particularly in extensive reading opportunities.

The stages of reading development, however, are not linear. Any instructional emphasis at each of the various stages must be dynamic, flexible, and dependent on student strengths and needs. It is important to reiterate that reading growth relies on explicit and systematic instruction, which includes scaffolding techniques, along with guided as well as independent practice. These are the vehicles through which reading progress is ensured. Three components of instruction secure continual reading growth for students: when teachers understand how reading skills are acquired, when they know the characteristics of the various stages of reading, and when they continually monitor reading progress through both formal and informal assessment.

Alexander (2002) maintains that the process of *learning to read* and *reading to learn* are inextricably tied together. As students begin to unravel the mysteries of language, they are simultaneously building their knowledge base. Similarly, as students pursue knowledge and reading in other domains, they are building a deeper and richer understanding of language.

The stages of reading development

- **Emergent** (commonly found from birth–grade 1)
 - Pretends to read
 - Demonstrates awareness of print
 - Demonstrates awareness that print carries a message
 - Demonstrates awareness that one spoken word matches one printed word
 - Recognizes names, some letters, and some high-frequency words
 - Begins to apply letter-sound relationships
 - Uses information from pictures
 - Begins to read signs and labels
 - Enjoys both narrative and expository (informational) text
- **Early Reading** (commonly found in grades 1–2)
 - Demonstrates an awareness of the concept that letters represent sounds and, as a result, words may be read by saying the sounds represented by the letters
 - Uses knowledge of letter sounds, together with the meaning and structure of language, to read words

- Activates background knowledge and experience to assist in making meaning
 - Reads fluently, using punctuation to guide phrasing
 - Recognizes the majority of easy, high-frequency words
 - Begins to read both narrative and expository (informational) text
- **Transitional** (commonly found in grades 2–3)
- Develops a significant foundation of automatically recognizable words
 - Integrates multiple sources of information: letter-sound relationships, meaning, structure of language
 - Applies a variety of problem-solving strategies to read words and understand text
 - Begins to read easy chapter books as well as different genres with some fluency and ease
- **Intermediate** (commonly found from grade 3–6 and beyond)
- Sustains silent reading over longer texts
 - Reads texts to enhance meaning and gain information
 - Demonstrates awareness of the expectation that different genres require different approaches to reading
 - Develops a substantial vocabulary base
 - Develops a process for building meaning from reading by activating background knowledge and prior experiences
- **Advanced** (commonly found from grade 6 and beyond)
- Reads varied texts for many purposes
 - Constructs meaning and selects strategies that are effective for the genre, type of text, and purpose for reading
 - Acquires new vocabulary through experiences with text
 - Makes connections among texts, experiences, and knowledge of the world at large
 - Extends beyond the text to interpret, analyze, synthesize, and formulate judgments
 - Applies new knowledge acquired through reading to other areas
 - Sustains interest and understanding over longer texts and over extended periods of time

PROFICIENT READERS

Proficient readers are strategic, and they actively construct meaning as they read. The following chart illustrates characteristics of proficient readers:

Table 4.1: Characteristics of proficient readers

Before Reading	During Reading	After Reading
<ul style="list-style-type: none"> ➤ Approach reading tasks confidently ➤ Activate appropriate background knowledge ➤ Connect background knowledge to new learning ➤ Know their purpose for reading ➤ Make predictions and choose appropriate strategies ➤ Set relevant, attainable goals 	<ul style="list-style-type: none"> ➤ Focus their complete attention on reading ➤ Sustain interest and read independently ➤ Possess and make use of an extensive vocabulary ➤ Use appropriate decoding/word-attack skills ➤ Read fluently ➤ Monitor their comprehension <ul style="list-style-type: none"> a. Use text structure b. Adjust rate according to purpose c. Read to learn d. Anticipate and predict while reading e. Persevere with unfamiliar passage f. Organize/integrate new information by searching for main idea, inferring, synthesizing, etc. g. Raise relevant questions h. Create visual and sensory images i. Use fix-up strategies as needed j. Strive to understand new terms k. Use contextual clues 	<ul style="list-style-type: none"> ➤ Reflect on what they have read and add new information to their knowledge base ➤ Summarize major ideas and recall supporting details, make inferences, draw conclusions, paraphrase ➤ Seek additional information from outside sources ➤ Feel success is attainable, a result of effort ➤ Gain information independently ➤ Express opinions about or pleasure in selections they have read ➤ Choose additional/continual reading for the sheer joy of it

(Adapted from Irvin, Buehl, & Klemp, 2003)

Proficient readers have learned that “. . . ‘meaning’ does not reside ready-made ‘in’ their text or ‘in’ the reader but happens or comes into being during the transaction between reader and text” (Rosenblatt, 2005). The complexity of the text and students’ interactions with a particular text influence their understanding of the written word. Proficient readers are self-motivated and self-directed (Paris, Lipson, & Wixson, 1994). They monitor their own comprehension. Research confirms the following key characteristics among proficient readers:

- They are strategic in monitoring the interactive processes that assist comprehension.
- They set goals that shape their reading processes.
- They monitor their emerging understanding of a text.
- They coordinate a variety of comprehension strategies.
- They are mentally engaged in the act of reading.
- They are motivated to read and to learn.
- They are socially active around reading tasks.

(Baumann & Duffy, 1997)

**FOR FURTHER INFORMATION, REFER TO APPENDIX E:
THE MANY STRANDS THAT ARE WOVEN INTO SKILLED READING.**

5. COMPONENTS OF LITERACY: READING

An ever-growing body of evidence concurs that the act of reading and comprehending is complex and requires the acquisition of many overlapping and supporting skills and strategies. The National Reading Panel (2000) concluded in its seminal report that there are no easy answers or quick solutions for optimizing reading achievement. Since the publication of this foundational document, much has been written about the skills that students must acquire in order to comprehend fully what they read.

Scientific evidence provides a foundation for effective instructional practice. RIDE has used this evidence to broaden and revise its description of the component skills and proficiencies that a reader must develop through explicit instruction, practice, and support. These components provide the basis for sound curricular decisions and instructional approaches for all students:

- Language development
- Print knowledge (print and book awareness)
- Phonological and phonemic awareness
- Word identification and recognition, including spelling
- Fluency
- Vocabulary development
- Text comprehension
- Motivation and engagement

Reading involves the fluent execution and coordination of word recognition and textual comprehension. Proficiency in word recognition alone requires several competencies: phonological awareness (including phonemic awareness), decoding, and sight recognition. Simultaneously, text comprehension requires readers to use their background knowledge, the depth and breadth of their vocabulary, knowledge about language structures, verbal reasoning skills, and knowledge about texts and genres. Working together, these skills allow readers to construct meaning from the words on the page (Scarborough, 2001).

Much attention had been focused on primary and elementary reading instruction. “But many excellent third-grade readers will falter or fail in later-grade academic tasks if the teaching of reading is neglected in middle and secondary grades” (Biancarosa & Snow, 2004). Acquiring literacy proficiencies is an on-going process that continues to develop throughout life. As literacy demands increase and

shift, “students must convert their third grade reading skills into literacy levels useful for comprehending and learning from content rich materials” (Biancarosa & Snow, 2004).

To implement explicit instruction that is grounded in scientifically based reading research, teachers working with students must understand the following:

- The science of how students learn to read
- How the brain processes first- and second-language acquisition
- How the brain functions in students who encounter no difficulty in learning to read
- How the brain functions in students who experience difficulty in learning to read

(Snow et al., 1998; Honig et al., 2000; Fletcher & Lyon, 1998; Shaywitz, 2003).

LANGUAGE DEVELOPMENT

The brain undergoes its most dramatic development during infancy and toddlerhood, when the foundations of literacy and learning are laid. During their first three years, children acquire the ability to think, speak, learn, and reason. When early literacy development is not nurtured, “the brain architecture is affected and young children begin to fall behind” (Kupcha, 2010).

The National Institute on Deafness and Other Communication Disorders ([NIDCD](#)), one of the National Institutes of Health (NIH), has provided scientific support for what may be obvious: speech and language are two of the primary tools that humans use to communicate to share thoughts, ideas, and emotions. Furthermore, language is comprised of shared sets of rules that create efficiency and predictability in this exchange. In order to become proficient, children must master the rules of the following:

- Phonology (phonemes or speech sounds or, in the case of signed language, hand shapes)
- Morphology (word formation)
- Syntax (sentence formation)
- Semantics (word, phrase, and sentence meaning)
- Prosody (intonation and rhythm of speech)
- Pragmatics (effective use of language)

The National Research Council’s report, [Preventing Reading Difficulties in Young Children](#), discusses the influence that language development has on reading acquisition, as well as how the relationship between language and reading is influenced by the “rules” of the English language (Snow et al., 1998). Certain kinds of early language experiences influence later reading acquisition. Data from several studies indicate that language development, including vocabulary, before entry into

kindergarten does indeed relate to later reading achievement. Furthermore for English learners (ELs)², research has shown that first language development has a profound effect on the development of English proficiency (Collier & Thomas, 1992; Cummins, 1989; Rodriguez, 1988).

Oral language—defined as the ability to produce or comprehend spoken language (including vocabulary and grammar)—is one of eleven variables that predict literacy achievement at the end of kindergarten and the beginning of first grade (National Institute for Literacy, 2008). [*Developing Early Literacy: A Scientific Synthesis of Early Literacy Development \(2008\)*](#) states that the “complex aspects of oral language, such as grammar, definitional vocabulary, and listening comprehension, had . . . substantial predictive relations with later conventional literacy skills.” Given research’s confirmation of its influence on reading acquisition, language development is a logical place to begin discussing the early skills that a competent reader develops.

The NIDCD acknowledges that children vary in their development of speech and language. This institute provides a detailed progression of identifiable skills, known as milestones, for receptive (receives information) and expressive (responds to information) language:

Table 5.1: Milestones for receptive and expressive language

Age	Skill Progression
Birth–5 months	<ul style="list-style-type: none"> ➤ Reacts to loud sounds ➤ Turns head toward a sound source ➤ Watches someone’s face when that person is speaking ➤ Vocalizes pleasure and displeasure (laughs, giggles, cries, and fusses) ➤ Makes noise when spoken to
6–11 months	<ul style="list-style-type: none"> ➤ Understands “no-no” ➤ Babbles (says “ba-ba-ba” or “ma-ma-ma”) ➤ Tries to communicate by actions or gestures ➤ Tries to repeat sounds
12–17 months	<ul style="list-style-type: none"> ➤ Attends to a book or a toy for approximately two minutes ➤ Follows simple directions accompanied by gestures ➤ Answers simple questions nonverbally ➤ Points to objects, pictures, and family members ➤ Says two to three words to label a person or an object (pronunciation may not be clear) ➤ Tries to imitate simple words

² EL and ELL are synonymous terms.

COMPONENTS OF LITERACY: READING

Age	Skill Progression
18–23 months	<ul style="list-style-type: none"> ➤ Enjoys being read to ➤ Follows simple commands that are not accompanied by gestures ➤ Points to simple body parts, such as “nose” ➤ Understands simple words, such as “eat” or “sleep” ➤ Correctly pronounces the sounds of most vowels and <i>N, M, P,</i> and <i>H,</i> especially at the beginning of syllables and short words. Also begins to use other speech sounds. ➤ Says eight to ten words (pronunciation may still be unclear) ➤ Asks for common foods by name ➤ Makes animal sounds, such as “moo” ➤ Starts to combine words, such as “more milk” ➤ Begins to use pronouns, such as “mine”
2–3 years	<ul style="list-style-type: none"> ➤ Knows about 50 words at 24 months ➤ Knows some spatial concepts, such as “in” or “out” ➤ Knows pronouns, such as “you,” “me,” or “her” ➤ Knows descriptive words, such as “big” or “happy” ➤ Says about 40 words at 24 months ➤ Is becoming more accurate in speech, but may still leave off ending sounds. Strangers may not be able to understand much of what is said. ➤ Answers simple questions ➤ Begins to use more pronouns, such as “you” or “I” ➤ Speaks in two- or three-word phrases ➤ Uses questioning inflection to ask for something (e.g., Play ball?) ➤ Begins to use plurals, such as “shoes” and “socks,” and regular past-tense verbs, such as “jumped”
3–4 years	<ul style="list-style-type: none"> ➤ Groups objects, such as foods, clothes, etc. ➤ Identifies colors ➤ Uses most speech sounds but may distort some of the more difficult sounds, such as <i>L, R, S, Sh, Ch, Y, V, Z, Th.</i> These sounds may not be fully mastered until age 7 or 8. ➤ Uses consonants in the beginning, middle, and ends of words. May distort some of the more difficult consonants, but may attempt to say them. Strangers are able to understand much of what is said. ➤ Able to describe the use of common objects, such as “fork,” “car,” etc. ➤ Has fun with language ➤ Enjoys poems and recognizes language absurdities, such as “Is that an elephant on your head?” ➤ Expresses ideas and feelings rather than just talking about the world around him or her ➤ Uses verbs that end in “-ing,” such as “walking” or “talking” ➤ Answers simple questions, such as “What do you do when you are hungry?” ➤ Repeats sentences

COMPONENTS OF LITERACY: READING

Age	Skill Progression
4–5 years	<ul style="list-style-type: none">➤ Understands spatial concepts, such as “behind” or “next to”➤ Understands complex questions➤ Speaks in a way that is understandable, but makes mistakes pronouncing long, difficult, or complex words, such as “hippopotamus”➤ Says about 200–300 different words➤ Uses some irregular, past-tense verbs, such as “ran” or “fell”➤ Describes how to do things, such as paint a picture➤ Defines words➤ Groups items into categories, such as animals, vehicles, etc.➤ Answers “why” questions

As children get older, they begin to understand more sophisticated content presented orally, and this listening competency, along with their developing speaking abilities, impacts their overall literacy development, including their vocabulary (Beck et al., 2002). A recent work, *Knowledge to Support the Teaching of Reading*, describes the language skills of a typically developing child entering kindergarten:

By the beginning of kindergarten, the child’s phonology, morphology, and syntax resemble those of the community to a large degree. A few sounds are still pronounced in an odd way; some more formal or less regular morphological forms may be missing or misused; sentences are still on average syntactically less complex than those that adults use. Semantics, pragmatics, and vocabulary are well started, but continue to grow into adulthood. (Snow et al., 2005, p. 20)

As language develops, so does a child’s vocabulary. In their seminal work, *Meaningful Differences in the Everyday Experience of Young American Children*, Hart and Risley (1995) demonstrate how variations in home experiences impact this language development and vocabulary growth. As children get older and enter kindergarten, their use of language in school further contributes to the growth of their vocabulary. By the end of kindergarten, a child has heard many new words and has incorporated them into both his active and passive vocabularies. By this age, a child will demonstrate further growth by demonstrating an ability to categorize, clarify, and explain using subject-specific words.

A review of the recent literature concludes that instruction across grades shifts in emphasis from speaking and listening in the early grades to reading and writing in the later grades. With explicit instruction in language development throughout all grades, student proficiencies continue to grow. Learning becomes integrated, fostering strong interrelationships between oral and written language.

FOR FURTHER INFORMATION, REFER TO THE [RHODE ISLAND EARLY LEARNING STANDARDS](#) AND THE [COMMON CORE STATE STANDARDS LANGUAGE \(K-5\) AND \(6-12\)](#).

Implications for Classroom Instruction

As students develop proficiency in reading, they continue to develop and refine their language skills. Language processing clearly lies at the heart of reading acquisition. August and Shanahan (2006) stress the need for oral language instruction in English in concert with effective research-based literacy instruction for ELs. Moats (2004) asserts the following:

Fortunately, children who begin schooling at a disadvantage in letter sound, word, and concept knowledge can be taught to read and write well if their teachers consistently implement a linguistically informed, structured, comprehensive, and content-rich curriculum. (p. 269)

A child's ability to understand and use spoken and written language develops along a continuum. In *Guidelines for Examining Phonics and Word Recognition*, the Texas Education Agency emphasizes the following elements in this development:

- **Print knowledge (print awareness):** awareness of the forms and functions of printed language
- **Phonological and phonemic awareness:** awareness of the sounds of spoken English words and the ability to manipulate them
- **Alphabetic knowledge:** knowledge of the shapes and names of letters of the alphabet
- **The alphabetic principle:** understanding that there is a systematic relationship between the sounds of spoken English and the letters and letter patterns of written English
- **Decoding and phonics:** understanding how to read each letter or letter pattern in a word to determine the word's pronunciation and meaning
- **Irregular/high-frequency words:** recognition of words that appear often in printed English but may not be readily decodable
- **Spelling and writing:** understanding how to translate sound-letter relationships and spelling patterns into written communication
- **Reading practice and fluency:** application of information about sound-letter relationships to the reading of readily decodable texts, and practice reading a variety of texts in order to achieve fluent, accurate, and expressive reading

(Adapted from the Texas Education Agency, 2002)

Implications for Classroom Instruction

Genishi (1988) presents considerations for primary grade teachers as they plan integrated language development opportunities for their classrooms:

- Remember that every child’s language (or dialect) is worthy of respect. A child uses language as a system of communication that reflects the values, experiences, and identities of the child’s family and community.
- Consider that adults remain the primary sources of sustained language development in children. Teachers, caregivers, and family members continue to teach students how to converse, question, listen, and respond.
- Allow students to become conversationalists and practice discussion behaviors, such as taking turns, listening actively, and using facial expressions.
- Encourage student interaction. Peer learning is an important component of language development. Plan activities that incorporate a wide selection of materials that promote talk. Activities should balance student collaboration with discussion.
- Integrate language skills into every area of the curriculum. As students develop an understanding of written language, continue to help them develop their oral abilities and skills across curricular areas.

“Children’s speaking and listening skills lead the way for their reading and writing skills, and together these language skills are the primary tools of the mind for all future learning” (Roskos et al., 2005).

Effective oral language instruction incorporates the following components:

- A language-centered learning environment
- Listening skills
- Conversational skills
- Auditory memory
- Conceptual knowledge and vocabulary
- Word consciousness

(Eisenhart, 2008)

FOR INFORMATION THAT SUPPORTS READING INSTRUCTION FOR CULTURALLY AND LINGUISTICALLY DIVERSE STUDENTS, ACCESS THE WIDA STANDARDS FRAMEWORK AT [HTTP://WWW.WIDA.US/STANDARDS/](http://www.wida.us/standards/)

PRINT KNOWLEDGE

At an early age children begin to develop an understanding of print and how it works. Research confirms that knowledge about print is gained through many interactions with language—both oral and written. Through these experiences, children come to understand that written language is related to spoken language and that print carries a message (meaning). By the time children begin school, many are able to “read” environmental print (the print we see in everyday life: the signs, logos, symbols, and colors that surround us), but they may not understand how print conveys meaning (Bialystok et al., 2000). This understanding, however, is foundational for learning to read.

Print awareness, also called “concepts of print,” involves an understanding of the forms of written language and how they work (the functions). The basis for learning how to read *connected* text—where words are grouped syntactically into phrases and sentences—lies in print awareness and the various aspects of book handling (McKenna & Stahl, 2003).

Print knowledge/awareness is the understanding of how language is used and consists of three components:

- **Print function awareness.** Valuing print as a method of communication, such as telling a story or providing information
- **Print convention awareness.** Knowing the features and mechanics of our Western alphabet
- **Concept of word.** Understanding the match between spoken words and written words in text (Rathvon, 2004)

Print awareness is developed in the following ways:

- Handling a book (holding and turning pages)
- Understanding the common parts of a book (front, back, title page, etc.)
- Knowing that print carries a message
- Differentiating among various forms of print (newspapers, road signs, billboards, webpage banners, etc.)
- Understanding the directionality of print (Western alphabets are read from left to right and from top to bottom)
- Making distinctions between upper and lower case letters or print in different fonts
- Knowing that punctuation marks have specific meanings
- Differentiating between letters and words

(Durkin, 1993; Lesiak, 1997; Whitehurst & Lonigan, 1998)

COMPONENTS OF LITERACY: READING

Snow, Burns, and Griffin (1998) articulate the print-knowledge skills that students who are beginning to read should be able to demonstrate:

- An understanding of the parts of a book and their functions
- The ability to track print (when listening to a familiar text being read aloud or rereading their own text)
- The ability to recognize or name some book titles and authors
- A familiarity with different genres and types of text (narrative and informational)
- The inclination to “read” emergently and play with the notion of making meaning in a variety of ways

The recent National Early Literacy Panel report (2008) discusses print knowledge and its correlations with later reading proficiencies:

- Concepts about print yielded a moderate relationship to decoding in primary grades (0.34 in 12 studies involving 2,604 children).
- Print knowledge yielded a moderate relationship to predicting reading comprehension (0.48 averaged across three studies involving 347 children).

FOR FURTHER INFORMATION, REFER TO [THE RHODE ISLAND EARLY LEARNING STANDARDS](#) AND [THE COMMON CORE STATE STANDARDS FOR READING: FOUNDATIONAL SKILLS \(PRINT CONCEPTS\)](#).

Implications for Classroom Instruction

An understanding of print does not emerge automatically. The adults who are central to nurturing children’s overall literacy development also nurture their print knowledge, thus laying the foundation for the ability to read connected text (Neuman & Roskos, 2005).

Print knowledge (print awareness) is fostered when children live and learn in print-rich environments, when they hear books through read-alouds (a planned oral reading of a book or passage from a text), and when they participate in shared readings. Teachers and other adults can initiate numerous activities to foster this awareness:

- Use print found in the environment and/or classroom (signs, calendars, labels, posters, etc.) to reinforce the forms and functions of print.
- Utilize shared reading to explain print conventions (directionality, word boundaries, capital letters, punctuation, etc.).
- Employ read-alouds to model and emphasize book awareness and handling.
- Model the concepts of print knowledge using stories and books that are predictable and patterned.
- Provide opportunities for student to practice their reading by utilizing predictable and patterned stories and books.

(Vaughn & Linan-Thompson, 2004)

FOR INFORMATION THAT SUPPORTS READING INSTRUCTION FOR CULTURALLY AND LINGUISTICALLY DIVERSE STUDENTS, ACCESS THE WIDA STANDARDS FRAMEWORK AT [HTTP://WWW.WIDA.US/STANDARDS/](http://www.wida.us/standards/)

PHONOLOGICAL AND PHONEMIC AWARENESS

The rules of language include phonology, the study of the phonemes or speech sounds of that language. Beginning readers must “capture the logic of the writing system” by noticing that speech consists of a sequence of small sounds (Yopp & Yopp, 2000). This understanding—that spoken language conveys thoughts as words and that words are composed of sounds specific to that language—is the basis of phonological awareness.

Phonemes are the smallest units of sound that make a difference in a word’s meaning (Zygouris-Coe, 2001). *[Put Reading First: The Research Building Blocks for Teaching Children to Read \(2001\)](#)* reminds

teachers that the 26 letters of the English alphabet can be used individually or in various combinations to represent about 41 different phonemes. (Although Moats [2004] maintains that 44 phonemes can be produced. The exact number of phonemes found in the English language remains uncertain because of such factors as dialect and the amount of emphasis placed on spoken syllables.)

As a continuum of skills, phonological processing includes identifying, using, and/or learning the sounds of speech that correspond to letters (Burns et al., 1999; National Institute for Literacy, 2001; National Reading Panel, 2000; Snow et al., 1998). Recent research confirms that phonological awareness is essential in learning to read an alphabetic writing system (Ehri, 2004; Rath, 2001; Troia, 2004). The [National Early Literacy Panel \(2008\)](#) reports that phonological awareness is one variable that correlates with later literacy and maintains its predictive power, even when other variables, such as socioeconomic status, were accounted for in their analysis.

Skills Most Important for Reading Acquisition

The importance of early literacy development is underscored in [Early Beginnings \(2009\)](#), a guide for professional development from the National Institute for Literacy, which reiterates the fact that “early literacy skills have a clear and consistently strong relationship with later conventional literacy skills.”

Family members and teachers can support young children to develop age-appropriate early literacy skills by helping them do the following:

- Become aware of systematic patterns of sounds in spoken language
- Manipulate sounds in words
- Recognize words and break them apart into smaller units
- Learn the relationship between sounds and letters
- Build oral language and vocabulary skills

The National Early Literacy Panel found the above-mentioned skills to be precursors to children’s later growth in their ability to decode and comprehend text, to write, and to spell.

Recent research confirms that the phoneme level of phonological awareness—phonemic awareness—is the most complex skill on the continuum and most critical when learning to read (Gillon, 2003; Goswami, 2002; Rath, 2002). Students who are proficient possess the following abilities related to phonemic awareness:

- Demonstrate an understanding that spoken words consist of sequences of phonemes
- Identify whether phonemes are the same or different

- Produce rhyming words
- Blend phonemes into words
- Segment words into phonemes
- Substitute phonemes to make new words

When students have built phonemic awareness, they have the foundational skills they need for using the alphabetic principle (Troia, 2004).

FOR FURTHER INFORMATION, REFER TO THE [RHODE ISLAND EARLY LEARNING STANDARDS](#) AND THE [COMMON CORE STATE STANDARDS FOR READING: FOUNDATIONAL SKILLS \(PHONOLOGICAL AWARENESS\)](#).

Implications for Classroom Instruction

Since research has demonstrated a very “close relationship between phonemic awareness and reading ability” (Snow et al., 1998), the implications for instruction are considerable. And while some children enter school with sufficient phonemic awareness to begin learning to read, others develop it from engaging in emergent literacy activities (Cunningham, 2003). In general, however, instruction is beneficial for all preschoolers, kindergarteners, and first graders who are just starting to read.

Phonemic awareness is critical because if students cannot perceive sounds in spoken words, they will later have difficulty decoding and encoding (spelling) the printed word. For example, if they cannot perceive that the /i/ combined with /g/ sound in “big” and “wig” are the same and recognize that the difference lies in the first sound, then they will have difficulty decoding (“sounding out”) words in a fast, automatic manner. These students will have difficulty learning phonics and spelling.

“Research clearly shows that phonemic awareness can be developed through instruction and furthermore that doing so significantly accelerates children’s subsequent reading and writing

Implications for Classroom Instruction

achievement” (Ball & Blachman, 1991; Blachman et al., 1994; Byrne & Fielding-Barnsley, 1991, 1993, 1995; Castle, Riach, & Nicholson, 1994; Cunningham, 1990; Wallach & Wallach, 1979).

One of the earliest phonological skills to develop is the ability to recognize and produce rhymes (Cunningham, 2007). Segmenting and blending words, on the other hand, are more difficult skills that require much practice. These two areas of instruction in phonemic awareness—segmenting and blending words—have the greatest impact on students learning to read. This is especially true for older and/or less proficient readers (Wagner & Torgesen, 1987). Lessons for these students should include activities that scaffold their understanding about the sameness, difference, number, and order of speech sounds (Adams et al., 1998).

Yopp and Yopp (2009) provide guiding principles for teachers:

- Phonological awareness is the ability to attend to and manipulate units of sound in speech (syllables, onsets and rimes, and phonemes) independent of meaning.
- Phonological awareness includes matching, synthesis (e.g., blending, adding), and analysis (e.g., counting, segmenting, deleting) of spoken sounds. Analysis tasks are generally more challenging; production is typically more difficult than recognition.
- Phonological awareness and phonemic awareness are different from phonics. Phonics is a means of teaching reading in which the associations between letters and sounds are emphasized.
- Phonological awareness is highly related to later success in reading and spelling.
- Phonological awareness can be taught. Instruction should be child appropriate and intentional.
- Phonemic awareness is one aspect (and the most difficult) of phonological awareness. It is the ability to attend to and manipulate phonemes, the smallest sounds in speech.
- Although instruction should generally progress from larger to smaller units of sound, phonological awareness development is not lockstep, and children need not master one level before being exposed to other levels of phonological awareness.
- Concrete representations (such as chips and blocks) of sound units may help make mental manipulations of sounds easier for some children. Pictures and objects may help reduce memory load.

Implications for Classroom Instruction

The [National Reading Panel](#) found that “the best approach is for teachers to assess students’ phonemic awareness before beginning phonemic awareness instruction. This will indicate which children need the instruction and which do not, which children need to be taught rudimentary levels of phonemic awareness [e.g., segmenting initial sounds in words], and which children need more advanced levels involving segmenting or blending” (National Reading Panel, 2000). In general, small-group phonemic awareness instruction may be more beneficial than whole-class or individual instruction because students often benefit from listening to their classmates respond to and receive feedback from the teacher (Armbruster et al., 2001).

Instruction should take place in a phonologically rich environment (Torgesen & Mathes, 1998). This type of classroom facilitates learning by using a variety of print materials in a variety of contexts for a variety of purposes. In addition, instruction that incorporates the sounds of the language into everyday activities also helps children to develop phonological awareness. Effective instruction is explicit, active, and incorporates singing, chanting, listening to books, and playing games that manipulate sounds (Yopp & Yopp, 2009).

Before students learn to read print, they need to become aware of how the sounds in words work. They need to understand that words are made up of speech sounds or phonemes. Effective instruction in phonemic awareness teaches students to notice, think about, and manipulate sounds in spoken language. The following instructional practices help to build phonemic awareness, which builds toward an ability to recognize nuanced differences in sounds:

1. **Phoneme Isolation:** to isolate and recognize an individual sound. For example, the last sound in “ball” is /l/.
2. **Phoneme Identity:** to recognize the same sound in individual words. For example, the first sound in “top,” “toe,” and “turn” is /t/.
3. **Phoneme Categorization:** to recognize the word with the “odd” sound in a sequence of three or four words. For example, among “mat,” “man,” and “tag,” the word “tag” begins with a different sound.
4. **Phoneme Blending:** to process discrete sounds into recognizable words. For example, blending /c/ and /a/ and /t/ into one word produces “cat”.
5. **Phoneme Segmentation:** to break a word into its separate sounds. For example, segmenting “tick” produces the three distinct sounds of /t/ and /i/ and /k/.
6. **Phoneme Deletion:** to recognize the part that remains when a phoneme is removed. For example, “land” without the /l/ becomes “and.”

Implications for Classroom Instruction

7. **Phoneme Addition:** to make a new word by adding a phoneme to an existing word. For example, "pot" with the /s/ sound added at the beginning becomes "spot."
8. **Phoneme Substitution:** to substitute one phoneme for another in order to make a new word. For example, replacing the /t/ in "cat" with /n/ forms the word "can."

Phonemic awareness develops differently for English learners (ELs) because of their exposure to phonemes that may not be present in English and/or a lack of exposure to those that are present. When instructing their student in English, teachers need to understand the linguistic characteristics of their EL students' native languages, including the phonemes that exist and do not exist in those languages. When teachers fail to do this, specific problems result, including the failure to distinguish certain sounds in words, such as ship and sheep; taught and tot; fool and full; or cart, cat, and cut. However, many phonemes do transfer across languages. In either case, teachers need to provide clear feedback and models when students experience trouble hearing and/or vocalizing particular sounds (Gersten, 2007). When students struggle with pronunciation, it does not indicate a lack of understanding. In response, teachers should simply continue their instruction (Peregoy & Boyle, 2001). Teachers should also use small-group instruction, which provides multiple opportunities for ELs to hear models of English and to participate in classroom activities and discussion (Argüelles, 2005). Scientifically based research suggests that language games and manipulatives that are consistent and focus on specific sounds and letters can also be beneficial for ELs.

FOR FURTHER INFORMATION, REFER TO THE [COMMON CORE STATE STANDARDS, FOR ENGLISH/LANGUAGE ARTS APPENDIX A](#). (READING FOUNDATIONAL SKILLS)

FOR FURTHER INFORMATION THAT SUPPORTS READING INSTRUCTION FOR CULTURALLY AND LINGUISTICALLY DIVERSE STUDENTS, ACCESS THE WIDA STANDARDS FRAMEWORK AT [HTTP://WWW.WIDA.US/STANDARDS/](http://www.wida.us/standards/)

WORD IDENTIFICATION AND RECOGNITION

Proficient readers demonstrate skill in both word identification and comprehension (Snow et al., 2005). Although the development of word identification skills continues for years, successful readers are able to recognize many words with speed and accuracy by the end of second grade. Word recognition encompasses word-part learning *and* whole-word learning (Meyer & Rose, 1999). This ability to accurately and rapidly decode words and then associate a printed word with its meaning

allows the reader to focus attention on the meaning of the text. Learning these combined skills involves attention to a number of elements: alphabetic knowledge, the alphabetic principle, decoding, irregular and high-frequency words, and spelling.

Alphabetic Knowledge

Bradley and Stahl (2001) confirm that alphabetic knowledge includes the following:

- **Letter-shape recognition.** As this skill develops, letter-shape recognition includes both upper- and lowercase letters and those printed in different fonts.
- **Letter-name knowledge.** Letter-name knowledge allows children to connect printed letters (and words) to speech sounds (Rathvon, 2004) and is strongly related to the ability to remember the shapes of the written words, treat words as sequences of letters, and develop the alphabetic principle (Vaughn & Linan-Thompson, 2004).
- **Letter-sound knowledge.** Letter-sound knowledge develops later than letter-name knowledge (McBride-Chang, 1999). Children use knowledge of letter names to learn letter sounds (Treiman et al., 2001; Treiman, et al. 1998).
- **Ability to print letters.** This ability includes both upper- and lowercase letters.
- **Rapid letter naming.** When children can recognize letters and letter patterns quickly and automatically, they can devote more time to decoding and storing words into memory.

(Rathvon, 2004)

The Alphabetic Principle

The alphabetic principle focuses on three major facts:

- Letters and letter patterns represent the sounds of spoken language.
- There are predictable relationships between sounds and letters; learning these allows children to apply the relationships to both familiar and unfamiliar words.
- Applying the alphabetic principle allows students to begin reading with fluency.

The [*Report of the National Reading Panel*](#) (2000) validates the importance of the alphabetic principle when it writes, “An essential part of the process for beginners involves learning the alphabetic system, that is, letter-sound correspondences and spelling patterns, and learning how to apply this knowledge in their reading.”

Decoding and Phonics

When readers apply their knowledge of the alphabetic principle, the process of decoding occurs and students read the words. Decoding is one strategy that readers use, and it involves “sounding out and blending graphemes into phonemes to form recognizable words.” More advanced decoders pronounce common spelling patterns in “chunks” (Ehri, 2002). These chunks consist of larger groupings of letters that “blend syllabic units into recognizable words. These chunks include spellings of common little words appearing in larger words, spellings of common rimes, and spellings of morphemes and syllables” (Ehri, 2005).

The term *phonics* is sometimes used synonymously for *decoding*. The What Works Clearinghouse topic report, [Beginning Reading \(2007\)](#), defines phonics as “the ability to associate letters and letter combinations with sound and blending them into syllables and words.” The teacher resource publication, [Put Reading First \(2001\)](#), discusses phonics instruction as a method of teaching children to learn and use the alphabetic principle.

In order to blend sounds together to pronounce words, students must learn progressively difficult word patterns as they move from their ability to decode individual letter sounds to an ability to blend letter combinations. This process of learning becomes increasingly more complex and eventually includes structural analysis, which involves decoding prefixes and suffixes. It bears repeating that systematic and explicit phonics instruction yields positive results for developing readers.

Irregular and High-frequency Words

As previously articulated, decoding is a strategy for rapid and accurate word identification. Another method employed by skillful readers is “sight” recognition. This method of reading words is word-specific. Research confirms that “readers learn sight words by forming connections between letters seen in spellings of words and sounds detected in their pronunciations already present in memory. The connections are formed out of readers’ knowledge of letter-sound relations, that is, grapheme-phoneme relations” (Ehri, 2002).

Holding words in memory facilitates accurate and rapid identification. A commonly held misconception is that sight vocabulary consists of a bank of high-frequency words that cannot be decoded, such as “the” and “said.” However, sight words are any words that are known automatically.

In its [Comprehensive Glossary of Reading Terms](#), the Florida Center for Reading Research defines those categories of words that readers must learn “by sight” and recognize quickly and accurately—without decoding:

Table 5.2: Categories of words to recognize automatically

Sight Words	
<p>Words that are recognized immediately. Sometimes sight words are thought to be irregular or high-frequency words (e.g., those in the Dolch and Fry list). However, any word that is recognized automatically is a sight word. These words may be phonetically regular or irregular.</p>	
High-frequency irregular words	High-frequency words
<p>A small group of words (300–500) that account for a large percentage of words in print and contain letters that stray from the most common sound pronunciation because they do not follow common phonic patterns (e.g., were, was, laugh, been).</p>	<p>A small group of words (300–500) that account for a large percentage of the words in print and can be regular or irregular words. Often, they are referred to as “sight words,” since automatic recognition of these words is required for fluent reading.</p>

A reader must identify most words (in connected text) “quickly, accurately and without effort” (Snow et al., 2005). Failure to do so impacts comprehension.

Spelling

The spelling of a word represents English orthography, the sound structures and meaning structures of the language. Just as they must be taught to read, children must be taught how to use both sound and meaning to become accurate spellers. Moats (2005) articulates compelling evidence and instructional insights for spelling instruction that is coherent and aligned with the increasing knowledge of the alphabetic principle that children develop as they progress in school. This sequence begins in kindergarten with training in phoneme awareness, letter sounds, and letter names and continues through middle school with the study of Greek combining forms. By the beginning of fourth grade, this instructional progression emphasizes Latin-based prefixes, suffixes, and roots.

As children learn to apply their alphabetic knowledge and learn to spell, their understanding of words grows. Automatic, accurate spelling makes writing easier because the student can focus their cognitive resources on communicating information and on the process of writing rather than struggling with spelling words (Singer & Bashir, 2004).

The notion that visual memory is the key to good spelling is *not* supported by recent research (Cassar et al., 2005; Treiman & Bourassa, 2000; Aaron et al., 1998). While a good visual memory certainly helps with spelling, the best foundation for accurate spelling lies in knowledge of the patterns of the

alphabetic principle that children learn as they begin to read. Joshi, Treiman, Carreker, and Moats (2008) assert “. . . spelling instruction underpins reading success by creating an awareness of the sounds that make up words and the letters that spell those sounds.”

FOR FURTHER INFORMATION, REFER TO THE [RHODE ISLAND EARLY LEARNING STANDARDS](#) AND THE *COMMON CORE STATE STANDARDS FOR READING: FOUNDATIONAL SKILLS* (PHONICS AND WORD RECOGNITION).

FOR ADDITIONAL INFORMATION ABOUT SPELLING, REFER TO THE *COMMON CORE STATE STANDARDS: LANGUAGE* ([K-5](#)) AND ([6-12](#)).

Implications for Classroom Instruction

Teachers want their students to be able to comprehend and learn from texts in order to develop enjoyment in reading and appreciation for both narrative and informational texts (Stahl, 2000). To accomplish these goals, a reader must be able to recognize words automatically. In turn, beginning readers cannot become skilled if they do not know and understand the alphabetic system (Ehri, 2004).

A sequence of effective instruction in word identification helps students master the following:

- The systematic relationships between letters and sounds
- The understanding that written words are composed of letter patterns representing the sounds of spoken words
- The ability to recognize words quickly and accurately, which facilitates meaning making from the text

Beck (2005) maintains that decoding instruction may begin when students have acquired enough skill in phonemic awareness and provides guidance for initiating instruction:

Implications for Classroom Instruction

Phonemic awareness is specifically folded into the teaching of letter-sound correspondences. This contrasts with typical phonemic awareness instruction, which deals with sounds in spoken words with no letters present—a speech-related activity practiced in the absence of print. . . . children do not need to be able to identify from a spoken word all the sounds in that word or be able to remove a sound from a spoken word to make a new word before they learn that *t* represents /t/. (p. 29)

Across the continuum of instruction in word identification, teachers need to maintain a balance between meaningful activities and skill practice (NAEYC, 1998; Neuman, 1998; Schickedanz, 1998; Teale & Yokota, 2000). Stahl (2000) offers guidance about the importance of well-developed opportunities for student practice, which should possess the following characteristics:

- Be focused and comprehensive
- Extend to both reading and writing activities
- Be cumulative and varied
- Lead to automaticity

Systematic instruction continues a sequential program of word study, which gives students opportunities to apply their knowledge of letters and words in a purposeful manner. The primary focus of this systematic and explicit instruction is to help beginning readers and/or older, less proficient readers understand how written symbols (graphemes—most commonly known as “letters”) are linked to sounds (phonemes) to form letter-sound correspondences.

Many word identification and recognition skills can transfer from one language to the other (Garcia, 1991). Consequently, teachers with culturally and linguistically diverse students must recognize the importance of the interplay between development in students’ native language and in English.

A number of sources provide direction for effective instructional practices in the various aspects of word identification:

Alphabetic knowledge. Effective instruction in alphabetic knowledge includes such activities as games and songs that help children identify and name letters. This type of instruction can teach both uppercase and lowercase letters. Writing activities encourage students to practice making letters and provide opportunities to manipulate letters to make words. To be effective, teachers

Implications for Classroom Instruction

adjust the sequence of the letters they introduce so that they meet the individual needs of students. As well, teachers provide many opportunities for students to practice their expanding knowledge of sound-letter relationships through reading phonetically spelled words that are familiar in meaning. (Texas Education Agency, 2002).

Research has not determined a specific order for introducing the letter-sound relationships; however, it does suggest that explicit, teacher-directed instruction is effective in teaching the alphabetic principle. Further, the earliest relationships introduced should have high utility and allow students to begin making words. An example might be consonants such as *F, M, N, R,* and *S,* whose sounds can be easily pronounced in isolation (Texas Education Agency, 2002).

The alphabetic principle. Instruction in the alphabetic principle teaches sound-letter relationships. This instruction should begin with teaching high-utility letter-sound relationships, with explicit instruction proceeding at a reasonable pace. Teaching a sequence of consonants and vowels at the beginning of the instructional progression enables students to read words. Instruction in blending sounds, using words that contain the learned letter-sound relationships, reinforces decoding. Students also strengthen their learning when they practice their decoding skills using word families, spelling patterns, and onsets and rime (Texas Education Agency, 2002).

Decoding and phonics. The National Reading Panel (2000) found that no one method of teaching phonics was superior to another. Moats (1998) states that “in a well-designed and executed program, decoding is taught in relation to the student’s stage of reading development. The inherent structure of language provides the scaffold for program organization. Teaching itself is explicit, systematic, and connected to meaning. It respects the ways that children learn language, through active extraction of patterns and successive approximations.”

Formal phonics instruction should begin in kindergarten. Research findings indicate that kindergarteners who receive beginning phonics instruction display an enhanced ability to read and spell words; and when they enter the first grade they are better able to decode and spell (encode), showing significant improvement in their ability to comprehend text (Armbruster et al., 2001). In first grade, students should move toward the decoding of more complex grapho-phonemic correspondences (e.g., blends: /st/ and /cl/; consonant digraphs: /ch/ and /sh/; vowel digraphs: /oa/ and /ai/). Explicit instruction of more advanced decoding strategies, those that focus on structural analysis, prepares students to read and understand multisyllabic words (Texas Education Agency, 2002).

Implications for Classroom Instruction

Irregular/high-frequency words. Explicit instruction in irregular/high-frequency words facilitates rapid and accurate word identification. A grade-appropriate set of these words should be introduced in a reasonable order. The use of these words in context and review serves to increase student familiarity with the word set (Texas Education Agency, 2002).

“Automatic sight word reading and automatic recognition of commonly encountered word chunks negate the necessity to decode alphabetically” (Pressley, 1998). Since most high-frequency words do not follow common letter-sound correspondences of English, they cannot be decoded (e.g., “the,” “you,” “was”). Students must receive direct instruction in these kinds of high-frequency words. They will benefit from multiple opportunities to learn high-frequency and non-decodable (sight) words through rereading texts, shared reading, interactive writing, and independent writing. Kame’enui and Simmons (2000) suggest the use of decodable texts, if needed, as a scaffolded step between explicit skill acquisition and a students’ ability to read quality, general market books.

Effective phonics instruction teaches students to use the sight-sound relationships between phonemes and meaning to read and write. In the English alphabetic system, individual letters are abstract and without meaning. In order to read words, readers must figure out the relationship between printed letters (graphemes) and their sound s (phonemes); they must know how print maps to sound—the alphabetic principle. Complicating the task, the English language contains many inconsistencies and complex patterns of words. As a result, many students have a difficult time learning to read unless the most basic and common sound-spelling relationships and high-frequency words are explicitly and systematically taught. Any lack of understanding of these inconsistencies and patterns would deny students important grapho-phonemic cues as they work toward fluent and automatic reading. One difference between good and poor readers is the ability to use letter-spelling correspondences to identify words (Juel, 1991). There is compelling evidence that systematic phonics instruction is the most effective approach to teaching this correspondence, especially for students who are “at-risk,” socially and economically (Adams, 1990; Chall, 1996; Armbruster et al., 2001).

For students in second grade and beyond, explicit instruction in morphemic/structural analysis (affixes: prefixes and suffixes, base/root words, word origins) is critical to decoding multisyllabic words. These words constitute the majority of unfamiliar words students will encounter in text. Systematic phonics instruction, coupled with instruction in the structural analysis of words, increases accuracy in decoding and word recognition skills. This, in turn, facilitates

Implications for Classroom Instruction

comprehension. For struggling readers of all ages, a lack of vocabulary knowledge is sometimes perceived as a deficit in these decoding skills.

Spelling and writing. Effective spelling instruction targets individual sounds and letters; letter sequences within words; syllables and their combinations; and the meanings of prefixes, roots, suffixes (Moats, 2005). Spelling instruction should be coordinated with instruction in letter-sound relationships and decoding strategies. Direct teaching introduces spelling in a systematic and organized sequence that addresses common spelling patterns.

Writing reinforces both reading and spelling. As children begin to write, teachers must guide them from “inventive” spellings to correct spellings. Lessons in spelling demonstrate the use of spelling patterns in written words. Purposeful activities allow students to respond in writing to what is read aloud and, later, to what they read. Writing experiences should include opportunities for students to communicate their ideas and to express them creatively (Texas Education Agency, 2002).

ELs who are not literate in their own language or whose language does not have a written form may not understand some concepts; they especially need to be taught about the functions of print (Peregoy & Boyle, 2000). However, phonics programs alone are not successful for ELs, and research suggests that it is important that phonological skills are taught in context. ELs can benefit from the direct teaching of these skills, as part of a comprehensive approach to boost early literacy. Snow et al. (1998) advise that students who are reading in their native language should be taught to transfer their skills to reading in English as they acquire proficiency in spoken English. On the other hand, teachers of ELs struggling with phonics should identify the decoding skills that may transfer across languages (August & Hakuta, 1997).

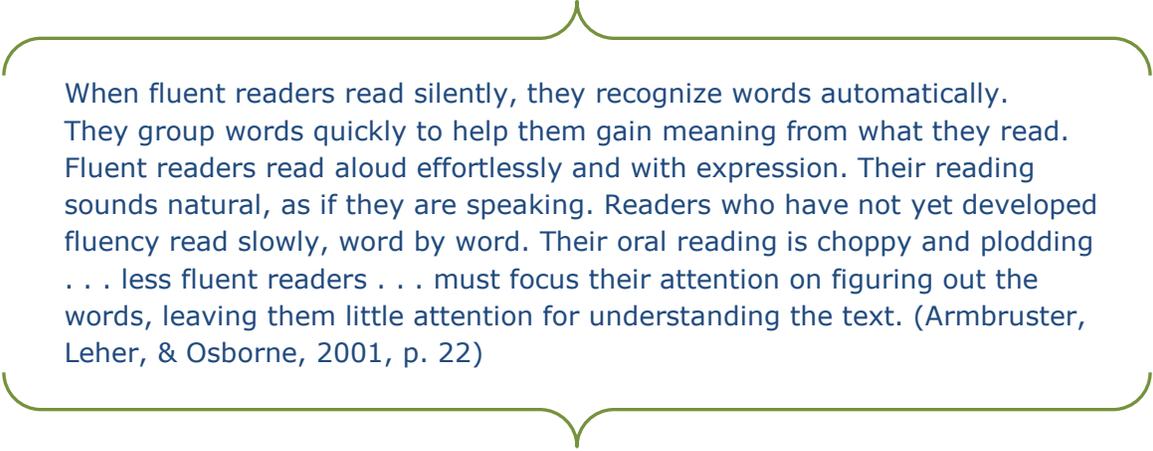
**FOR FURTHER INFORMATION, REFER TO APPENDIX F IN THIS DOCUMENT AND
THE *COMMON CORE STATE STANDARDS*:
[APPENDIX A \(READING FOUNDATIONAL SKILLS\)](#)**

**FOR FURTHER INFORMATION THAT SUPPORTS READING INSTRUCTION FOR CULTURALLY AND
LINGUISTICALLY DIVERSE STUDENTS, ACCESS THE *WIDA* STANDARDS FRAMEWORK AT
[HTTP://WWW.WIDA.US/STANDARDS/](http://www.wida.us/standards/)**

FLUENCY (AND READING PRACTICE)

Fluency in reading begins to develop *before* a student can read continuous text. The quick and effortless identification of letters, the association of letters to sounds, and the segmentation of phonemes are three of the beginning steps toward reading fluency. In a recent article for the *Annals of Dyslexia*, Katzier et al. (2006) discuss “New and evolving conceptualizations [that] have begun to broaden the definition of fluency to include such variables as rate and accuracy at every level of reading: letter naming, whole-word identification, and comprehension at the passage level.”

As skillful readers develop, their recognition skills move from understanding simple letter patterns to understanding more complicated patterns of language structure (Meyer & Rose, 1998). Quick and accurate word identification is essential for skillful reading (Torgesen et al., 2007). Automatic recognition allows a student to use cognitive abilities to focus on comprehending the text. Rasinski (2004) creates a visual image of fluency as the bridge connecting word decoding and comprehension:



When fluent readers read silently, they recognize words automatically. They group words quickly to help them gain meaning from what they read. Fluent readers read aloud effortlessly and with expression. Their reading sounds natural, as if they are speaking. Readers who have not yet developed fluency read slowly, word by word. Their oral reading is choppy and plodding . . . less fluent readers . . . must focus their attention on figuring out the words, leaving them little attention for understanding the text. (Armbruster, Leher, & Osborne, 2001, p. 22)

Fluent readers demonstrate three fundamental skills that they build and maintain over time:

Table 5.3: Three dimensions of fluency

<p>Accuracy</p>	<p>Word recognition is accurate with few miscues. Readers need to expend as little mental effort as possible in the decoding aspect of reading so that their attention can be focused on constructing meaning.</p> <p>“Comprehension suffers if the reader fails to identify most of the words quickly, accurately, and without effort” (Snow et al., 2005).</p>
<p>Automatic Processing (Automaticity)</p>	<p>Word recognition occurs quickly, automatically, and at a reasonable rate. In the early stages of learning to read, readers may be accurate but slow and inefficient at recognizing words. Continuous reading practice helps word recognition become more automatic, rapid, and effortless. Even when students recognize many words automatically, their oral reading still may be expressionless. Automaticity refers only to accurate, speedy word recognition, not to reading with expression. Therefore, automatic word recognition is necessary but not sufficient (Armbruster et al., 2001).</p> <p>“Skilled readers recognize words and other markers in text automatically. They may slow down or pause to problem-solve when they come across new vocabulary, a novel sentence construction, or unfamiliar content, but generally their recognition of the symbols, sounds, and patterns in a page of text requires virtually no conscious effort” (Meyer & Rose, 1999).</p>
<p>Prosody</p>	<p>Reading is done with expression—it sounds like language. To read with smoothness, phrasing, and expression, readers must be able to divide the text into meaningful chunks. These chunks include phrases and clauses. To be fluent, readers must know when to pause appropriately within and at the ends of sentences and when to change emphasis and tone. The appropriate use of punctuation is important as well.</p> <p>Intonation, stress, tempo, and appropriate phrasing indicate prosodic reading. As an indicator of fluent reading, prosody also contributes to a reader’s engagement with the text (Kuhn & Rasinski, 2007).</p>

Skilled readers are those “who are fluent at the word level but who constructively respond to text, constructing meaning and reacting to text all along the way . . .” (Pressley, 2006). Fluency development is important during second and third grades because, while students have learned to decode, they are not yet involved with large amounts of subject-specific text and the demands of learning content (Stahl & Heubach, 2005; Chall, 1996).

FOR FURTHER INFORMATION, REFER TO THE [RHODE ISLAND EARLY LEARNING STANDARDS](#) AND THE [COMMON CORE STATE STANDARDS FOR READING: FOUNDATIONAL SKILLS \(FLUENCY\)](#).

Implications for Classroom Instruction

Fluency develops gradually over considerable time and with numerous opportunities to read and reread. It is important to note that fluency is more than the processing of visual information; it is also connected to the student’s increasing capacity to take on more complex language structures and to make connections among the ideas in the text, between texts, and with their background knowledge.

Fluency level is dependent on what readers are reading, their familiarity with the words, and the amount of practice they have had with a particular genre. To achieve fluency, all students—including beginning readers and older, less proficient readers—need specific instruction. This instruction is accomplished by providing students with many opportunities to observe modeled fluent reading and by practicing reading text at their independent level.

Effective fluency practice also involves repeated opportunities for students to apply to their reading the information they have about sound-letter relationships (decoding) and maintain that practice with a variety of texts in order to achieve accurate and expressive reading. Reading connected texts gives students important practice in developing fluency (Stahl, 2000). Practicing fluency includes the use of different kinds of texts:

- **Predictable (or patterned) texts** are composed of text that is semi-repetitive or predictable. Patterned or predictable books facilitate the use of predictions and picture cues to enhance or reinforce the text (Snow et al., 1998). Predictable books should be used to develop print concepts, finger-pointing (which helps children learn the concept of directionality in print, the one-to-one correspondence of letters to sounds, and the boundaries of words), and print-speech matching. Although they may be used for shared reading experiences, this type of text should be “phased out” by the middle of first grade (Stahl, 2000).

Implications for Classroom Instruction

- **Decodable texts** are written to contain the spelling patterns (and a limited number of high-frequency function words: those words that have only syntactic meaning and that serve to connect and show relationships among the words that carry the content of the text [Jolly, 1981]) that readers can decode because of their knowledge of sound-spelling correspondences (Murray, 2006). This type of text should contain a reasonable percentage of words with patterns that have been taught. Well-designed decodable books tell a comprehensible story; poorly designed examples make little or no sense. Decodable texts allow students to practice decoding in context and are sometimes used during repeated readings (Stahl, 2000).
- **Instructional-level texts** can be read by students with some support. This type of text allows students to practice the integration of a range of reading skills, particularly comprehension skills. With an instructional-level text, a student will typically make fewer than 10 mistakes reading every 100 words; the student reads with 90 percent accuracy (Vaughn & Linan-Thompson, 2004).
- **Authentic texts** (the word *authentic* in this context “loosely implies as close an approximation as possible to the world outside the classroom” [McDonough & Shaw, 1994]) help develop higher-order thinking skills, content-based concepts, and vocabulary. Authentic texts, which include literature and informational texts, nurture students’ interests in reading and in the world. These texts should be relatively difficult and may be used for teacher modeling (read aloud). Student reading of authentic texts may require support (Stahl, 2000).

The issue of fluent reading is complex because some children read haltingly yet they are able to determine the “gist” of the text, whereas other children read words rapidly and accurately but do not comprehend the text’s meaning at all. Evidence from several sources confirms that teachers can “reengineer instruction” to improve children’s fluency (Stahl, 2004).

There are several effective approaches to fluency instruction. The key, however, is student practice—reading more appropriate-level and varied texts, with and without assistance. Teachers also support the development of fluency among their students when they provide feedback and monitor progress.

Implications for Classroom Instruction

Rasinski (2006) describes three instructional strategies for the development of fluent reading:

- **Model fluent reading.** Teacher can model fluent reading through daily oral reading in a whole-class or small-group activity. Book selection within these activities is clearly an important consideration:

Children need to hear and participate in reading books that excite their imaginations and expand their knowledge of the world. These books are characterized by demanding vocabulary and more complex sentences and by concepts that stretch children’s imagination and knowledge . . . reading aloud should include a variety of genres—stories, nursery rhymes, poems, fables, fairy tales and informational text . . . [that] will both fascinate children and introduce them to the kind of text structures they will encounter most often throughout their school years.

(Texas Education Agency, 2002, p. 17)

- **Provide assistance during reading.** Research confirms that students who are developing as readers increase and maintain reading fluency when they receive feedback from a more fluent reader who reads with them. Ten to fifteen minutes of daily, assisted reading has been found to have a positive effect on students’ fluency, word recognition, and comprehension development (Topping, 1995). Rasinski (2006) offers specific suggestions:

The developing reader hears a fluent rendering of the passage while at the same time reading the text on his or her own. The simultaneous combination of seeing the words while hearing the words pronounced orally leads developing readers to improved and more expressive recognition of the words in text. Assistance can take various forms. A teacher can read to a group of students while they follow along in their own books or on a story printed on the chalkboard or chart. A teacher or other more proficient reader (e.g., teacher aide, adult volunteer, older student, or principal) can sit beside a developing reader and together read aloud a text, the more advanced reader adjusting his or her voice to match the speed and proficiency of the developing reader (pp. 64-65).

- **Provide opportunities for student practice.** The most authentic use of repeated reading occurs when students practice texts for the purpose of “performing” for others; the goal of performance provides motivation (Rasinski, 2006). Teacher-assigned or student-selected, appropriate texts may include poetry, dialogues, speeches, lyrics, and cheers. Student practice involves short periods of time for approximately one week. One critical part of the repeated reading procedure is teacher coaching. During practice, students need formative feedback in order to attain the correct level of expression in the reading. Studies have shown that

Implications for Classroom Instruction

students improve their ability to read the practiced text, and, more importantly, this improvement in fluency transfers to passages they have never seen before.

Fluency must be taught as part of a comprehensive reading curriculum (Rasinski, 2004). Instructional strategies need to emphasize guided oral reading practices and may include the following approaches:

- **Repeated reading.** Students read the same text multiple times until they attain a desired level of fluency.
- **Assisted reading.** Student and teacher read the same text simultaneously.
- **Tutor-based reading.** This is a combination of repeated and assisted reading that involves the following:
 - Paired reading
 - Peer tutoring
 - Cross-age tutoring

Social interaction—which can involve oral reading and instruction with a teacher, other adult, or a peer—often help to assist ELs in acquiring fluency in English. The acquisition of a large sight vocabulary assists students in reading and learning from context (Grabe, 1991). The use of repeated readings, teacher modeling, and progress monitoring are effective in improving the fluency of ELs (Argüelles, 2005). Recorded books and buddy reading are also ways fluent reading can be modeled for ELs.

FOR FURTHER INFORMATION, REFER TO APPENDIX G: FLUENCY.

FOR FURTHER INFORMATION THAT SUPPORTS READING INSTRUCTION FOR CULTURALLY AND LINGUISTICALLY DIVERSE STUDENTS, ACCESS THE WIDA STANDARDS FRAMEWORK AT [HTTP://WWW.WIDA.US/STANDARDS/](http://www.wida.us/standards/)

VOCABULARY DEVELOPMENT

Lehr, Osborn, and Hiebert (2004) define vocabulary as the “knowledge of words and word meanings.”

There are four types of vocabulary:

- **Listening:** Words needed to understand what is heard
- **Speaking:** Words used when speaking
- **Reading:** Words needed to understand what is read
- **Writing:** Words used in writing

(Nagy & Scott, 2000)

Vocabulary influences reading. When young children have large oral vocabularies, they are more easily able to analyze the representation of the individual sounds of those words (Goswami, 2001; Matsala & Walley, 1998), thus linking word knowledge to phonological awareness. Beginning readers thus draw on their word knowledge to decode words in print, linking word knowledge to word identification. When a reader recognizes a word and understands its meaning, the “mapping” of the spoken sounds to words in print makes sense and is reinforced. “One of the most enduring findings in reading research is the extent to which students’ vocabulary knowledge relates to their reading comprehension” (Lehr et al., 2004; Baumann et al., 2003; Anderson & Freebody, 1981; Becker, 1977).

How Vocabulary Knowledge Develops

Early language experiences influence reading acquisition. When young children hear language and are encouraged to use and experiment with it themselves, they are more likely to achieve early reading success (Dickinson & Tabors, 2001; Storch & Whitehurst, 2002). Children enter kindergarten with individual vocabularies that reflect the following:

- The level of parental language support and encouragement
- Influences from other sources of language, such as caregivers or preschool experiences
- Each child’s own ease at acquiring words (Biemiller, 2003)

When children begin school they become aware of the multiple registers of the English language: the levels or styles of language usage appropriate for different situations, topics, and activities. As their literacy skills progress, children gain experience and begin to understand the differences between conversational (oral) and written language. These differences include considerations of vocabulary, syntax, purpose, and the “pervasive power of word choice as a communication tool” to accomplish the task of making meaning (Scott & Nagy, 2003). Students are expected to develop different types of vocabularies, including social and academic. The complexity of vocabulary development includes the

ability to categorize words as core, literary, general academic, school-task associated, and content-specific (Hiebert, 2008).

Word learning is considered developmental because vocabulary continues to grow across the school years (Johnson & Anglin, 1995; Roth et al., 1996). Studies indicate that students add approximately 2,000 to 3,500 distinct words to their reading vocabularies every year (Anderson & Nagy, 1992; Anglin, 1993; Beck & McKeown, 1991). The average number of root word meanings acquired every year is approximately 600 for the period extending from infancy through the end of elementary school (Biemiller & Slonim, 2001). However, research findings demonstrate that students at the end of second grade exhibit vocabulary differences, which can amount to more than 3,000 root words between students with large vocabularies and those with small vocabularies.

Learning new words is not easy, and students learn words for many different reasons and demonstrate varying levels of understanding, which in turn is determined by the subject area, the task at hand, and the word itself. Graves (2000) notes that successful word learning takes place when a student learns *about* words and does not simply memorize or “acquire” them. The goal of vocabulary development is to help students “cultivate” new words by building meaning; these students personalize their learning and use multiple sources of information to construct and expand their knowledge (Blachowicz & Fisher, 2007). Nagy and Scott (2000) offer several tenets for vocabulary development:

- Word knowledge is complex: knowing a word is more than being able to recite its definition.
- Word learning is incremental: it represents an accumulation of knowledge over time (school career). Students need many exposures in different contexts.
- Word knowledge is multidimensional: many words have multiple meanings and serve different functions in different texts.
- Word knowledge is interrelated: knowledge from one word connects to knowledge about other words.
- Word knowledge relies on multiple sources: definitions, context, and word parts each provide important information about a word; however each source has limitations.

FOR FURTHER INFORMATION, REFER TO THE [RHODE ISLAND EARLY LEARNING STANDARDS](#) AND THE [COMMON CORE STATE STANDARDS FOR LANGUAGE \(VOCABULARY ACQUISITION AND USE\) \(K-5\)](#) AND [\(6-12\)](#) AND [READING STANDARD #4](#).

Implications for Classroom Instruction

One goal of vocabulary development is to create student ownership of newly learned words. Ownership moves the words into the student’s own vocabulary, and newly learned words become evident in student discussions and writing (Blachowicz & Fisher, 2007). In order to achieve this goal, students need to learn extensive information about words and be able to make connections between the word (label) and the concept it represents (Tompkins, 2003).

Word-learning tasks differ and depend on what students already know about the words being learned and on what they are expected to do with the words afterwards. This process includes several types of learning, which involve the following:

- **Known words.** Students recognize the word, know what it means when they hear someone say it, and can use it orally; however, they do not recognize its written form.
- **Known concept words.** Students have a concept related to the word; however, they are not familiar with the word in either oral or written form.
- **New meaning for known words.** Students know the word; however, they are unfamiliar with the way the word is being used and its meaning in a particular situation.
- **New concepts.** Students have little or no background knowledge about the concept underlying the word, and they do not recognize the word itself. This learning is most difficult because students must first learn the concept and then attach the correct label—the word itself.

(Graves, 2006)

By the end of kindergarten, students continue to hear new words and use these words in dialogue, both in and out of school. Students demonstrate their understanding of words by answering questions and explaining concepts about the words and with the words (Blachowicz & Fisher, 2007). Deeper understanding of words is revealed by the student’s ability to categorize, clarify and explain, and use subject-specific words. When students begin to read independently, they should also be able to demonstrate the use of independent word-learning strategies.

Over time and with experience, students develop depth and breadth of vocabulary as their word knowledge expands (Blachowicz & Fisher, 2007):

- **Depth** describes how much is known and understood about a particular word (in conversation and reading). The ability to use examples of the word itself (“my *birthday* is a *celebration*” or “the *carp* belongs to the phylum *Chordata*”) enhances depth of word meaning.

Implications for Classroom Instruction

- **Breadth** explores how a word is connected to other words in a domain of learning (“a *pen*, is a *writing utensil*, as is a *marker*, a *crayon*, and a *pencil*” or “the *genre* of a novel helps determine its *diction* and *tone*”). Effective instruction is the vehicle for such vocabulary development.

Blachowicz and Fisher (2007) confirm the guidelines of the National Reading Panel in their description of components that enhance vocabulary development:

- **A word-rich environment** where students are immersed in words, develop word awareness, and create ownership of words
- **Specific opportunities** for both incidental and intentional word learning
- **Teacher modeling** of effective word-learning behavior and the use of various strategies for determining word meaning
- **Explicit instruction** for important content- and concept-vocabulary learning

Vocabulary is developed both directly (intentionally) and indirectly (incidentally). Both intentional and incidental word learning are critical elements of vocabulary development. To support both modes for students, comprehensive vocabulary instruction combines strategies that teach specific words, that teach approaches to learning words independently, and that support the development of an appreciation for words in many contexts (Baumann et al., 2003). Of course, providing feedback to students as they use new vocabulary words in conversation and writing helps to deepen their understanding of those new words across content areas (Blachowicz & Fisher, 2007).

Incidental word learning involves the following kinds of activities for students:

- Engaging in daily oral language with articulate adults
- Listening to adults read to them (Meyer et al., 1994)
- Reading extensively on their own
- Participating in peer conversations/social interactions
- Talking about words during “read-aloud” sessions (Anderson, 1996)

The amount of reading a student does is the prime contributor to individual differences in students’ vocabularies (Hayes & Aherns, 1988; Nagy & Anderson, 1984; Stanovich, 1986). Not the quantity of the books read per year is important but rather the number of words read.

Implications for Classroom Instruction

According to Anderson, Wilson, and Fielding (1988), the average fifth grader reads about 600,000 words a year from books, magazines, and newspapers outside of school. If a student reads fifteen minutes a day in school, that student can be exposed to another 600,000 words of text, making the total volume of reading for a typical fifth grader over one million words per year. Unquestionably “the single most important thing a teacher can do to promote incidental vocabulary growth is to increase students’ volume of reading” (Nagy, 1988).

Intentional word learning (teacher-directed, everyday activities) involves the following:

- Studying words in texts
- Learning content-area terms
- Applying word-learning strategies

“Knowing a word is not an all-or-nothing proposition: it is not the case that one either knows or does not know a word. Rather, knowledge of a word should be viewed in terms of the extent or degree of knowledge that people can process” (Beck & McKeown, 1991). Students need to encounter words with great frequency, at least twelve meaningful interactions (not just two or three), before they will know the word well enough to have an impact on their comprehension (McKeown et al., 1985). The type of instruction that ensures this frequency sets up conditions that encourage students to use new words across all contexts.

However, Biemiller (2003) raises an important issue that must be considered when teachers are planning vocabulary instruction: students enter a grade with different vocabulary sizes and background knowledge. Each child needs to learn “somewhat different” words, and students with smaller vocabularies need instruction that is different from the instruction needed by students with larger vocabularies. Additionally, when English language learners are studying vocabulary, they need explicit instruction in utilizing cognates—those words that look similar and that have meaning that is similar in two languages (Kieffer & Lesaux, 2007).

The long-range goal of vocabulary instruction is to develop students’ word consciousness. Scott and Nagy (2003) define the concept of “word consciousness” as “the knowledge and dispositions necessary for students to learn, appreciate, and effectively use words. Word consciousness involves several types of metalinguistic awareness, including sensitivity to word parts and word order.” Efforts to develop word consciousness require activities that are motivational and that provide opportunities for students to enjoy language on many levels (Graves & Watts-Taffe,

Implications for Classroom Instruction

2002). This type of learning can only occur in classrooms where teachers themselves model curiosity about words and exhibit word-learning behavior (Hiebert, 2008).

Research confirms that, in general, effective instruction incorporates a combination of instructional techniques (Baumann et al., 2003; Beck & McKeown, 1991; Blachowicz & Fisher, 2000; Nagy & Scott, 2000). Listening and speaking also provide more opportunities for rich language experience (Graves, 2006). An effective program of vocabulary instruction encompasses four approaches (Graves & Watts-Taffe, 2002):

- **Opportunities for extensive and wide-ranging reading.** Shared book reading provides opportunities for incidental word learning. Storybook reading with an explanation of specifically targeted words can be used to teach vocabulary in primary grades (Brabham & Lynch-Brown, 2002; Biemiller, 2003; Penno et al., 2002). This practice is particularly effective when used with children who have not yet developed their independent reading skills.

Follow-up discussions about texts that are read provide students with multiple opportunities to interact with the target words in meaningful contexts and beyond the reading of a particular text (Wasik & Bond, 2001). “Talk” incorporated into read-alouds helps students to focus on the language that represents the ideas and concepts in the text (Beck & McKeown, 2001).

A meta-analysis by Lewis (2002) determined a moderately strong, positive relationship between in-school independent reading and reading achievement. This is especially true for all students learning new content, primary-level readers, struggling readers, and English language learners. Independent reading also contributes to “a wide, flexible, and usable general vocabulary” (Blachowicz & Fisher, 2007).

Primary school teachers need to be mindful of the fact that most of the words in the texts that their students read independently are words contained within their own oral vocabularies (McKeown & Beck, 2003). This presents a dilemma for word learning because familiarity with these words allows students to read and comprehend the text; however, vocabulary growth is limited. This problem can be addressed, however, by carefully selecting in-class readings that contain new vocabulary words, introducing and following up the readings with conversations about those words.

- **Teaching individual words and meanings.** Some words, especially those that are critical to the understanding of a literary selection or of a concept in informational text, require intentional and explicit instruction (Lehr et al., 2004). There are three levels of word

Implications for Classroom Instruction

knowledge: unknown, acquainted, and established (Beck et al., 1987). Teachers will want to be clear on where targeted vocabulary fits into their student's knowledge levels.

Beginning readers need instruction in identifying and sorting (or categorizing) common words, describing common objects and events with specific language, and classifying words. Learning the structure of words at the syllable and morpheme levels supports this kind of word recognition, as well as spelling and vocabulary development (Nagy & Anderson, 1984). As students progress through the grades, vocabulary instruction necessarily becomes more sophisticated and complex (Honig et al., 2000).

After extensive research, Beck, McKeown, and Kucan (2002) maintain that a person's vocabulary is comprised of three tiers of words: the first tier consists of the most basic words, which do not require instructional attention; the second tier consists of words considered to be of high frequency, can be found in a variety of domains, and play a large role in language expression; and the third tier consists of words specific to a content area or field of study. Instruction should focus on tier two words because of their utility in all types of texts and on tier three words because of their specificity and close ties to the development of content knowledge.

Individual word instruction should utilize active learning techniques that provide meaningful, multiple experiences (Graves, 2006; Beck et al., 2002; Nagy, 2005). Research confirms that incorporating students' prior knowledge and comparing word meanings are two approaches that are likely to be effective (Beck & McKeown, 1991; Baumann et al., 2003).

However, instruction is most beneficial when teachers select vocabulary words based on their usefulness. The following suggestions from Ellis and Farmer (2003) offer guidelines for selecting vocabulary words to be learned:

- Teach fewer vocabulary words, but teach for deeper understandings of each word. Less is more; depth is more.
- Teach terms that are central to a unit of study.
- Teach terms that address key concepts and ideas.
- Teach terms that will be used repeatedly throughout the semester.

Instruction of word-learning strategies. Word-learning strategies are tools that help students gain information about words (Blachowicz & Fisher, 2007). In order to use word-learning strategies, students need to understand how word structure, word references, and word context can help them learn more about word meanings:

Implications for Classroom Instruction

- **Word structure:** The spelling of a word represents its orthography, the sound and meaning structure. Using word parts—such as prefixes, suffixes, and roots—to break a word apart helps students learn and remember word meanings (Carlisle, 2000).
- **Word references:** The dictionary is an important resource for word learning. Students need explicit and supportive instruction in using this valuable tool (Blachowicz & Fisher, 2007), as well as in selecting dictionaries that are appropriate for their age and experience (Graves, 2006).
- **Word context:** Context can support word recognition for those words that students already know but that are not part of the student’s active vocabulary; context can also provide clues about the meaning of a word that is entirely new to the student (Kuhn & Stahl, 1998). However, single exposures to a new word in even the most helpful of contexts will rarely result in any lasting word learning (Baldwin & Schatz, 1985). Students need direct instruction in strategies for how to use context to understand words and secure their meanings.

Most importantly, teaching word-learning strategies ought to follow an evidence-based sequence of instruction, similar to the following (Duke & Pearson, 2002):

1. The teacher explicitly describes the strategy and elaborates about when and how it should be used.
 2. The teacher, then student, models the strategy in action.
 3. The teacher provides opportunities for collaborative practice of the strategy.
 4. The teacher provides opportunities for guided practice of the strategy—the gradual release of responsibility.
 5. Students use the strategy independently.
- **Opportunities to Foster Word Consciousness.** Rich language environments do not guarantee that students will develop word consciousness. However, a word-rich classroom is a first step. Developing word consciousness requires “classrooms, where new vocabulary is presented in rich listening and personal reading experiences, time is taken to stop and discuss new words, language is part of all activities, and words, dictionaries, puzzles and word games, word calendars, books on riddles, and rhymes round out the environment for enthusiastic word learning” (Blachowicz & Fisher, 2007).

In general, teachers can continuously build vocabulary knowledge by directly instructing their students in the use and meaning of antonyms, synonyms, prefixes, suffixes, multiple meanings

Implications for Classroom Instruction

of words, shades of meaning, the use of resources (e.g. dictionary, glossary, thesaurus), knowledge of word origins, derivations, root words, analogies, idioms, and figurative language to determine related words and concepts (Honig et al., 2000).

Words that are conceptually difficult or that represent complex ideas that are not part of students' everyday experience must be intentionally taught (Baumann & Kame'enui, 1991; Nagy, 1988). This intentional instruction—often referred to as the “conceptual approach”—involves teaching concepts and labels that enable a deeper understanding of content. In support of this effort, Anderson and Nagy (1992) assert that new terms should be defined using language and examples already familiar to the students. The more ideas from their own background knowledge (schema) that they associate with the new concept, the more likely students are to remember it (Ellis & Farmer, 2003).

Allen (1999) confirmed the following effective practices for building content-area vocabulary instruction:

- Activating and building background word knowledge
- Making word learning meaningful
- Building concept knowledge
- Using word and structural analysis to create meaning
- Using context as a text support
- Making reading the heart of vocabulary instruction

English learners (ELs) need instruction in vocabulary to build semantic knowledge (Garcia & Nagy, 1993). Extensive and varied vocabulary instruction is essential to an EL's academic achievement and should include the meaning of everyday words that native speakers know but that are not necessarily part of the academic curriculum (Gersten et al., 2007). Teachers can provide ELs with the extensive vocabulary support they need through pre-teaching, modeling, and visual aids (Honig et al., 2000). These strategies help to build deep conceptual knowledge in English. In addition, Goldenberg (2007) notes that ELs benefit greatly from learning new words when the words are taught within meaningful contexts and when the students are given multiple exposures to the word and numerous opportunities to use them. Making use of visual clues and graphic organizers also helps convey meaning and allows both teacher and student to check for understanding. These organizers can include semantic webs, graphs, charts, maps, timelines, and diagrams.

FOR FURTHER INFORMATION, REFER TO APPENDIX H: VOCABULARY.

FOR FURTHER INFORMATION THAT SUPPORTS READING INSTRUCTION FOR CULTURALLY AND LINGUISTICALLY DIVERSE STUDENTS, ACCESS THE WIDA STANDARDS FRAMEWORK AT [HTTP://WWW.WIDA.US/STANDARDS/](http://www.wida.us/standards/)

TEXT COMPREHENSION

Readers find meaning when they engage in intentional, problem-solving thinking processes that occur when interacting with a text (Durkin, 1993). “Meaning’ does not reside ready-made ‘in’ their text or ‘in’ the reader but happens or comes into being during the transaction between reader and text” (Rosenblatt, 2005). Meaning is influenced by the text and by the reader’s prior knowledge (Anderson & Pearson, 1984). While the ability to read text accurately and fluently is one of several proficiencies that a skilled reader possesses (Torgesen et al., 2007), fluent reading does *not* ensure good reading comprehension (Paris et al., 2005).

Comprehension begins early in life as children engage in a rich language environment, which includes listening to and retelling parts of a story (McGill-Franzen et al., 1999). These practices have demonstrated substantial positive impact on children’s early literacy development. Pearson and Fielding (1982) discuss the importance of developing *listening* comprehension as a prelude to formal reading comprehension instruction. They assert that young children should be given direct instruction in listening comprehension or, at the very least, ample opportunities to listen to stories, rhymes, songs, and so forth. Because comprehension abilities that are developed in the listening mode often transfer to text comprehension, developing listening comprehension at all grade levels leads to improved text comprehension. Oakhill and Cain (2007) state the following:

Skills in spoken language comprehension serve as a foundation for developing reading comprehension, but do not in themselves guarantee success in reading. Clearly, reading comprehension depends on listening comprehension: In order to read a language with adequate comprehension, one has to understand that language in its spoken form. Therefore, general language comprehension will constrain the development of reading comprehension. Although there is a relation between reading and listening comprehension, the strength of the relationship changes with age. (pp. 3–4)

As they mature over time and with experience, proficient readers are eventually able to comprehend both literature and informational text. In order to develop into this kind of reader by the end of elementary school, students must be able to identify the words on the page accurately and read them fluently. Further, they must possess a body of knowledge large enough to help them understand the words, sentences, and paragraphs strung together to explain and relate concepts. Finally these students must be engaged in thinking and motivated to use their knowledge to understand and learn from text (Torgesen et al., 2007). A concise description of a reader skilled in comprehension is provided by Pressley, Gaskins, and Fingeret (2006):

Excellent comprehenders overview text and scan it. They relate their prior knowledge to ideas in the text. They notice when they are confused or need to reread and do so. They construct images in their mind's eye reflecting the content of the text. Good readers summarize, and they interpret, often with intense feeling, rejecting or embracing the ideas of an author. Such reflective reading, actually, can be pretty slow. Speed in reading and accurate word reading are not the goals. Understanding, appreciating, and thinking about the ideas in text are. (p. 47)

These readers also develop the flexibility and stamina required to complete the complex task at hand (Blachowicz & Ogle, 2008). Reading comprehension requires active thinking and strategic processing (Anderson et al., 1985), and the process of comprehension itself is interactive (Anderson & Pearson, 1984), since meaning does not exist in the text but is actively constructed (Snow et al., 2001). "Every reading act is an event or a transaction with the text" (Rosenblatt, 1994).

Comprehension is actually a process that involves strategic action before, during, and after reading if learning is to take place. Before reading, the student sets a purpose for reading, makes predictions, or formulates questions. During reading, the student may have his or her predictions confirmed and questions answered; however, the student may also reformulate or add questions and predictions. A "good comprehender" also self-regulates by monitoring his or her understanding, clarifying confusions, and repairing comprehension. After reading, the student reflects on the reading and summarizes or synthesizes the new information. The student's comprehension is deepened by a process that involves building knowledge, actively reading for specific purposes, and applying the new knowledge gained.

Three types of comprehension processing are identified by Block, Rodgers, and Johnson (2004). The first type is literal processing, which serves as a prerequisite for inferential comprehension and entails such tasks as mining facts and details from the text and recognizing the author's purpose. Generally the information readers are looking for is directly articulated in the text. The second type is inferential

processing, which requires readers to combine textual information with their own background knowledge and thoughts to draw from the text ideas, information, and conclusions that are not directly stated. The third type, metacognitive processing, affords readers an opportunity to think about their own thinking and the way they process the text.

Metacognitive readers are strategic. They are able to control their reading and employ a variety of strategies to ensure that they understand what they read. These strategies involve actions that readers often consciously control, although certain strategies also may be applied unconsciously when the reading materials are easy or when the reader is skilled in using a specific strategy (Blachowicz & Ogle, 2008). Successful readers select strategies that fit the kind of text they are reading and their purpose for reading (Honig et al., 2000).

According to research (Pearson et al., 1992; Pressley et al., 1989; Keene & Zimmermann, 1997; Zimmermann & Hutchins, 2003; Harvey & Goudvis, 2000), certain key thinking/comprehension strategies should be explicitly taught because they lead to deeper text comprehension. "Research has focused on identification and instruction of such strategies because poor readers seem to lack them and be unaware of when and how to apply the knowledge they do possess. . . . Paris, Cross and Lipson (1984) concluded that students can be taught about the existence of reading strategies through informed direct instruction. Duke and Pearson (2002) suggest that a model of comprehension instruction should include explicit description, modeling, collaborative use, guided practice, and independent use of the selected strategy" (Schmar-Dobler, 2003). Moving beyond the findings of the National Reading Panel, Block and Duffy (2008) provide a list of strategies that "have been researched and validated to be highly successful since 2000":

- **Predict.** Size up a text in advance by looking at titles, text features, sections, pictures, and captions, continuously updating and re-predicting what will occur next in a text.
- **Monitor.** Activate many comprehension strategies to decode and derive meaning from words, phrases, sentences, and texts.
- **Question.** Stop to reread and initiate comprehension processes when the meaning is unclear.
- **Image.** Construct meanings expressed in the text by wondering, noticing, and generating mental pictures.
- **Look-backs, rereads, and fix-it strategies.** Continue to reflect on the text before, during, and after reading, continuously deciding how to shape the knowledge base for personal use.
- **Infer.** Connect ideas in text based on personal experiences, knowledge of other texts, and general world knowledge, making certain that inferences are made quickly so as not to divert attention from the actual text but to help the reader better understand it.

COMPONENTS OF LITERACY: READING

- **Find main ideas, summarize, and draw conclusions.** Make sure to include information gained from story grammar or textual features; if students can't make a valid summary of information read to date, this is a signal to go back to reread.
- **Evaluate.** Approach a fictional [literary] text expecting to (and making certain that students do) note the setting, characters, and story grammar early on, with problems, solutions, and resolutions to occur thereafter. Approach an informational text attending to textual features, unique types/presentations of information, or arguments and claims based upon support.
- **Synthesize.** Approach an informational text watching for textual features; accessing features, unique types of information, sequence of details, and conclusions; and combining all of these to make meaning. Approach a fictional text describing a story or drama's plot in a series of episodes, or analyze the characters' response to change as they move towards resolution.

Proficient text comprehension is influenced by several factors, which Torgesen (2005) concisely outlines:

- Accurate and fluent word-reading skills
- Oral language skills
- Conceptual and factual knowledge
- Reasoning and inferential skills
- Knowledge and skill in use of cognitive strategies
- Motivation to understand and interest in task and materials

FOR FURTHER INFORMATION, REFER TO THE [RHODE ISLAND EARLY LEARNING STANDARDS](#) AND THE [COMMON CORE STATE STANDARDS FOR READING \(K-12\)](#) AND [LITERACY IN HISTORY/SOCIAL STUDIES, SCIENCE, AND TECHNICAL SUBJECTS \(6-12\)](#).

Text Types

Instruction to prepare students to meet the goals articulated in the *Common Core State Standards* in reading begins in kindergarten and encompasses both literature and informational texts. Duke and Pearson (2002) maintain the following:

- Teaching students how to read literature helps them organize their story understanding and recall.
- Teaching students how to read informational texts provides opportunities to experience the different organizational structures used. Knowledge of these structures helps students learn to use the structural features as supports for understanding and recalling information.

Literature is a form of writing in which the author tells a story, either factual or fictional, in prose or verse (Harris & Hodges, 1981). Explicit instruction of literature focuses on the elements of narrative text. These structures/elements include characterization, setting, plot, theme, mood, resolution, and so forth. Subplots, minor characters, and/or minor themes are frequently present in more complex texts.

Informational text is a form of writing that is intended to inform the reader about a topic. It reports factual information and the relationship among ideas. Often dense with much information and unfamiliar technical vocabulary, informational texts may feature many different structures within a single document (American Federation of Teachers, 2005). Informational texts require students to perform complex cognitive tasks to extract and synthesize content (Lapp, Flood, & Ranck-Buhr, 1995). Beginning in kindergarten and throughout their school career, students require explicit instruction about expository text structures that are generally used in informational texts. Anderson and Armbruster (1984) have identified the following logical structures that, when directly taught, support reading comprehension with informational texts:

- Compare-contrast
- Cause-effect
- Description-classification
- Problem-solution
- Question-answer
- Sequence

Because students' awareness and understanding of text structure plays a key role in reading comprehension (Kame'enui et al., 2002), teaching text structures is part of effective comprehension instruction. An understanding of text structures gives students insight into the author's message and leads to more efficient and effective comprehension. Students need to learn what the characteristics of these structures are and the words that signal a particular type of structure. Each text structure makes different demands on the reader, and all of them require explicit instruction.

Because they place different demands on readers, different text structures affect comprehension (Dickson et al., 1998). Skilled readers learn to distinguish among different structures and use their knowledge of these distinctions to support their comprehension. To learn how to work with these different structures in texts, students need to experience a variety of reading materials that present an appropriate level of challenge (Shanahan, 2008).

COMPONENTS OF LITERACY: READING

Teaching reading comprehension is uniquely challenging because of the variety and range of texts that students interact with across their school careers, and especially because the act of constructing and expressing meaning occurs across multiple forms (e.g., digital, visual, spoken, printed). Pearson, Raphael, Benson, and Mada (2007) advocate for the definition of literacy to expand beyond “the reading and writing of printed text,” because a digitally literate learner is one who is able to use, comprehend, and manipulate computer-related content and processes in order to accomplish personal, academic, and social goals (Labbo, 2004).

Being able to read complex text independently, proficiently and with deep understanding is essential for academic achievement. Implementation of the *Common Core State Standards* fosters a shift in thinking about texts and multiple levels of complexity. The Standards’ Model of Complexity maintains that three equal parts contribute to the complexity of a particular text:

- **Qualitative dimensions** are those aspects of complexity measurable by an “attentive human reader” and include levels of meaning or purpose, structure, language clarity, and knowledge demands.
- **Quantitative dimensions** are typically measured by computer software and include aspects such as word length or frequency, sentence length, and text cohesion.
- **Reader and task considerations** focus on the reader and the task. Reader variables include motivation, knowledge, and experience. Task variables consider the purpose and complexity of the task or questions posed.

(Common Core State Standards Initiative, 2010)

Across a student’s school career, increasingly complex pieces of literature and informational texts must be considered deeply. All text types need to encompass a range of cultures and periods. Students should experience within this range of texts a “deep reading” of stories, dramas, and poetry; informational text selections should include the range of literary nonfiction, as well as historical, scientific, and technical texts.

FOR FURTHER INFORMATION ON TEXT COMPLEXITY, REFER TO APPENDIX I IN THIS DOCUMENT AND THE *COMMON CORE STATE STANDARDS*: [APPENDIX A \(READING\)](#), [APPENDIX B \(TEXT EXEMPLARS\)](#).

Implications for Classroom Instruction

Listening and reading comprehension both require thinking about language. While teachers often substitute listening lessons for reading comprehension instruction, this tactic will only “get you through the book” (Shanahan, 2008); it does not facilitate the teaching of reading.

Skillful reading comprehension requires time and repeated opportunities to build stamina by reading, writing, talking, and thinking about text. Duke and Pearson (2002) emphasize that if schools are to develop strong and flexible comprehenders, students must have supportive classrooms and effective teaching that include the following:

- **Time spent actually reading.** Students need experience applying their knowledge, skills, and strategies during actual reading.
- **Reading real texts for real reasons.** Students need experience reading authentic texts (not just texts designed for reading instruction), including reading text with a clear purpose in mind.
- **Reading a range of text genres** (e.g., fiction, history, memoir, poetry, how-to manuals). Students need experience reading in a variety of genres and types of text, both narrative and informational.
- **An environment rich in vocabulary and concept development.** Students need experience, they need to read, and they need to discuss what they’ve read in order to comprehend text and make connections to their relevant prior knowledge. Well-chosen texts are as valuable as experiences for building a reader’s knowledge base.
- **Time spent writing for others to comprehend.** Students need practice in writing in a variety of genres to reinforce comprehension. Developing students’ ability to “write like a reader and read like a writer” fosters the connection between reading and writing.
- **Experience high-quality talk about text.** Students need to participate in teacher-to-student talk and student-to-student talk about texts. Discussions about texts should occur on several levels, from clarifying specific material to drawing conclusions to making connections among texts, experiences, and reading goals.

The successful application of comprehension strategies distinguishes a proficient reader from a struggling reader. Collectively, these strategies form the foundation of effective instruction in reading comprehension. When activities are intentionally designed and carefully implemented to support the understanding of the texts that students are reading, these activities improve student comprehension (Pearson & Duke, 2001). This instruction teaches students to use strategies flexibly and in combination.

Implications for Classroom Instruction

Strategies used *before, during, and after* reading must be directly and explicitly taught (separately, then in combination) over an extended period of time. Effective instruction models *what* each strategy is; *why* it is important; and *how, when, and where* to apply it.

As students learn how and when to use a selected strategy or combination of strategies, they need guided practice and scaffolded instruction. This instruction should be distributed across strategically selected pieces of literature and informational texts. Reading aloud and guided reading activities allow teachers to provide instruction that models these strategies and that can also emphasize higher-order thinking and discussion skills. Thoughtful and intentional comprehension instruction also incorporates opportunities for writing in response to reading. In particular, teaching strategies within content areas enables students to become proficient, self-regulating strategy users (Snow et al., 2005).

As the demands on readers evolve, Leu, Kinzer, Coiro, and Cammack (2004) offer advice about instructional considerations for new literacies:

While it is clear that many new literacies are emerging rapidly, we believe the most essential ones for schools to consider cluster around the Internet and allow students to exploit the extensive ICTs [information and communication technology] that become available in an online, networked environment. In an information age, we believe it becomes essential to prepare students for these new literacies because they are central to the use of information and the acquisition of knowledge. (*Literacy for the 21st Century*, 2003, p. 222)

These authors further maintain that student use of ICTs supports the following comprehension processes:

- Identifying questions
- Locating information
- Evaluating the usefulness of the information
- Synthesizing information to answer questions
- Communicating the answers to others

McKenna, Labbo, Reinking, and Zucker (2007) remind teachers that the computer is a tool for thinking, learning, and communicating. Any computer-related activities, just like traditional literacy activities, must support students' learning goals and be woven into the fabric of the

Implications for Classroom Instruction

classroom. They offer opportunities for collaborative activities that can serve to scaffold learning and provide practice. As well, technology can serve as a powerful tool for supporting the diverse needs of learners.

Responding to Text

Skilled readers are able to understand, appreciate, and think about the ideas presented in a text (Pressley et al., 2006). Booth and Swartz (2004) conclude that “what students do after reading should relate directly to what they have read and what they need to do.” Primary students in particular need to construct representations of what they understand and incorporate their understandings into an expanding knowledge base (Block et al., 2004). Simply stated, responding to text demonstrates comprehension.

Opportunities to respond to a text should take place in a variety of settings that encourage interaction and promote thinking about what has been read. Teachers need to purposefully structure occasions for students to talk and write (or draw) in meaningful contexts. Response activities should also promote further reading, writing, speaking, and listening (Booth & Swartz, 2004).

Discussion. Talking about a text helps activate and build background knowledge. As students share thoughts and ideas, they learn from each other. Discussion, whole class or small group, fosters clarification and extends the meaning of the text (Booth & Swartz, 2004). This activity also promotes language use (to express thoughts and opinions) and listening skills (in order to interact). Blank (2001) asserts that four principles should govern teacher-student discourse:

- There needs to be a high level of redundancy of key ideas and information. The sustained examination of main ideas and information is essential to student learning. Major points need to be repeated; however, this repetition should be structured so that the information is presented in various wordings and/or through a variety of materials. This process helps ensure student attention and influences motivation.
- Comments should be used to make implicit information explicit. Most of the teacher’s input should involve providing missing information. Teacher comments should restate, elaborate, or summarize information.
- Varied questions should represent a smaller percentage of teacher participation. During discussion, questions serve to focus students on processing the information being discussed.

Teachers should develop questions that (1) can be easily answered, (2) do not include assumptions about previously acquired knowledge, and (3) require high-level processing (e.g., prediction, inference, connection) about the ideas presented in the text.

- When appropriate, the use of visual aids should be incorporated to scaffold and support the acquisition of new information.

Students also need time to reflect on the text and reformulate ideas as the discussion continues and to construct meaning from the text by returning to it to clarify and support their learning (Booth & Swartz, 2004). English learners need additional time to process both the language load and the content.

Written responses. Writing in response to reading encourages students to think critically and make judgments. Furthermore, it focuses the student's attention on literacy skills and their value. Teachers need to encourage and promote methods and scaffold skills for examining content through writing (Booth & Swartz, 2004). The following writing tasks serve to support these efforts:

- **Retelling.** The process of retelling allows students to
 - **scaffold** the interpretation in order to create personal meaning,
 - **explore** the language of literacy, and
 - **reinforce** communication skills.

"The degree of detail provided and the general coherence of the retelling are used to gauge comprehension" (McKenna & Stahl, 2003).
- **Answering questions.** Three types of questions should be used during instruction and assessment: (1) literal questions that require students to recall specific information that was explicitly stated in the text; (2) inferential questions, where the reader must make logical connections among the facts because the answer is not directly stated within the selection; and (3) critical questions that require the reader to make value judgments (McKenna & Stahl, 2003).
- **Summary writing.** Developing a written summary improves and enhances general comprehension of the text read (Pressley & Woloshyn, 1995). As students write summaries, they state the text's "big ideas" at the beginning of the paragraph and support these points by adding supporting details (Tompkins, 2003). McKenna and Stahl (2003) reiterate why summary writing is effective:

One reason summary writing is so effective is that it compels students to transform content into their own words and expressions; doing so requires active thought. Another reason is that students must make repeated judgments about the relative

importance of ideas. They must separate main ideas from details and string the main ideas together into a coherent account. (p. 180)

Teachers need to encourage their ELs to use a variety of strategies for constructing meaning and to see their bilingualism as an asset (Peterson et al., 2003). When teachers model thinking and analytic processes (e.g., think-alouds: strategies that involve the teacher expressing thoughts out loud to model for students how to think about the more complex issues that arise when reading) to teach comprehension strategies, they provide ELs with the explicit instruction they need in specific strategies for understanding a text, before, during, and after reading. Another important strategy to support literacy in ELs is read-alouds, which expose ELs to complex texts that they may not yet be able to access independently. Cooperative learning can also drive language learning and increase text comprehension, particularly when it is structured and extended.

FOR FURTHER INFORMATION, REFER TO APPENDIX J: TEXT COMPREHENSION.

FOR FURTHER INFORMATION THAT SUPPORTS READING INSTRUCTION FOR CULTURALLY AND LINGUISTICALLY DIVERSE STUDENTS, ACCESS THE WIDA STANDARDS FRAMEWORK AT [HTTP://WWW.WIDA.US/STANDARDS/](http://www.wida.us/standards/)

MOTIVATION AND ENGAGEMENT

Students' comprehension depends on (1) how well they read the words on the page, (2) how much knowledge they possess, (3) how well they think, and (4) how motivated they are to do the work (Torgesen, 2005). Simply defined, motivation is the desire to *do something*. In the context of reading development, *doing something* might be reading a picture book, participating in a discussion, or learning about photosynthesis (Gaskins, 2003).

Motivation is one predictor of reading success (Snow et al., 1998). Positive expectations about and positive experiences with literacy serve to foster motivation at an early age. Most children begin school with a positive attitude and expect to be successful. However, children who struggle with reading as early as the first grade decide that they do not like to read and they do not want to read (Juel, 1988). Children need to develop and *maintain* the motivation to read (Leipzig, 2001). A motivated reader does the following:

- Appreciates the pleasures of reading
- Views reading as a social act
- Uses reading as an opportunity to explore interests
- Reads widely for a variety of purposes
- Works comfortably with a variety of written forms and genres of text

Guthrie and Humenick (2004) reiterate the types of motivation confirmed by research:

- **Extrinsic (external) motivation** focuses the student’s cognitive efforts in the pursuit of prizes, incentives, or recognition. This type of motivation depends on an external source (e.g., teacher, peers, computer software) to deliver benefits, such as grades, points, or prizes.
- **Intrinsic (internal) motivation** focuses the student on the reading activities at hand; the completion of these tasks satisfies the student’s needs and interests. The student values reading and embraces the goal of reading well.
- **Self-efficacy** is the student’s personal belief in his or her skills and capability. The student approaches reading tasks with confidence, expecting to master difficult words and texts. Without self-efficacy, a reader cannot sustain the effort required to learn the skills necessary to become a proficient reader.

Earlier work (Guthrie et al., 1994) concludes that motivation actually consists of a number of factors. The following several motivations characterize students’ reading in school:

- **Curiosity:** the desire to learn about a topic
- **Aesthetic appeal:** the enjoyment of experiencing a literary text
- **Challenge:** the orientation to learn complex ideas
- **Recognition:** the tangible gratification one receives from success in reading
- **Grades:** favorable evaluations from a teacher

The first three—curiosity, aesthetic appeal, and challenge—are factors linked to intrinsic motivation; whereas recognition and grades represent external motivation. Malloy and Gambrell (2008) conclude that “the most basic goal of any comprehension program is the development of highly motivated readers who *can* read, and who *choose* to read for pleasure and information.”

Research has shown that support from the home environments and from a parent (or another adult) is important to literacy development (Durkin, 1966; Hall & Moats, 1999). These studies focused on the acquisition of reading skills. “McKenna, Kear, and Ellsworth (1995) surveyed children’s attitudes toward reading and concluded that children’s views of recreational and academic reading are tied to reading ability as well as to community norms and beliefs” (Strommen & Mates, 2004). Without motivation, “the difficult work of cognitive learning does not occur rapidly, if it occurs at all” (Guthrie & Wigfield, 1997).

Motivation Influences Engagement

Skilled readers recognize the purpose of reading and value its benefits—the way that reading adds to their experiences, helps to shape and inform their attitudes, and enlarges their perspective on the world (Texas Education Agency, 2002). Self-direction distinguishes intrinsically motivated readers. These types of readers are engaged learners (Blachowicz & Fisher, 2004), and their authentic engagement results in enjoyment, which is highly correlated with achievement in all areas of literacy (Campbell et al., 2000).

Several components influence the “cultivation” of highly engaged readers: the desire to read, strategies to improve reading ability, knowledge, and social interactions (Alveremmann & Guthrie, 1993). A student’s purpose for reading is also closely related to motivation and engagement. Students who read purposefully are more motivated to comprehend the text: they read for the express purpose of understanding the content and thus are more interested in the text, are more engaged during reading, and gain more conceptual knowledge (Guthrie & Humenick, 2004). Reading comprehension can be increased by the infusion of “engagement-supporting” practices into teachers’ instructional repertoires.

Implications for Classroom Instruction

In [Reading Next \(2004\)](#), Biancarosa and Snow conclude that “a lack of incentive and engagement . . . explains why even skilled readers and writers do not progress in reading and academic achievement in middle and high school. The proportion of students who are not engaged or motivated by their school experiences grows at every grade level and reaches epidemic proportion in high school.”

Motivated readers who are engaged in the process of reading are willing to take risks, have confidence in their abilities, and are seldom easily discouraged. “Students need both the skill and the will to become competent and motivated readers” (Gambrel, Malloy, & Mazzo, 1983). To this end, students in general want and need work (e.g., assignments, meaningful activities) that enables them to demonstrate and improve their sense of themselves as competent and successful human beings. In addition, students work harder when they see they are improving, and they are also energized by praise from teachers, parents, and peers, especially when that praise is honest and specific (Schunk & Zimmerman, 1997; Sweet, 1997; Wigfield, 1997).

A body of research (e.g., Anderman & Midgley, 1992; Gambrell & Morrow, 1996) reports the effects of engagement on instruction and concludes that a number of specific aspects of classroom

Implications for Classroom Instruction

environments and instructional practices can encourage engagement and increase comprehension. Malloy and Gambrell (2008) assert the following:

Creating a motivating instructional climate where students are ready and willing to learn, to read, to comprehend, and to compose requires a willingness on the teacher's part to get to know students' interests and needs. With this knowledge, teachers can assist students in setting goals, finding resources, developing strategies, and negotiating ways to engage with topics in personally relevant ways. (pp. 226–227)

Every teacher is called on to develop a literate community within the classroom by creating classroom climates that encourage intrinsic motivations for learning (Malloy & Gambrell, 2008). The following confirmed practices assist in this development and contribute to student motivation and engagement:

- **Collaboration.** Whether working as pairs or in groups, collaborative structures increase intrinsic motivation for academic tasks (Ng et al., 1998). Within these structures, students work together to gain conceptual knowledge, apply reading strategies, and receive feedback from peers. Reading together, sharing information, and presenting knowledge to others all increase intrinsic motivation in most students (Guthrie & Humenick, 2004).
- **Student choice.** Student choice includes choices of topics, texts, and activities (Guthrie & Humenick, 2004). Materials that are personally interesting create an enjoyable experience, which increases motivation to continue working and learning. Encouraging students to become deeply immersed in a topic of their interest increases the likelihood that students will eagerly pursue the content by reading more intently. Such choice enables students to apply their background knowledge and experience to their reading, which results in additional motivation for subsequent reading.
- **Feedback on student progress.** Providing appropriate and timely feedback to students about their performances on particular tasks “enables students to perceive when they are reading competently and how their comprehension can be improved” (Guthrie & Humenick, 2004). Feedback from peers is also a valuable way to receive information about one's performance (Butler, 1995).
- **Access to books.** Having access to an abundance and variety of interesting texts positively influences children's interest in reading. Texts within a classroom need to be as diverse as the students themselves (Guthrie & Humenick, 2004). For example, a well-equipped primary school classroom contains several collections of books, both literature and informational texts

Implications for Classroom Instruction

and related materials. Books are organized and labeled to facilitate easy access and represent the diversity of the community and the world (Smith et al., 2008).

Mazzoni and Gambrell (2003) state that the goal of successful instruction is the development of readers who *can read* and who *choose to read*. Classrooms that foster reading motivation have been proven to support students in their reading development. These researchers have identified an additional factor: a teacher who values reading and is enthusiastic about sharing a love of reading with students.

Not surprisingly, students who have experienced repeated failure in reading are often unwilling to participate as readers or writers. However, teachers can do much to change this defeating trajectory, since we know that students perform at their best when they feel competent, view a task as being challenging but doable, understand why they are undertaking the task, are given choices, feel a part of the process, and have interesting materials and activities (Snow et al., 1998; Guthrie & Wigfield, 1997).

Clearly, teachers must explicitly address student motivation as an integral part of lesson planning to help students, especially adolescents, perceive that the tasks they are asked to do are worthwhile. In addition, when students have opportunities to make choices about their reading materials, they read more and achieve at higher levels (Anderson, Wilson, & Fielding, 1988). After reviewing the research on motivation, Marzano (1992) concluded that “when students are working on goals they themselves have set, they are more motivated and efficient, and they achieve more than they do when working to meet goals set by the teacher. . . . If educators expect students to be motivated to succeed at classroom tasks, they must somehow link those tasks to student goals.”

FOR FURTHER INFORMATION ABOUT MOTIVATING AND ENGAGING STUDENTS IN CONTENT-AREA LEARNING, REFER TO PAGE 113

6. COMPONENTS OF LITERACY: WRITING

RECIPROCITY OF READING AND WRITING

Reading and writing are acts of composing, as they involve the ongoing process of making meaning. And both processes are rooted in language and share common characteristics: setting a purpose, making a commitment, activating prior knowledge, planning, self-monitoring, and revising. Additionally, both reading and writing facilitate learning and help students explore new content, clarify ideas, and think deeply (Vacca & Vacca, 2005).

In spite of these common processes, reading and writing are cognitively different in many ways. For readers, the construction of meaning is not visible. The reader's interpretations, connections, questions, and inferences are generally invisible. Unless the reader communicates his or her thinking, through conversation or written response, only the reader knows what he or she is thinking. For writers, on the other hand, the construction of meaning is visible. The writer begins with a blank page or screen and creates text (e.g., a letter, report, an argument). That text reveals the writer's cognitive process.

Though cognitively different, reading and writing are reciprocal processes that are mutually supportive. The reader—particularly the emergent or struggling reader—engages in a process of decoding. The emergent writer, on the other hand, engages in the reciprocal process of encoding. Thus, decoding is integral to the development of emergent readers; encoding to the development of the emergent writer.

Fitzgerald and Shanahan (2000) assert that skillful readers and writers use specific types of common knowledge to construct meaning:

- **Metaknowledge:** an understanding of the functions and purposes of reading and writing
 - How readers and writers interact
 - How readers and writers self-monitor their own meaning-making, production strategies, and knowledge
- **Domain knowledge:** content knowledge gained through reading and writing
 - Vocabulary meaning
 - Meaning created through the context of connected text
- **Attribute knowledge about the text:** graphophonics (the relationship between sounds in speech and spelling patterns in print), syntax, and text formats
 - Phonological awareness

COMPONENTS OF LITERACY: WRITING

- Grapheme awareness, including letter shapes and the typographical representations (capitalization and punctuation)
 - Morphology (word structure and orthographic patterns)
 - Syntax, including sentence syntax and punctuation
 - Text format, including text structures and organization
- **Procedural knowledge:** knowing what texts are and how to access, use, and generate different types of knowledge (listed above) and the smooth integration of the literacy processes

As readers and writers develop, so does their knowledge. For example, a beginning emergent reader develops procedural knowledge when learning about concepts of print (e.g., directionality, the difference between letters and words) and this student expresses that knowledge as “scribbles” beneath a drawing. By senior year of high school, that student will be expected to analyze complex, informational text and write arguments using evidence to support his or her claims. Fitzgerald and Shanahan (2000) maintain that the acquisition of these categories of knowledge is developmental, and a student’s understanding of these concepts matures over time.

Having studied the links between reading and writing for a number of years, researchers draw several broad conclusions:

- Good readers are often good writers; conversely good writers tend to be good readers.
- Students who write well tend to read more than those who do not write well.
- Wide reading improves writing.
- Good readers and writers who perceive themselves as such are more likely to engage in reading and writing on their own.

(Vacca & Vacca, 2005)

DEVELOPMENT OF WRITING

Writing is an intricate process that involves both cognitive and physical factors as well as personal and social processes. Bromley (2007) suggests the following:

Writing is a complex interaction of cognitive and physical factors. It involves the hand, eye, and both sides of the brain. Writing requires making connections and constructing meaning. It is a way to explore thinking and create new knowledge. It requires the conventions of grammar, spelling, punctuation, and form. It involves small-muscle development and eye-hand coordination to form letters, words, and paragraphs with a pen, pencil, or keys on a computer keyboard. It requires a vocabulary that permits effective self-expression. Writing can be a personal process done solely for oneself or a social process done for or with others. (p. 244)

During the recursive act of writing, the student plans, drafts (composes), revises, edits, and “publishes.” While writing, the student also must learn how to employ a wide variety of higher-order thinking skills that include planning, categorizing, selecting, organizing, and using language to deliver an intended message (*Rhode Island Literacy Policy, 2005*).

Emergent Writers. Developing writers acquire skills gradually within early literacy experiences. By age three, typically developing children are engaged in purposeful scribbling that produces letter-like forms with some features of English writing. By the time children enter kindergarten, they “write” as part of their play and call attention to the “story” they have produced (Burns, Griffin, & Snow, 1999). The *Rhode Island Early Learning Standards* set the following early writing goal for children: that they demonstrate “an interest and ability to use symbols to represent words and ideas.” Furthermore, these preschool standards identify the following sample expectations related to early writing:

- Begin to print the letters in his or her own name
- Understand that writing carries a message
- Experiment with a variety of writing tools and materials
- Use scribbles, shapes, letter-like symbols, and letters to write or represent words or ideas
- Begin to dictate ideas, sentences, and stories

Writing development generally progresses through the following stages:

1. **Random scribbling:** Demonstrates the relationship between motor activity and the use of a writing tool
2. **Pictorial:** Uses drawing not as an illustration for a story but as the story itself

COMPONENTS OF LITERACY: WRITING

3. **Scribbling:** Makes marks that resemble a line of writing and that may have the appearance of a series of waves
4. **Letter-like forms:** Makes marks that resemble manuscript or cursive letters but that are not real letters
5. **Prephonemic:** Writes using letters; however, these letters are usually a random collection, or repetition of the same letter
6. **Semiphonetic:** Begins to use some letters to match sounds
7. **Phonetic:** Writes most words using beginning and ending consonant sounds and spells some words correctly
8. **Transitional:** Writes words the way they sound, representing most syllables in words
9. **Conventional:** Spells most words correctly

(Feldgus & Cardonick, 1999; Sulzby, 1989; Gunning, 2003; Baghban, 2007)

Students in primary school and not yet bound by convention tend to find their own inventive ways to fill a page. The writing of the very young reflects both their creative individuality and an astute ability to observe the world around them (Spandel, 2001). At any stage, it is important for children to see their strengths as a writer and to believe in their own capability.

Fluent writers. To become fluent in their writing, students must regularly engage in the process of writing and learn how to write with purpose and increasing confidence for a variety of audiences. Learning to write effectively is multidimensional and involves an understanding of purpose, focus, organization, elaboration, voice, and convention.

The *Common Core State Standards for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects* (2010) articulate the following expectations for student writing:

To build a foundation for college and career readiness, students need to learn to use writing as a way of offering and supporting opinions, demonstrating understanding of the subjects they are studying and conveying real and imagined experiences and events. They learn to appreciate that a key purpose of writing is to communicate clearly to an external, sometimes unfamiliar, audience, and they begin to adapt the form and content of their writing to accomplish a particular task or purpose. They develop the capacity to build knowledge on a subject through research projects and to respond analytically to literary and informational sources. To meet these goals, students must devote significant time and effort to writing, producing numerous pieces over short and extended time frames throughout the year. (p. 11)

COMPONENTS OF LITERACY: WRITING

Carefully benchmarked by grade level, these standards convey the range of writing in which students need to be engaged in order to meet the expectations articulated above. The standards further articulate that student writing should be produced through a process of planning, drafting, revising, editing, rewriting, or sometimes trying a new approach. And since it is important for students to have an audience to strengthen their conviction that writing actually serves a practical purpose, classroom activities should involve processes for distributing student writing that can take advantage of the various (and every-changing) technologies. Most important for instruction, however, is the attention paid to the types and purposes of writing:

Table 6.1: Types and purposes of writing

Type	Purpose	Approach
Arguments	To support claims in an analysis of substantive topics or texts	Uses logical reasoning and relevant and sufficient evidence
Informative or Explanatory texts	To examine or convey complex ideas and information	Selects, organizes, and analyzes content effectively
Narratives	To develop real or imagined experiences or events	Uses effective techniques, well-chosen details, and well-structured sequences
Research projects (short-term and sustained)	To demonstrate an understanding of the subject under investigation	Uses a focused question as the work's foundation

(Adapted from the *Common Core State Standards*, 2010, p. 41)

Content-area writing/writing across curricula “has come to mean drawing upon writing as a resource for skill building and for learning” (Winchell & Elder, 1992). When students “really know it,” they have something to say. The relationship between ‘knowing’ and the ability to demonstrate one’s knowledge in written form (e.g., informational or report writing) is significant. Since content areas differ in their protocols for thinking about and working with their material, so also the purpose, form, and audience must vary from subject to subject. Therefore, students must have multiple opportunities to *develop* their understanding about content if they are expected to demonstrate those understandings in writing (Strong, 2006).

FACTORS THAT INFLUENCE WRITING

Over the last two decades researchers have studied factors that influence writing. Coker (2006) identifies and discusses the following factors:

- **Reading skills.** As previously discussed, the reciprocity of reading and writing is well documented. These mutually supportive processes are both rooted in language; and while they are cognitively different in many ways, Shanahan (2006) maintains that instruction that improves a student's cognitive skills has implications for both reading and writing.
- **Oral language skills.** Once children begin to control the marks they make, they begin to learn how to compose meaning. This process begins with oral language development (Shanahan, 2008; Brice, 2004). Children should be encouraged to talk about events in their lives and share what they know with others. Another factor that contributes to this development is the child's relationship with books. Children develop an intuitive sense of story grammar and expository text from listening to stories, talking about them with family members and teachers, and reading on their own (Casbergue & Plauché, 2003; Duke & Kays, 1998; Kamberelis, 1999).
- **Self-efficacy and motivation.** Throughout their school years, students develop a set of beliefs about the functions and role of writing (Bruning & Horn, 2000). Student engagement is impacted by two components: a sense of competence (How capable do I feel about taking on this task?) and the meaningfulness of the activities (How relevant is this activity to me personally?). Both of these components directly affect a student's motivation to write and attitude about the act of writing. Self-efficacy—one's belief about his or her ability and capacity to accomplish a task—and writing competence increase when students are provided with specific strategies that will improve writing and with regular feedback regarding how well they are using those strategies (Pajares & Valiante, 2008). Additionally, teachers can favorably influence students' attitudes about writing by placing value on specific writing activities and the use of written products. Motivation directly impacts the degree to which students are willing to engage in writing (Boscolo & Gelati, 2007).
- **Transcription skills (spelling and handwriting).** Spelling and handwriting (or keyboarding) impact a writer's ability to transcribe words into written symbols on the printed page (Berninger, Fuller, & Whitaker, 1996). Research on the effects of transcription regarding the development of writing skills indicates that nonfluent transcription can interfere with text generation and other writing skills (Berninger et al., 1994, 1997, 2002; Graham & Harris, 2000; Olive & Kellogg, 2002). Students who have not yet mastered the mechanics of writing or those who have not developed automaticity for spelling words need to consciously think about getting the language onto the page. This act is labor intensive and may strain the writer's processing memory, interfering with higher-order skills, such as planning and generating content (Graham & Harris, 2000).

While it is important for children to be given autonomy in "getting their ideas down" without being overly concerned about handwriting and letter formation, the goals of developing legibility, relative speed, and comfort in writing should be specifically addressed in developmentally appropriate ways. (Casbergue & Plauché, 2005). Assistive technologies, such as word processing

programs, provide tools and scaffolds to aid transcription (Committee on Developments in the Science of Learning, 2000).

Students grasp English spelling patterns and principles within their writing at different rates. As a result, students range widely in their spelling achievement. When students are presented with spelling words that they are not ready to learn, spelling becomes a matter of memorization rather than concept development. This occurs when students know a word on Friday and forget it by Monday. In response, teachers must be mindful of the five stages of spelling development:

- **Precommunicative spellers** are at the “babbling” stage of spelling. Their letters are strung together randomly, and these letters do not correspond to sounds (e.g., OPSPS = eagle; RMLF = eighty).
- **Semiphonetic spellers** know that letters represent sounds. They perceive and represent reliable sounds with letters in a type of telegraphic writing. Their spellings are often abbreviated, representing initial and/or final sound (e.g., E = eagle; A = eighty).
- **Phonetic spellers** spell words like they sound. The speller perceives and represents all of the phonemes in a word, though their spellings may be unconventional (e.g., EGL = eagle; ATE = eighty).
- **Transitional spellers** think about how words appear visually; they demonstrate a visual memory of spelling patterns. Their spelling exhibits the conventions of English orthography, such as vowels in every syllable, e-marker and vowel digraph patterns, correctly spelled inflectional endings, and frequent English letter sequences (e.g., EGIL = eagle; EIGHTEE = eighty).
- **Conventional spellers** develop over years of word study and writing, and their spelling ability reflects appropriate advancement through the grades (e.g., a fourth-grader can spell “clever” with facility; an eighth- grader, “diurnal”). A fourth-grade curriculum features words that proficient students at that specific grade level should be able to spell independently.

(Gentry, 1982, 2000)

When it is guided by the child’s own developing abilities, spelling instruction allows children to move toward more conventional spelling (Snow, Burns, & Griffin, 1998). Thus teachers can support the literacy development of children by adapting instruction to students’ stages of development. Samples from daily writing activities are a good starting point for assessing a student’s knowledge of spelling rules and patterns. However, no matter which stage of development they have attained, students should always be encouraged to write. When they are given daily opportunities for guided and independent writing, students will progress through these developmental stages. And they will develop fluency and stamina in the writing process, as well.

- **Student background.** Research findings indicate a relationship between writing performance and various student characteristics. While overall achievement gaps are closing, certain

COMPONENTS OF LITERACY: WRITING

socioeconomic, gender, and racial gaps still persist (Salahu-Din, Persky, & Miller, 2008).

Socioeconomic factors that impact academic success include, but are not limited to, quality of housing and healthcare, accessibility to high-quality preschool, environmental stress, caregiver/parental employment, and nutrition (Wamba, 2010). In terms of gender, girls tend to outperform boys, even at the elementary level (Peterson, 2008; Berninger & Fuller, 1992). And students who struggle with language (particularly English language learners and students with disabilities) also struggle with writing (Calderón, 2004).

- **Environmental influences.** Classroom environments influence learning. Coker (2007) reports the range of book genres in a classroom library has been found to predict growth in the quality of writing through third grade. Studies on vocabulary growth and reading development have determined a relationship between the amount of a child’s direct exposure to language (e.g., an adult speaking and singing to the child) and the child’s later skills (Dickinson & McCabe, 2001).
- **Teacher preparedness.** A teacher’s training, approaches to writing instruction, and self-confidence all impact classroom instruction and student achievement. Pressley et al. (2001) determined that teachers in the most effective classrooms exhibited several common characteristics: they presented balanced instruction; provided a positive, reinforcing, cooperative environment; encouraged self-regulation; made strong connections across the curriculum; and provided students with motivating tasks that were challenging but not overwhelming.

FOR FURTHER INFORMATION, REFER TO THE [RHODE ISLAND EARLY LEARNING STANDARDS](#) AND THE [COMMON CORE STATE STANDARDS FOR WRITING \(K-5\)](#) AND [ELA \(6-12\)](#) AND [LITERACY IN HISTORY/SOCIAL STUDIES, SCIENCE, AND TECHNICAL SUBJECTS \(6-12\)](#) AND [LANGUAGE \(K-5\)](#) AND [\(6-12\)](#)

Implications for Classroom Instruction

Foundational writing skills

The complex process of developing young children’s writing skills involves the interaction and relationship of cognitive, social, cultural, and instructional forces (Coker, 2006). When planning instruction for emergent writers, teachers should consider the following:

- **Understanding how writing is used to communicate.** Because young children have more experience with oral language than with written, they may not realize that writing is also a communication tool. The number and nature of the exposures young children have to writing and text-related practices is linked to how well they understand the functions of writing (Purcell-Gates, 1996). Seeing adults using writing to express themselves and communicate knowledge assists young children’s understanding of writing as a communication tool (Coker, 2007).

Teachers need to broaden young children’s experience with writing and print (Tolchinsky, 2008). High-quality authentic activities (activities that actually matter and aren’t just busy work) give emergent writers opportunities to expand their experience with writing and learn the functions of writing. Playing post office in the “dramatic play” area in a preschool or kindergarten and “signing in” when they enter class encourages writing and communication.

Classrooms should also be filled with a wide range of writing materials: different types, sizes, and textures of paper, markers, crayons, and pencils appropriate for small hands that are just beginning to develop fine motor skills. When stencils, stamps, and other marking devices are provided, they also motivate a child to write and enrich the experiences.

Parents can foster this learning by providing writing opportunities and making writing materials available in the home.

- **Unlocking the conventions of print.** Experienced writers take the conventions of print for granted. Emergent writers need multiple exposures to the “rules” of text. Reading experiences can help to build children’s knowledge of these rules (Coker, 2007).

In order for this knowledge to develop, children need to be surrounded by and have access to many different kinds of books (Neuman, 1999). Carefully planned interactive reading directly fosters a child’s understanding of the conventions of print. During these readings, teachers (and parents) can draw children’s attention to the way print works and reinforce these conventions. Effective reading activities balance instruction with interests and, like all effective lessons, need to be planned. Teachers need to strategically select a book based on the goals of the lesson. Multiple rereading also reinforces concept development.

Modeling the writing process reinforces writing as a communication tool and also demonstrates the conventions of print. Emergent writers imitate the process with scribbles

Implications for Classroom Instruction

and drawings that they often intend as marks for communicating their thoughts and feelings to others (Falconer, 2010).

- **Comprehending that print represents speech sounds.** Knowing the sounds associated with printed letters is a strong and consistent predictor of conventional literacy skills (NIFL, 2009). An interest in the link between print and speech often begins with a child’s interest in his or her own name. Providing opportunities for children to see their names in print and to print their own names fosters this understanding. Teachers can also reinforce the relationship between print and the sounds of speech by using a wide variety of activities that involve rhymes, songs, mnemonic clues, and alliteration (Coker, 2007).

When modeling, teachers need to draw children’s attention to the phonemes that make up a particular word and write the letters that represent each phoneme, thus spelling that word. When children are writing, teachers need to encourage inventive spelling in the earliest stages of writing so that children can begin to match some letters to sounds.

- **Expressing ideas fluently.** As children write, they manage several cognitive and physical tasks simultaneously. They are constructing meaning, making connections, and exploring their own thinking. For emergent writers, this process is complicated by motor coordination and the conventions of the English language (Bromley, 2007).

Teachers need to support the development of this complex skill. Scaffolding the use of a recursive process teaches children how to write. Supports, such as computer keyboards and dictation, can ease frustration and allow the emergent writer to focus on expressing thoughts and constructing meaning. Handwriting and spelling should not interfere with the composing process (Coker, 2007).

- **Creating new knowledge.** Writing is a meaningful activity when one has something to express. Children come to school with a wide range of experiences and background knowledge. When teachers are aware of these student differences, they can design learning experiences that will build on students’ backgrounds and provide opportunities for knowledge growth. Using a variety of texts—both literary and informational—for read-alouds and other literacy activities fosters the continued growth of knowledge. Exposing children to the natural world and encouraging them to develop their imagination also helps children build a bank of relevant knowledge that they will access throughout their schooling.

Knowing about how texts are organized is also important in the development of skillful readers and writers. Teachers need to use stories to teach story grammar. However, children need to understand that texts differ, depending on their purpose (Donovan & Smolkin, 2002). Teaching with informational texts provides exposure to other text

Implications for Classroom Instruction

structures, those important to content-area learning. Teachers need to examine how they select books and remember that genre knowledge is important to reading and writing (Duke & Pearson, 2002).

The process approach to writing

Over the past several decades, writing instruction has focused on teaching process-oriented skills and strategies that emphasize extensive prewriting activities, multiple drafts, attention to writing conventions prior to sharing work with others, and the sharing of work with peers (Applebee & Langer, 2009). The use of a process approach has been shown to be more effective than other approaches in improving writing attitudes and products.

Best practices for using the process approach (as outlined by Pritchard & Honeycutt, 2007) include the following:

- **Time.** Students need time to write every day and in blocks of time dedicated to lessons that address specific features of writing and the writing process. This dedicated time and focus will serve to mitigate the four major factors that, regardless of grade level, contribute to students' unrealistic expectations and negative perceptions of themselves as writers: an unclear understanding of the writing process; unfamiliarity of the features of the assigned genre; confusion about exactly what they are being asked to do in the assignment; and failure to understand and use appropriate strategies when composing text.
- **Understanding.** Regardless of their ability level, skillful writers follow a process: developing a first draft of the writing piece, reviewing and revising several times, seeking feedback from others, editing for errors, and then "publishing." They also realize that their writing, although considered finished, may be subject to future revision. Teachers need to demystify writing by modeling this process and helping students to understand that going back to revise further is part of the writer's craft.
- **Self-regulation strategies.** Zimmerman and Risemberg (1997) define self-regulation as "self-initiated thoughts, feelings, and actions that writers use to attain various literary goals, including improving their writing skills as well as enhancing the quality of the text they create." Self-regulation involves applying specific strategies to complete an assignment and monitoring one's own understanding of the writing process. Teachers need to model and teach strategies

Implications for Classroom Instruction

for reflection and self-evaluation, such as comparing a written draft to a set of criteria listed in a rubric.

- **Peer response.** Hillocks (1986) concludes that writing practice alone does not improve writing. However, having someone respond to one's writing using specific criteria does improve writing. The process of providing constructive feedback given by peer partners, small groups, or the teacher should be utilized at all grade levels. Teachers need to (1) train students to understand exactly what needs to occur during peer response and (2) monitor the feedback process.
- **Targeted strategy instruction.** Explicit instruction in strategies gives students the opportunity to learn and practice the steps that lead most learners to succeed in a given task. Teachers can introduce a particular writing strategy during group mini-lessons, with reinforcement taking place in individual conferences.
- **Technical language.** Writing has its own formal vocabulary. In order to progress as writers, students must know the technical terms used in writing, understand what they mean, and apply this knowledge to their writing. This technical language consists of the basic parts of speech and how to use them; grammatical structures (simple sentences, modifying phrases, etc.); features found in writing products, such as sensory images; and terms specific to the craft of writing such as *voice* and *diction*. The process of acquiring the language of writing begins in preschool and may continue throughout life. As student writing becomes more sophisticated, their "composing vocabulary" becomes more complex and abstract.

Content-area writing

After reading, students often need to consolidate and connect ideas or critically assess the author's arguments (Ogle & Lang, 2007). In middle and high school, these activities are frequently accomplished through writing. Discipline-specific tasks provide opportunities to strengthen and expand content knowledge.

[Graham and Perrin's meta-analysis \(2007\)](#) identifies eleven elements key to adolescent writing instruction. These instructional elements (listed below and not prioritized) hold the most promise for improving adolescent writing skills:

Implications for Classroom Instruction

Table 6.2: Instructional elements to improve adolescent writing skills

Writing strategies	Explicit instruction in effective strategies used for planning, revising, and editing
Summarization	Explicit instruction in how to summarize texts read
Collaborative writing	Group work that employs the steps of the writing process to develop a written product
Specific product goals	Developed and articulated goals for student writing that are concrete and attainable
Word processing	Student use of computers and other available technology as support for writing
Sentence combining	Explicit instruction that teaches students to combine simple sentences into more complex sentences
Prewriting	Activities that allow students to generate and organize ideas for writing
Inquiry activities	Authentic activities that require students to analyze concrete data and articulate results through written products
Process writing approach	Connected “activities that emphasize extended opportunities for writing, writing for real audiences, self-reflection, personalized instruction and goals, and cycles of planning, translating, and reviewing” (Graham & Perrin, 2007)
Study of models	Providing students with good models of writing, including anchor papers
Writing for content learning	Use of writing to augment the content-area knowledge learning

Integrating instruction

Like skilled reading comprehension, skill in writing is a predictor of academic success and a basic requirement for participation in civic life and in the global economy (Graham and Perrin, 2007). Writing fulfills many purposes in our everyday lives: to communicate, to organize thoughts, to make sense of new knowledge, and to remember and show learning. Further, writing helps readers *understand* what they know. Generally students can write; what most students cannot do is write well enough to meet the demands they face in higher education and the emerging work environment (National Commission on Writing, 2003). The ability to produce focused, fluent writing that effectively addresses a prompt (the writing task) is developed over time and with effective instruction.

Implications for Classroom Instruction

Integrating instruction in reading and writing helps students use writing to think about what they will read and to understand what they have read. Students who experience this integration of reading and writing are likely to learn more content, understand it better, and remember it longer. Vacca and Vacca (2005) maintain the following:

Classrooms that integrate reading and writing lend encouragement to students who are maturing as readers and writers and provide instructional support so that readers and writers can play with ideas, explore concepts, clarify meaning, and elaborate on what they are learning. When reading and writing are taught in tandem, the union influences content learning in ways not possible when students read without writing or write without reading. (p. 356)

Students learn to write when they are surrounded with examples and models, given clear expectations, allowed to make decisions and mistakes, provided feedback, and given time to practice in realistic ways. To be fully and successfully engaged in writing, students must write about what is relevant to them (Bromley, 2007).

A recent meta-analysis (Graham & Hebert, 2010) provides evidence of the following:

- Writing about texts that students have read does enhance their reading comprehension.
- Teaching writing enhances reading skills.
- Increasing how much students write does improve how much they read.

Researchers have been able to identify instructional practices that hold the most promise for improving writing achievement. Each finding implies the need for explicit instruction and scaffolding for each practice:

➤ **Require students to write about the texts they read.**

Examples include the following:

- Responding to a text through analysis and interpretation or as a personal reaction
- Writing summaries of a text, including locating main ideas from the text and developing an outline
- Writing notes about a text, including following note-taking procedures
- Answering questions about a text, including pre-written and self-created questions

Implications for Classroom Instruction

➤ **Teach students writing skills and processes needed to create text.**

Examples include the following:

- Teaching the process approach to writing, text structures for writing, and paragraph or sentence construction skills
- Teaching spelling skills improves word-reading skills
- Teaching spelling and sentence construction skills to improve fluency

➤ **Increase how much student write.**

Choice motivates readers and writers. Allowing students to select topics or write collaboratively with peers serves the dual purpose of increasing time through engaging, purposeful activities.

The responsibility for teaching writing rests with all teachers, regardless of their level or content. In order to work effectively, teachers need to be prepared to teach writing and must be confident in delivering their instruction (Coker, 2006). All teachers can effectively support the development of writing in their students through the following:

- Building an environment that supports and encourages frequent writing. Students need to write regularly and often.
- Providing/allowing students to use a variety of writing materials, including technology. Teachers provide assistance to students in integrating technology to support writing and publishing.
- Facilitating student learning and setting clear expectations for writing. Students are carefully and purposefully taught to take responsibility for their own writing. Teachers know that the students own their own writing.
- Modeling writing behaviors. Teachers model content-area writing and share their writing and revision processes with their students.
- Talking about writing. Teachers confer and talk with their students about content-area writing that models the behavior and questions teachers hope will occur when students talk with each other about their writing. Conference questions are open-ended. Teachers also listen to their students discuss their writing, thus learning a great deal about how students think about the process of writing and the results.

Implications for Classroom Instruction

- Evaluating and documenting student growth over time. Teachers establish clear criteria for evaluation. They explore and explain areas of success, progress, and concern. Folders/portfolios of student writing are maintained. Judgments are based on accumulated work in student folders/portfolios.
- Providing opportunities for students to share their writing with a real audience. Teachers provide student writers with opportunities for sharing their writing in such places as school magazines, newspapers, classroom-published books, or online publishing venues, as well as on school or classroom bulletin boards and with classmates during sharing times.

(Adapted from RIDE, 2004)

Furthermore, research (Calderon, 2004) suggests two principles of writing instruction for ELs:

- Helping the student to understand what is being taught and to communicate that meaning
- Providing the student with a rich and challenging curriculum that is taught in context

The student should be engaged in writing activities that meet and challenge their current level of language proficiency. Teachers should use a process-based approach to writing that includes explicit instruction in drafting, revising, and editing student work. Student writing should be assessed and evaluated in terms of current accomplishments and next levels of development. A portfolio approach allows the teacher to keep in touch with what students know now and what they need to learn next (Peregoy & Boyle, 2001).

7. CONTENT-AREA LITERACY

FOUNDATIONAL CONTENT LITERACY

Klein defines content literacy as “the ability to read, write, create, interpret and present a range of media, in subjects such as science, social studies, and mathematics” (2008). For many years the demonstration of these literate behaviors had been expected in middle and high school content classrooms. However increased demands of our global economy and daily integration of ever-changing technology require higher levels of literacy from all learners. If students can be expected to leave school in command of these more advanced levels of language and literacy skills, they must begin to develop these more sophisticated skills at an earlier age (Brozo & Puckett, 2009).

Content learning capitalizes on natural curiosity and serves as a springboard for gaining new knowledge, critically evaluating information, and expressing new understandings (Moss, 2005). Beginning content instruction only after students have learned to read and by using narrative texts is counterproductive. An integrated model of literacy development begins early with language and pre-literacy instruction and builds upon students’ interests in the world around them. Early exposure to informational text lays the foundation for student understanding (Duke & Bennett-Armstead, 2003) and contributes to better informational text writing and increased enthusiasm for recreational reading (Duke, Martineau, Frank, & Bennett-Armistead, 2003). Authentic reading and writing activities, those that are important to the learners and utilize authentic texts, increase students’ interest and motivation for learning (Duke, Purcell-Gates, Hall, & Tower, 2006).

A strong foundation of content built during the elementary grades will create well-informed students who will be equipped to continue acquiring the knowledge, including vocabulary, and tools they need to enhance and apply domain-specific knowledge (Brozo, 2010). The *Common Core State Standards* (2010) provide guidance for developing cross-disciplinary skills by articulating grade-specific reading, writing, speaking, and listening standards.

ADOLESCENT LITERACY

The [Adolescent Literacy Advisory Panel of the National Governor’s Association Center for Best Practices](#) found that “as students get older, the more potential exists for their falling even further behind and becoming disengaged from learning.” Barriers to adolescent reading success include the following:

- Decreased motivation to read
- Inadequate opportunities to develop vocabulary, background, and content knowledge

- Lack of access to comprehension instruction
- Poor decoding and fluency skills
- Increasing reading and writing demands across the curriculum
- Reading and writing instruction disconnected from content area literacy demands
- Reading and writing instruction not seen as province of middle and high school instruction
- Lack of widespread support for adolescent literacy

(National Governors Association Center for Best Practices, 2005, p. 7).

Biancarosa and Snow maintain that “learning from reading in content-area texts requires skills that are different than the skills needed to comprehend literature” (2004). Teachers across all content areas, including English, need to emphasize reading and writing practices that are specific to their subjects.

Rhode Island specifically addresses the issue of middle and high school literacy instruction in section 4.0, *High School Literacy*, of the 2003 regulations *Regarding Public High Schools and Ensuring Literacy for All Students Entering High School*. These regulations require that the literacy needs of all elementary, middle, and high school students be met so that all students have attained a strong literacy foundation by the time they graduate from high school. The *Scaffolded Framework for Secondary Literacy for Rhode Island* provides a structure for teaching and learning to be used as the vehicle for developing literacy in each content area. The main themes follow:

- Incorporating reading strategies consistent with the research on adolescent literacy
- Using pre-reading activities to activate prior knowledge and set a purpose for reading
- Teaching “during-reading” strategies that students can use while reading to support their understanding and acquisition of content
- Using post-reading activities that foster evidence-based speaking and writing

Amended on March 3, 2011, these regulations “codify and solidify the policies and procedures that have been developed during the last eight years. The amended regulations reflect key design elements and principles that have been identified since 2003” (RIDE, 2011). These updated regulations reiterate Rhode Island’s definition of literacy: the ability to read, write, speak, and listen in order to communicate with others effectively, as well as the ability to think and respond critically and to process complex information across content areas (RIDE, 2011).

Rhode Island’s scaffolded literacy program describes a model of instruction for school-wide, discipline-specific literacy that provides three tiers, or scaffolds, of support for improving reading achievement for all middle and high school students: (1) a school-wide, discipline-specific program for all students; (2) targeted literacy supports for students reading more than one and up to two years below grade level; and (3) intensive literacy intervention for students reading more than two years below grade level (RIDE, 2005).

**FOR FURTHER INFORMATION, REFER TO APPENDIX B:
ELEMENTS OF EFFECTIVE ADOLESCENT LITERACY PROGRAMS.**

IMPORTANT CONSIDERATIONS

Reading proficiency in the early grades does not ensure continued success through middle and high school. More complex work and unique content demands affect students’ ability to understand in the later school years (Shanahan & Shanahan, 2008). Adolescent learners must be able to read and comprehend more complex texts from many sources, synthesize the information presented, and apply new knowledge in different ways. Each content area (English, mathematics, history/social studies, science, and technical subjects) requires specialized skills and strategies; thus a student may do well in one content area while struggling in another (Carnegie Council on Advancing Adolescent Literacy, 2010). Given the complexity of reading and writing across content areas, several factors must be considered.

Academic Vocabulary

Vocabulary refers to words that are used in speech and print to understand and to communicate. Skilled readers fluently use grade-level words in their speech, understand those words when they are used by others, and transfer that ability to their reading and writing (Curtis, 2004). Print vocabulary is usually more difficult to attain than oral vocabulary. Most often words, figures of speech, syntax, and text structures of printed material are more complex and obscure than those of conversational language (Moats, 2004).

Academic vocabulary generally is defined as words used in formal, educational settings. These words may be categorized as follows:

- Everyday words (e.g., eraser, building)
- Nonspecialized academic words that occur across content areas (e.g., examine, cause)
- Specialized, content-area words unique to specific disciplines (e.g., octagon, ecosystem)

Dutro and Kinsella (2010) report that academic words are generally not taught in content-based classrooms; they are presumed to be common knowledge.

Struggling adolescent readers, particularly those who are culturally and linguistically diverse, face several vocabulary challenges: a small percentage of these students still struggle with decoding words; some labor to recognize multisyllabic words (their pronunciation and/or meaning); others have limited personal vocabularies; and most are unaware of or not proficient in applying word-learning strategies (NIFL, 2007). For example, a student may know one meaning of a word but not the meaning specific to a particular content area: Cherokee as a type of SUV but not the Cherokee tribe studied during a history unit. Also, the fact that a student recognizes multiple meanings for a particular word does not necessarily mean that the student understands that word in its use as academic terminology: e.g., meter in poetry vs. meter in science (Short & Fitzsimmons, 2007).

Word learning, or the lack of it, has an impact on content learning. Students in general tend to possess insufficient knowledge of technical and abstract terms. Insufficient content vocabulary may also result in students developing misunderstandings about words with multiple meanings that are based on context and/or content (Short & Fitzsimmons, 2007).

FOR FURTHER INFORMATION, REFER TO THE *COMMON CORE STATE STANDARDS FOR LITERACY IN HISTORY/SOCIAL STUDIES, SCIENCE, AND TECHNICAL SUBJECTS: READING STANDARD #4 AND LANGUAGE (6-12) (VOCABULARY ACQUISITION AND USE)*.

Implications for Classroom Instruction

Vocabulary knowledge is strongly related to comprehension and students' academic success (Baumann, Kame'enui, & Ash, 2003; Beck, McKeown, & Kucan, 2002). Thus vocabulary instruction is critical in content-area classrooms (National Institute of Child Health and Human Development, 2000; Snow, 2002; Snow, Burns, & Griffin, 1998).

Over time and with experience, students need to develop depth and breadth of vocabulary. Depth refers to how much is known and understood about a particular word (through discussion and reading) and the ability to use examples to enhance word meaning. Breadth of knowledge about a word involves knowing how the word is connected to other words in a domain of learning. (Blachowicz & Fisher, 2007).

Research indicates there is no one, single, successful method for teaching new words (Bryant et al., 2003; Medo & Ryder, 1993). Rather a combination to unknown word meanings is most effective. Comprehensive vocabulary instruction includes teaching specific words, teaching

Implications for Classroom Instruction

students how to learn words independently, and helping students to develop an understanding and appreciation for words in many contexts (Baumann, Kame’enui, & Ash, 2003).

Two recent publications provide research-based recommendations for making vocabulary instruction effective:

Table 7.1: Components of effective vocabulary instruction

<p><u>What Content Area Teachers Should Know about Literacy</u> National Institute for Literacy (2007)</p>	<p><u>Improving Adolescent Literacy</u> (IES Practice Guide) Kamil et al. (2008)</p>
<p>Incorporate repeated exposures to unknown word meanings:</p> <ul style="list-style-type: none"> ➤ Use students’ prior knowledge ➤ Teach words directly and explicitly ➤ Build morphemic knowledge 	<p>Provide explicit vocabulary instruction:</p> <ul style="list-style-type: none"> ➤ Dedicate a portion of each lesson to explicit instruction ➤ Provide repeated exposure to new words in multiple contexts ➤ Allow sufficient practice ➤ Teach students word-learning strategies

Using students’ prior knowledge for developing content-based vocabulary helps to facilitate the learning and retention of new words and concepts and provides opportunities for students to connect new learning to what they already know (Kamil, 2003). Effective instruction of this kind includes the following:

- Eliciting students’ prior knowledge of the content/subject in which the new vocabulary will be used
- Relating students’ prior knowledge to the new vocabulary
- Providing multiple repetitions of the words in different contexts
- Identifying certain nonspecialized academic words that are used when talking about content
- Modeling the usage of these words and phrases
- Providing students several opportunities to apply new word meanings across different situations and domains

Indirect word learning also takes place in content classrooms. Independent, wide reading, structured read-alouds, and class discussions can contribute to the development of content vocabulary of this kind (Kamil, 2003).

Proficient readers employ word-learning strategies when they encounter a word they do not know. The use of independent strategies allows them to continue growing as learners. However,

Implications for Classroom Instruction

content teachers cannot assume their students have developed the use of independent word-learning strategies, and they may need to model and provide guided practice for their students. Teaching the use of appropriate dictionaries and related reference tools is a proven strategy that confirms and deepens students' knowledge of word meanings, as does helping students develop their ability to analyze a word's parts (morphemic analysis) so they can more easily determine a word's meanings. While inference, the use of surrounding context to ascertain/confirm meaning, is first taught in primary grades, teachers at every level can attend to age-appropriate and increasingly more sophisticated inference skills. Particularly important for English language learners is instruction in the strategy of cognate awareness, where words in two languages have similar meaning; thus words from a primary language can be used as a tool for understanding English words (August et al., 2005).

Comprehensive vocabulary instruction begins even before students read an assigned text, with the teacher selecting appropriate words for focused attention. Criteria for selection differ by content:

- English teachers should consider concept words that relate to themes and words that relate to the characters they read about, their motives and attitudes (Dole, 2007).
- Mathematics teachers should consider technical and complex words that are often removed from common language (e.g., *adjacent* in a geometry lesson). Gersten (2007) advises not to pre-teach any word that serves as the core of a lesson (e.g. *parallel, oblique*). Gersten also counsels that teaching a word and its opposite in the same day is too confusing for most mathematics learners.
- Social studies teachers should focus on the most important technical terms—those words and phrases with meanings that are used in the discipline (*bear market, matrilineal*). General words that help students understand concepts and that students are likely to see often in relationship to key concepts (*animosity, conflagration*) should also be given consideration, in addition to words or phrases that are names of specific people, places, or events that are central to what is being studied (Shanahan, 2007).
- Science teachers should consider technical terms that have particular meanings that are critical to developing scientific understanding (*mitochondria, polymer*). Everyday words that are used in precise ways in science (*energy, variable, force*) should also be considered for selection (Moje, 2007).

Effective instruction in content vocabulary provides meaningful exposure to new words during reading and authentic discussion (i.e., “classroom talk that is purposeful and engaging” [Johannessen, 2003]). After reading, writing activities then provide students with opportunities to apply the new words they have learned.

Comprehension

Biancarosa and Snow (2004) affirm the demands of comprehension for adolescents:

- How to read purposely
- How to select materials that are of interest
- How to learn from those materials
- How to figure out the meanings of unfamiliar words
- How to integrate new information with information previously known
- How to resolve conflicting content in different texts
- How to differentiate fact from opinion
- How to recognize the perspective of the writer

Today's adolescent learner is expected to use all types of informational sources: traditional textbooks, electronic sources, primary source documents, documentary films, and more. Yet many struggling adolescent readers have difficulty making sense of the information and ideas conveyed by complex text. Continuing research finds that even readers considered proficient may also have difficulty comprehending particular texts from time to time (NIFL, 2007).

Research (Blachowicz & Ogle, 2008; Pressley, et al., 2006; Snow, 2002; Paris, Lipson & Wixson, 1983) confirms that the comprehension process involves strategic action throughout the reading experience:

- Before reading, students set purposes for reading, make predictions, or formulate questions.
- During reading, predictions may be confirmed and questions answered. Students may also reformulate or add questions and predictions.
- After reading, students reflect on the reading and summarize or synthesize the new information.
- A "good comprehender" also self-regulates by monitoring for understanding, clarifying confusions, and repairing comprehension.
- Knowledge-building, active reading for specific purposes, and applying the new knowledge gained all serve to deepen comprehension.

Recent publications identify specific, effective strategies used by adolescent learners:

Table 7.2: Strategies to support adolescent literacy

<p><u>What Content-Area Teachers Should Know About Adolescent Literacy</u> National Institute for Literacy (2007)</p>	<p><u>Reading in the Disciplines</u> Lee and Spratley (2010)</p>
<ul style="list-style-type: none"> ➤ Generate questions ➤ Answer questions ➤ Monitor comprehension ➤ Summarize text ➤ Use text structure to aid comprehension ➤ Use graphic and semantic organizers 	<ul style="list-style-type: none"> ➤ Ask questions ➤ Make predictions ➤ Test hypotheses ➤ Summarize ➤ Monitor for understanding ➤ Deploy fix-it strategies as needed

In order to engage in content-based learning, students must possess comprehension strategies that involve extracting or constructing meaning to apply new knowledge. Critically important in this process is the ability to build new meanings and integrate new information with previously learned information. Lee and Spratley (2010) maintain that comprehending in content areas “is not a static or fixed ability, but rather one [that] involves a dynamic relationship between the demands of texts and the prior knowledge and goals of readers.”

The act of learning content presents unique challenges. The quality of content—increasingly complex texts, unfamiliar terms, and sophisticated concepts—mark the vast difference in informational reading at the middle and high school levels from reading at the elementary level. The process of learning and retaining subject matter demands that students possess a deep understanding of numerous sophisticated, often interrelated concepts. Increasing the challenge, different disciplines require students to engage in different modes of reasoning. In general, students are expected to use reading and reasoning to make sense of diverse texts to access and learn new information.

Students who struggle in content classrooms do so for a variety of reasons: lack of vocabulary knowledge, insufficient topic knowledge, unfamiliar text structures, and an inability to self-monitor for comprehension and to apply strategies to repair comprehension (Lee & Spratley, 2010).

FOR FURTHER INFORMATION, REFER TO THE READING STRAND OF THE COMMON CORE STATE STANDARDS FOR ENGLISH LANGUAGE ARTS AND LITERACY AND HISTORY/SOCIAL STUDIES, SCIENCE, AND TECHNICAL SUBJECTS, (6–12).

Implications for Classroom Instruction

The goal of adolescent literacy instruction is to develop students' comprehension abilities, as opposed to simply support their understanding of one particular text (Beers, 2003). Therefore, comprehension needs to be viewed and taught as a process rather than a product of reading.

Content-area teachers must instruct students in—and reinforce the instruction of—skills and strategies that are effective in their subject areas. As well, these teachers should emphasize reading and writing practices that are specific to their subjects. The desired result is that students read and write like mathematicians, historians, scientists, and so forth.

Comprehension strategies thus need to be taught explicitly in all content areas. Effective instruction demonstrates *what* the strategy is; *why* it is important; and *how, when, and where* to apply it. As students learn how and when to use a selected strategy or combination of strategies, teachers guide their practice, employ collaborative strategies, and scaffold instruction. Teaching strategies within content areas enables academically diverse students to become proficient, self-regulating users of the strategies (Snow et al., 2005). Equally important is for content teachers to model and use instructional supports (e.g., graphic organizers, prompted outlines, structured reviews, guided discussions) to promote understanding and to enhance student performance (Biancarosa & Snow, 2004).

Heller and Greenleaf (2007) assert that “content area literacy instruction must be a cornerstone of any movement to build high-quality secondary schools that young people deserve and on which the nation’s social and economic health will depend.” Research (Torgesen et al., 2007) provides several recommendations for improving academic literacy instruction for adolescents:

- Provide explicit instruction and supportive practice in the use of effective comprehension strategies
- Increase the amount and quality of open, sustained discussion of reading content
- Set and maintain high standards for text, conversation, questions, and vocabulary
- Increase student motivation and engagement with reading
- Teach essential content knowledge so that all students master critical concepts

In English language arts classrooms, students need to be able to activate prior knowledge, visualize, determine the main idea (or gist), summarize, and make connections (Dole, 2007). Social studies content requires students to ask questions, identify causes and effects, and make

Implications for Classroom Instruction

comparisons (Shanahan, 2007). Setting purposes, making predictions, and synthesizing information are important reader strategies during science class (Moje, 2007), while the study of mathematics relies on students’ ability to ask questions, deconstruct complex text, monitor comprehension, and paraphrase (Gersten, 2007).

Lee and Spratley (2010) maintain that content teachers need to teach, through modeling and guided practice, a list of specific strategies. These discipline-specific reading strategies allow the teacher to organize for content-area instruction and assist comprehension and learning.

Following these routines will result in successful content-area learning:

Table 7.3: Strategies to support content-area learning

Generic Reading Strategies	Discipline-Specific Reading Strategies
<ul style="list-style-type: none"> ➤ Monitor comprehension ➤ Pre-read ➤ Set goals ➤ Think about what one already knows ➤ Ask questions ➤ Make prediction ➤ Test predictions against the text ➤ Re-read ➤ Summarize 	<ul style="list-style-type: none"> ➤ Build prior knowledge ➤ Build specialized vocabulary. ➤ Learn to deconstruct complex sentences ➤ Use knowledge of text structures and genres to predict main and subordinate ideas ➤ Map graphic (and mathematical) representations against explanations in the text ➤ Pose discipline-relevant questions ➤ Compare claims and propositions across texts ➤ Use norms for reasoning within the discipline (e.g., what counts as evidence) to evaluate claims

The authors make additional recommendations for scaffolding comprehension and content learning:

- Apply both generic and discipline-focused strategies and knowledge to the comprehension and evaluation of source materials from textbooks, primary sources, and multimedia and digital texts
- Reinforce ideas of reading as a meaning-making process

Implications for Classroom Instruction

- Provide guided supports that help students make sense of a text while students are engaged in reading
- Shift responsibility for thinking and making sense of texts to students themselves through guided supports in both small- and whole-group work
- Sequence discipline-specific inquiry tasks and the reading of a range of discipline-focused texts in ways that build knowledge and dispositions over time
- Focus classroom talk on how students make sense of texts and how they use what they learn from texts to carry out discipline-specific thinking tasks
- Provide consistent supports so students experience success and develop (or reinforce) their sense of efficacy as readers

Teaching students to use strategies and to think metacognitively about their reading does not end at elementary school. Content-area teachers must continue this work because student learning needs to occur simultaneously across several content areas.

Text Considerations

Compared to texts used in elementary grades, middle and high-school content-based texts are significantly longer and more involved. This sophistication can be found at the word level, with the increased use of academic vocabulary and the infusion of technical terms that carry specific meaning; at the sentence level, with increased sentence length and complexity that articulate complex relationships; and at the structural level, where certain text structures are used in each content area to communicate complicated concepts and logical relationship between ideas (Carnegie Council on Advancing Adolescent Literacy, 2010). Subject textbooks also present greater conceptual challenges for adolescent learners; unfamiliar concepts become increasingly abstract, with many relying on the application of previously acquired concepts (Moje & Speyer, 2008).

FOR FURTHER INFORMATION, REFER TO THE *COMMON CORE STATE STANDARDS: APPENDIX A (READING) AND APPENDIX B (TEXT EXEMPLARS)*.

Implications for Classroom Instruction

As students are asked to comprehend texts of increasing complexity, their skills as readers must also increase in sophistication. Content-area teachers need to understand the demands and conceptual load of reading and writing in their subject areas. Learning about the factors of text complexity will help inform teachers' decisions about which texts to use in their classroom and when to apply scaffolds to help students work competently with texts.

Writing

The ability to compose text effectively for various purposes and audiences defines writing. As a tool for communicating and learning, writing enables a person to document, collect, and widely circulate information across levels and media (Graham, 2005). No matter their grade level or experience, all students need to be able to express themselves and persuade others if they expect to realize success in post-secondary education and the workplace.

After they read material, students often need to consolidate and connect ideas or critically assess an author's arguments (Ogle & Lang, 2007). Frequently these activities are accomplished through writing. Since the implementation of standards-based instruction, academic expectations for student writing have increased. Proficient students should be able to do the following:

- Write in a variety of genres and purposes
- Plan, organize, compose, revise, and edit
- Employ a variety of writing strategies
- Learn to be self-directed and goal-oriented
- Accept and act on feedback from teachers and peers
- Meet the demands of each academic discipline

(Graham, Harris, & Loynachan, 1993; Graham, 2005; Shanahan, 2004)

The inability to write effectively may create barriers to communication and learning and could result in misleading performances on academic assessments. As well, college and workplace opportunities depend heavily on the ability to present thoughts cogently and persuasively on paper. Problems with writing can limit access to such opportunities.

Yore (2003) corroborates writing's importance in learning a subject. Discipline-specific tasks, such as lab reports and persuasive essays, provide opportunities to strengthen and expand content

knowledge. In developing written products, students use and apply their newly learned content vocabulary, refine their own process for writing by thinking metacognitively, strengthen modes of argumentation, develop technical writing skills, and become more sophisticated in their use of conventions, particularly punctuation.

It is often assumed that proficient readers are also proficient writers. Graham and Perin (2007) assert that academic writing varies across disciplines and presents several challenges for adolescent learners. As a result, many skilled readers struggle to develop strong writing products. Some students struggle with formulating their own ideas while others find organizing their thoughts a laborious task. A majority of students grapple with the demands and conventions of academic writing.

**FOR FURTHER INFORMATION, REFER TO THE WRITING STRAND OF
[COMMON CORE STATE STANDARDS FOR ENGLISH LANGUAGE ARTS AND LITERACY IN
HISTORY/SOCIAL STUDIES, SCIENCE, AND TECHNICAL SUBJECTS \(6–12\)](#).**

Implications for Classroom Instruction

While reading and writing are actually complementary skills, the development of each runs a parallel course. Reading instruction does not necessarily improve writing skills, and writing instruction does not necessarily improve reading skills. Both require dedicated instruction (Graham & Perrin, 2007). Since students entering college or the workplace are expected to “write coherent and persuasive arguments based on evidence,” all students need to become proficient and flexible writers (Alliance for Excellent Education, 2011).

Research confirms that improving a person’s writing skills does increase that person’s capacity to learn. When students use writing to reflect on their use of strategies, for example, their acquisition of those strategies improves. Writing in response to reading in general fosters improved thoughtfulness and critical thinking. Not surprisingly, the high levels of reasoning skill and engagement that are required for content-based writing in turn act as tools for learning a particular subject.

Much as they are expected to read complex literature and informational text, adolescents are expected to write authentically and demonstrate increasing sophistication in all aspects of language use (*Common Core State Standards*, 2010). As students write for different purposes across content areas, the practice of adapting their writing to these different purposes helps them become more critical and analytic. In English class, for example, writing instruction should mirror the genres being studied and include opportunities to write descriptive, informational, and persuasive texts (Dole, 2007). Social studies teachers should instruct students in how to write to

Implications for Classroom Instruction

communicate information: descriptions, arguments based on evidence, and analyses of events or actions (Shanahan, 2007). In science classes students should be taught how to write like scientists: logs and notebooks that track results and record objective information in different formats and formal science reports, as well as expressions of personal views and opinions (Moje, 2007). Writing in mathematics class “should be used to articulate mathematical proofs, compare and contrast ideas, or explain concepts and procedures . . .” (Gersten, 2007).

Since skillful writing requires time and practice, students need instruction and multiple opportunities in varied contexts to demonstrate their learning through writing. The National Institute for Literacy (2007) presents five recommendations, drawn from research, for improving adolescent writing instruction:

➤ **Use direct, explicit, and systematic instruction to teach writing.**

Explicitly teaching strategies and skills to adolescent writers enhances their development by building upon students’ prior knowledge and introducing new information contextually (Graham, Harris, & Loynachan, 1993; Graham, 2005; Shanahan, 2004). The steps of the writing process and the skills required for editing and revising are the kinds of strategies and skills students need across content areas. In each content classroom, teachers need to model these strategies and carefully guide their students’ practice.

➤ **Teach students the importance of prewriting.**

Often students do not take time to plan before they begin to write. Research (Urquhart & McIver, 2005; Lindemann, 1995) indicates that planning is an important step in developing high-quality writing products. Known as pre-writing, this planning phase provides time for thinking about the anticipated product and one’s knowledge about the topic. Most importantly, pre-writing allows students to organize their thoughts and determine next steps based on expectations and knowledge. Teachers can model pre-writing and articulate the importance of this process. Effective pre-writing strategies utilized in content classrooms include brainstorming, developing outlines, and using graphic organizers that arrange information appropriately.

➤ **Provide a supportive instructional environment.**

An instructional environment that supports writing is critical for developing proficient academic writers. Writing needs to be a regular activity in every content classroom. Student opportunities should include writing both short and extended pieces. Teachers should interact with students and engage their thinking about various formats that might be used to best communicate information. Teachers can effectively convey the importance of writing

Implications for Classroom Instruction

- in a particular content area by articulating how useful writing is outside of school, connecting writing to academic reading across disciplines, and sharing the writing of both students and teachers. Displaying student writing is a common practice in elementary schools; however, research indicates that prominently exhibiting student writing in content classrooms can also be motivating.
- **Use rubrics to assess writing.**

It is important for a student to know how writing will be assessed. Rubrics are widely accepted tools that articulate the expectations for a writing product and that promote self-assessment during product development. Before beginning the writing task, teachers should review the rubric to make students aware of the standards of good writing and the expectations for a particular product. Because they include gradations of quality, rubrics help student understand how their writing will be judged and scored. Whether used independently or in collaboration with peers, a rubric facilitates continuing improvement through the editing and revising process. Shanahan (2004) maintains that rubrics are important in assessing writing because they provide detail about the expectations and a clear understanding of what contributes to a strong or weak piece of writing.
- **Address the diverse needs of individual learners.**

Content classrooms are filled with diverse learners. The needs of struggling writers vary and depend on their prior knowledge, skills, motivation to write, and ability to self-regulate (NIFL, 2007). Emphasizing writing's usefulness and its value in everyday life will help students connect content-based writing to college and the work place. Allowing adolescents to frequently make their own choices about writing products or content will help motivate and engage them. Emerging research indicates that a process-based approach—one that integrates reading and writing activities, incorporates writing from multiple drafts, supports peer interactions, and includes inquiry-based projects and open-ended tasks—may be an effective way to support struggling writers (Peregoy & Boyle, 2010; Pérez & Torres-Guzmán, 2002).

Motivation and Engagement

Most often adolescent learners must work to comprehend complex texts. To be successful, these readers must be engaged with the text: actively use background knowledge and appropriate reading strategies to construct meaning and then develop a thoughtful response. With time and practice, readers can become more proficient and learn to coordinate these actions (Torgesen et al., 2007). The condition of student engagement involves the degree to which a student processes text deeply. Engaged readers become motivated learners when authentic engagement results in enjoyment and a

feeling of accomplishment. Student engagement is highly correlated with achievement in all areas of literacy (Campbell, Voelkl, & Donahue, 2000).

Motivation refers to “the desire, reason, or predisposition to become involved in a task or activity” (Kamil et al., 2008). Learners can be motivated to complete a task without being engaged, however. This lack of engagement may result when a task is too easy or too difficult (Kamil et al., 2008). Research further indicates that the use of extrinsic rewards, such as grades or prizes, may increase initial motivation, but the effect is short-lived (Deci et al., 1999; Tang & Hall, 1995).

Successful readers and writers are intrinsically motivated. They exhibit self-determination, believing that they have control over their reading and writing tasks. They self-regulate by setting goals for each task and making sure that they stay focused on their goals. They remain engaged throughout the task by activating prior knowledge and applying strategies effectively. Most importantly, these learners, whether struggling or not, *believe* they can accomplish the task (Wigfield & Guthrie, 1997; Guthrie & Humenick, 2004; Reed et al., 2004).

The decline in motivation typically seen in adolescents can be attributed to several factors. During adolescents, young adults develop changes in their beliefs, values, and goals, which may lead to a decline in motivation. However, students who display a lack of motivation in school are most likely continuing their literacy activities outside of school: reading magazines of personal interest, texting friends, or researching products on the Internet. For struggling readers and writers, any lack of motivation has probably been compounded by years of frustration, poor grades, and/or school grouping practices. In addition, adolescents often compare themselves to others and can be quick to perceive that they may be less capable than their peers (Guthrie & Wigfield, 2000), contributing to their low sense of self-efficacy.

Implications for Classroom Instruction

Research suggests several ways for content teachers to motivate their students. Moje and Hinchman (2004) explain that integrating student interests into content classrooms will motivate students to use reading and writing to learn about and communicate academic content. This strategy includes making real-world connections to academic content. Several interest inventories are available to help teachers determine the interests of their students and provide some ideas for making these kinds of connections.

When they articulate clear and specific goals for every reading and writing assignment, teachers set the purpose and inform students about what they are expected to do (Wigfield, 2004), thus

Implications for Classroom Instruction

helping students understand the task and the work needed to complete it. This clarity supports student engagement. Teachers should make sure this approach includes specific guidance by giving examples and soliciting student input about strategies they might use or scaffolds that could be helpful, such as noting chapter headings or using graphic organizers.

Choice and variety motivate learners. Today's classrooms include more options for reading materials, in both print and other media. Teachers can offer students multiple, high-quality sources for interacting with and learning the same content. This option allows student to make decisions about how to complete the task; as well, it facilitates differentiation for struggling readers. Allowing students to select how they will demonstrate their new knowledge also acknowledges and recognizes their interests and provides added motivation through choice. Choice and variety may also help students to focus on improving their own literacy skills because, as long as they complete the assignment, they are free to plan the subtasks of the assignment however they want (Moje & Hinchman, 2004; Wigfield, 2004).

A final key motivator is interaction. Opportunities for collaborative learning serve to support struggling learners and reinforce content for all learners. Teachers should create and manage opportunities for students to meet in small groups to discuss their reading with the goal of clarifying and extending their content learning. Research confirms that collaborative techniques are effective for accomplishing these goals (Council of Chief State School Officers, 2007). Teachers need to structure groups carefully, however, when students of differing abilities meet to discuss a common topic and offer different viewpoints or information (Wigfield, 2004).

A positive learning environment impacts adolescent learning. Establishing an environment that acknowledges individual interests, sets clear and specific goals, and supports learning through choice and collaboration will foster motivation and engagement.

**FOR FURTHER INFORMATION ABOUT MOTIVATING AND ENGAGING STUDENTS,
REFER TO PAGE 78**

21st Century Literacies

Today's adolescents are the first generation to be born into a digital world. As such, they are fluent in the language, customs, and values of information and communication technology (ICT). They are "digital natives" who have spent their entire lives surrounded by ever-changing technologies (Prensky, 2001). These learners adjust easily to technological innovations and are skilled in utilizing these tools in creative ways. A digitally literate learner is one who is able to use, comprehend, and manipulate computer-related content and processes in order to accomplish personal, academic, and social goals (Labbo, 2004).

The production and distribution of digital texts make necessary the act of constructing and expressing meaning across multiple formats (e.g., digital, pictorial, spoken, printed). As a result, the definition of literacy must expand beyond reading and writing texts in print. The *Common Core State Standards* (2010) describe what it means to be literate in this ever-changing environment:

They [students who meet the standards] habitually perform the critical reading necessary to pick carefully through the staggering amount of information available today in print and digitally. They actively seek the wide, deep, and thoughtful engagement with high-quality literary and informational texts that builds knowledge, enlarges experience, and broadens worldviews. They reflexively demonstrate the cogent reasoning and use of evidence that is essential in both private deliberation and responsible citizenship in a democratic republic. (p. 3)

In order to be ready for college or a career, adolescents will need to demonstrate proficiency in problem solving, collaboration, and analysis, where the processes of critical thinking and reflection play important roles. The expectations for these high school graduates also include a mastery of word-processing skills and the competent use of both the "hard" and the "soft" tools of technology, such as Webcams and hypertext, digital audio devices and podcasts (Kist, 2005).

Implications for Classroom Instruction

These new technologies shape the acquisition of literacy by affording opportunities that foster reading and writing in more diverse contexts and by adding a social dimension to literacy. Interactive, web-based catalogs of library materials expand the range of available texts and can provide the same content at different reading levels. Digital technology motivates and creates interactive experiences. Research indicates that students who use computers to write are more motivated and engaged, and they produce work of greater length and higher quality (Goldberg, Russell, & Cook, 2003).

Building on foundational literacy skills, 21st Century Literacies are central to acquiring knowledge and to preparing students for new technological demands (Leu et al., 2004). Similar to traditional literacy activities, technology-based activities must support the goals of student learning and be woven into the fabric of the content. Research supports an integrated approach to this challenge that involves helping students understand how to access information and data, evaluate its relevance to the task, synthesize new content, and make contributions to an expanding body of knowledge. Librarians, the schools' information/21st Century Literacy experts, should work collaboratively across grade levels and content areas to ensure vertical articulation of these informational literacy concepts and skills. Further, teachers must provide interactive demonstrations to explain and model the use of a particular technology. Guided practice, including collaborative activities, also serves to scaffold learning (National Council of Teachers of English, 2007; McKenna et al., 2007).

Teachers cannot make assumptions about the knowledge and skills each learner brings to the classroom. Using a simple inventory of technology will allow students to detail their technology skills and personal interests. An inventory of this kind provides teachers with a baseline of information, allowing them to make informed decisions about which tools to integrate and which students to support (Moorman & Horton, 2007).

Teaching content remains the primary responsibility of secondary school teachers. In the past, textbooks influenced which concepts would be presented and what content learned. However, teachers can now consider accessing a variety of sources—digital and print—to teach their content. This practice connects students to the real world by allowing them to interact with working scientists, mathematicians, and social scientists. Furthermore, it gives them opportunities to practice with authentic texts at different levels of complexity. Computers, web-based research tools, and certain kinds of software can provide support for struggling learners.

Implications for Classroom Instruction

Students have always needed to activate strategies and skills to locate, read, comprehend, evaluate, and use information. New literacies rely even more on this kind of strategic knowledge. As technology changes, strategic knowledge will continue to evolve, as well. Using these processes online is more complex than accessing a textbook (Leu et al., 2004). Teachers need to guide students by modeling what the process looks like, reminding them to employ effective learner strategies and providing authentic opportunities to practice.

Critical to the effective use of web-based information is a student's ability to evaluate the quality of a source. Students have extensive experience in accessing and using online sources; however they have little skill in determining the reliability or accuracy of Internet resources. Many students type a word or phrase into a search engine and click on the first site listed. Teachers and librarians need to coach their students in how to critically evaluate a web-based source for authenticity, applicability, authorship, bias, and usability. These criteria for evaluating sources are not new to content teachers and should be included as part of instruction.

FOR FURTHER INFORMATION, REFER TO APPENDIX K FOR WEBSITE EVALUATION AND STUDENT TECHNOLOGY SURVEY TOOLS.

8. COMPREHENSIVE SYSTEM OF ASSESSMENT FOR LITERACY

READING

The act of reading and comprehending is complex and requires the acquisition of many overlapping and supporting skills and strategies. Effective reading instruction depends on sound instructional decisions made in partnership with the use of reliable data regarding students' strengths, weaknesses, and progress in reading. The National Reading Panel (2000) concluded that there are no easy answers or quick solutions for optimizing reading achievement. Nor is there one assessment that will screen, diagnose, benchmark, and progress monitor students reading achievement. Multiple indicators from different types of assessments provide a more complete picture of students' reading processes and achievement (Edwards et al., 2008).

There are various ways to gather assessment data (Rhodes & Shankin, 1993). Teachers can test students, analyze student work samples, observe students performing literacy tasks, or interview students on their reading skills. Teachers can gain the most information by using all of these methods to collect data.

Timely, reliable assessments indicate which children are falling behind in critical reading skills so teachers can help them make greater progress in learning to read. Reliable and valid assessments also help monitor the effectiveness of instruction for all children; without regularly assessing children's progress in learning to read, we cannot know which children need more help and which are likely to make good progress without extra help. (Torgesen, 2006, p. 1)

FACETS OF A COMPREHENSIVE ASSESSMENT SYSTEM IN READING

A comprehensive system of assessment in reading involves several different types of assessments for determining the effectiveness of the instruction, the progress the student is making, and the need for and direction of additional interventions and supports to ensure that a student is able to maintain grade-level progress. The following describes various categories of reading assessments and the kinds of information they provide.

Classroom Instructional Assessments

Screening Assessments. A type of interim assessment

- Used as a first alert or indication of being at-risk for reading below grade level
- Administered to all students *before* instruction
- Quick and easy to administer to a large number of students and correlated with end-of-year achievement tests
- Rarely provide the specific information needed to determine the most appropriate intervention or target for instruction

All essential components of reading may not be included within any given grade level's screening assessment. However, to make informed decisions on a student's proficiency in reading, ample data must be collected. Therefore, a screening assessment should include, at a minimum, two of the components that influence reading proficiency.

Key questions that screening assessments should answer:

- Which student is experiencing reading difficulty?
- Which student is at-risk for reading difficulty and in need of further diagnostic assessments and/or additional interventions?

Benchmark Assessments. A type of interim assessment

- Used to chart growth in reading
- Administered to all students
- Determine if students are making adequate progress in overall performance towards standard(s)
- Typically administered at a predetermined time (e.g., at the end of a unit/theme, quarterly)

Key questions that benchmark assessments should answer:

- What is the effectiveness of the classroom instruction?
- How should groups be formed for classroom reading instruction?
- Which students need extra support or enrichment to acquire a particular reading skill or standard?
- Which specific reading skills need to be emphasized or re-taught?

Progress Monitoring. A type of formative or interim assessment

- Used to determine next steps
- Used during classroom reading instruction (may occur daily, weekly)

- Aligned to instructional objectives
- Can be used on an ongoing basis and may include teacher-made assessments, book logs, work samples, anecdotal records, and standardized or semi-structured measures of student performance, such as a miscue analysis and observational notes from a reading conference

Key questions that progress monitoring assessments should answer:

- How does the data articulate whether a student “got it”?
- Does the lesson need to be re-taught to the whole class or to just a few students?
- Who needs extra support or enrichment?
- How is the specific, constructive, and timely feedback that is provided to students promoting student learning (or relearning) of reading skills/standards?

Outcome Measures. A type of summative assessment

- Used as a program or student evaluation in reading
- Used to indicate a student’s learning over a period of time and to show how proficient a student is towards meeting the grade-level standards in reading

Key questions that outcome assessments should answer:

- To what degree has the student achieved the reading content standards?
- Is the assessment aligned to the state-adopted reading standards?
- What information/data is provided and may be used to evaluate the effectiveness of the reading curriculum?
- Can decisions about selection and utilization of resources, materials, and personnel be made with data collected from this reading assessment?

Intervention Assessments

Diagnostic Assessment. A type of interim assessment

- Used to gain an in-depth view of a student’s reading profile
- Administered to students who have already been identified as being at-risk of reading below grade level during the screening process
- Often are individually administered so observations of behaviors can also be included

Diagnostic assessments are used to determine specific areas of need and may not include all essential components of reading. However, a comprehensive assessment system must include a variety of assessments that address all essential components of reading for educators to use as needed.

Key questions that diagnostic assessments should answer:

- What are a student’s strengths in reading?
- What are a student’s weaknesses in reading?
- Which components of comprehensive reading (fluency, phonemic awareness, phonics, text comprehension, and vocabulary) are problematic for the student?
- Are other students exhibiting similar reading profiles?
- How should reading intervention groups be formed?

Progress Monitoring of Intervention. A type of formative or interim assessment

- Used to chart rate of growth towards benchmark/goal/standard
- Used for students who have intervention services in reading

Key questions that a progress monitoring assessment used with a method of intervention should answer:

- Has this intervention been proven effective in improving students’ literacy skills?
- Is the individual student progressing at a sufficient rate to achieve the goal?
- Are instructional revisions needed in order for the student to make sufficient progress toward the student’s goal/standard?

WRITING

Writing requires the coordination of multiple skills and abilities, including the ability to organize, establish purpose/focus, elaborate, chose and maintain a consistent voice, select appropriate words, structure effective sentences, spell, plan, revise, etc. “To address each of these aspects instructionally, educators need an assessment plan that is comprehensive and meets the varied needs of students” (Olinghouse, 2009).

Assessments for writing may be used for a variety of purposes (e.g., providing assistance to students, assigning a grade, determining proficiency, placing students in instructional groups or course, and evaluating writing curricula/programs). The National Council of Teachers of English (NCTE) believes that the primary purpose of assessment is to improve teaching and learning (2009). Consequently, the goal of assessing students’ writing should always be just that: refining instruction and improving student learning.

Writing assessments must reflect the social nature of writing and its recursive process, while also considering that each piece of writing has a specific purpose, audience, and task. Due to the variety of genres of writing, the skills associated with each, the diverse audiences and various purposes for writing (entertain, persuade, inform), the evaluation of a student’s overall writing ability should be based on multiple measures. One piece of writing, regardless of the quality of the writing or its purpose, should never be the sole indicator of overall writing ability:

Ideally writing ability must be assessed by more than one piece of writing, in more than one genre, written on different occasions, for different audiences, and responded to and evaluated by multiple readers as part of a sustained writing process. (NCTE, 2009)

Students may draw incorrect conclusions about the very nature of writing when there is a lack of multiple measures:

For example, timed writing may suggest to students that writing always cramps one for time and that real writing is always a test. Machine-scored tests may focus students on error-correction rather than on effective communication. (NCTE, 2009)

Students should be able to demonstrate what they do well in writing. Assessment criteria should match the particular kind of writing being created and its purpose. These criteria should be directly linked to standards that are clearly communicated to students in advance so that students can be guided by the criteria while writing. In some cases, teachers may even want to involve students in the creation of a rubric, a process that can solidify their understanding of the criteria for success and invest them in the assessment process.

Most standardized tests focus on easily assessed features of language (grammar, usage, and mechanics) through the use of multiple choice questions. Choosing a correct response from a set of possible answers is not writing. This type of assessment lends itself to provide information on what students do wrong or do not know rather than on how well a student can communicate through writing.

Classroom formative assessments are short-term, in-process judgments about what the students know and what the teacher should teach next. These assessments should include a period of ungraded work that receives feedback from multiple readers, including peer reviewers. Writing feedback often occurs within a conference, with both peers and teachers, that provides specific direction on how to improve the piece. Sometimes this type of conference provides written feedback (but not always) and sometimes it is just oral (promoting the social aspect of writing). Self-assessment should also be encouraged:

Ultimately, we want students to internalize the qualities of good writing and to have inner conversations about their writing—in other words, to have conferences with themselves in which they notice their strengths, critique their own writing, set reasonably high goals, know how to seek help, and work towards accomplishing their goals. (Routman, 2005, p. 253)

Classroom-level assessment of writing should also include reviewing the initial piece through final drafts of the writing piece and multiple opportunities to demonstrate proficiency. Strickland & Strickland (2000) assert that classroom writing assessment “gets to the heart of teaching and lets us decide how and when to offer support to writers” to develop proficiency.

Educators need to understand the following in order to develop a system for assessing writing:

- How to find out what students can do when they write informally and on an ongoing basis
- How to use that assessment to decide how and what to teach next
- How to assess in order to form judgments about the quality of student writing and learning

COMPREHENSIVE SYSTEM OF ASSESSMENT FOR LITERACY

- How to assess ability and knowledge across varied writing engagements
- What the feature of good writing are
- What the elements of a constructive writing process are
- What growth in writing looks like—the developmental aspects of writing
- How to deliver useful feedback, appropriate for the writer and situation
- How to analyze writing tasks/situations for their most essential elements (so that assessment is not everything about writing all at once but rather targeted to objectives)
- How to analyze and interpret both qualitative and quantitative writing assessments
- How to use a portfolio to assist writers in their development
- How self-assessment and reflection contribute to a writer’s development
- When determining proficiency in writing, multiple student writing samples should be reviewed from various genres and for diverse audiences, tasks, and purposes

(Adapted from Newkirk & Kent, 2007)

FOR FURTHER INFORMATION ABOUT THE DEVELOPMENT OF A COMPREHENSIVE ASSESSMENT SYSTEM, REFER TO THE [COMPREHENSIVE ASSESSMENT SYSTEM: RHODE ISLAND CRITERIA AND GUIDANCE.](#)

9. LITERACY INTERVENTION

The importance of addressing the needs of struggling readers cannot be overstated. Research confirms that the longer a student moves through school with reading difficulties, the more entrenched those difficulties become and the more difficult they are to address. The consequences are disturbing: if a student falls significantly behind in reading in the first grade, that student will “very likely” fail not just in reading but in all academic areas in every subsequent grade (Carlisle, 2004).

If schools do not meet the challenge of struggling readers today, those students face “a future of sharply diminishing opportunities” (Snow & Biancarosa, 1998). Students who do not read proficiently by third grade “are four times more likely to leave school without a [high school] diploma than proficient readers” (Hernandez, 2011). While some struggling readers manage to get into college, even those who work hard to address their reading deficit by enrolling in remedial reading courses are more than three times *less* likely to earn a bachelor’s degree within eight years than students who take no remedial education courses (AEE, 2006).

Reading difficulties are predictive as well as cumulative: “A student who fails to learn to read adequately in the first grade has a 90 percent probability of remaining a poor reader by Grade 4 and a 75 percent probability of being a poor reader in high school” (Mathes, 2011). But even more tragic is the quality of life faced by someone who remains a poor reader. As adults, these struggling readers are hampered in their efforts to become informed citizens, and they face vastly fewer job prospects (Snow & Biancarosa, 2006). Alongside economic disadvantage, a poor reader enters adulthood with “a reduced capacity to learn independently, to absorb information on a variety of topics, [and] to enjoy reading” (IES, 2010).

Some maintain that reading is a problem for more students today because of the increased literacy demands of our technological society. Almost all reasonably well-paying jobs now require a better-than-basic level of literacy, “creating more grievous consequences for those who fall short” (NRC, 1998). Others point to “a marked decline in the reading and writing skills of adolescent learners” in general (Carnegie, 2011). Whatever the ultimate source of the problem, the need for schools to implement effective approaches to teaching reading at all grade levels—and to provide targeted support for those who struggle—is inarguable.

It is daunting to realize that even the best early literacy instruction does not always “inoculate students against struggle or failure later on” (CCAAL, 2011) and that some students will simply not progress at their grade level in reading, “even with excellent instruction in the early grades.” However, the good news is that most students can become proficient readers if they are given supplementary services and support (National Research Council, 1998).

RTI: TIER 2 AND TIER 3 SUPPLEMENTING THE CORE

Research shows that the most effective way to address reading difficulties is to identify problems as early as possible, provide instruction that is specifically targeted at those problems, monitor the progress of the struggling student, and then evaluate the effects of the instruction (Carlisle, 2004). This kind of intervention within an RTI system “considers individual student needs, selects appropriate materials, and establishes a focus on accelerative instruction.” In general, these intervention strategies “reflect a powerful philosophical shift in ensuring [that] school practices are meant for all students, especially older poor readers” (Neal & Kelly, 2002). Interventions are coupled with progress monitoring and data-based decision making to quantify a student’s rate of improvement and to evaluate the effectiveness of the interventions. When school data reveals that the vast majority of students are qualifying for targeted or intensive interventions, core instruction must be re-examined.

While the first tier of instruction within the RTI framework provides “core instruction,” sometimes students struggle with their learning, despite the accommodations and adjustments that classroom teachers make. When this happens, the **second tier** of RTI offers immediate, targeted interventions: “explicit instruction is provided to some students who need more than the core instruction to achieve at grade level.” Struggling readers are given supplemental instruction (in addition to Tier 1) and support, based entirely on their specific reading deficits. These instructional strategies and materials are “research-based and delivered by effective providers to small groups of students with similar needs. The instruction is designed to be short term and targeted to specific student needs” (RIDE, 2010). Valid, reliable, and evidence-based assessments administered biweekly or monthly provide ongoing progress monitoring to inform whether to continue, adjust, or end the intervention.

The **third tier** of support within RTI provides the most intense, individualized level of instruction—again guided by assessment—to directly address the needs of the students who struggle the most. Just as with Tier 2, Tier 3 support does not replace Tier 1 core reading instruction; it is in addition to Tier 1. Tier 3 is made up of “specifically designed systematic instruction for those few students who are not making sufficient progress with targeted interventions or who need a greater instructional intensity to accelerate their progress because of a more significant learning gap” (RIDE, 2010). The goal at this third tier is the “remediation of existing problems and prevention of more severe problems or the development of secondary concerns as a result of persistent problems. . . . with close monitoring of [student] progress” (Ervin, 2011). “The instructional strategies and materials used are research-based and delivered by highly effective providers to very small groups of students. This type of intervention is delivered more frequently (often four to five times a week) and often of longer duration than targeted interventions. . . . It differs from targeted instruction in that it is more intense and often more individualized.” This third tier may involve the expertise of “reading specialists, ESL/bilingual teachers, special educators, [or] related service providers” (RIDE, 2010). Progress monitoring occurs with greater frequency at the intensive intervention level.

In general, as individual students demonstrate a need for the supports provided in the second and third tiers of the RTI process, the intensity of the services is increased to meet those needs. As students close gaps and as they struggle, they move back and forth along the Tier 1, Tier 2, and Tier 3 continuum: RTI is a recursive process. The fluidity of the continuum attends to the needs of each student by encouraging multiple supports and preventing students from receiving permanent services.

**FOR FURTHER INFORMATION, REFER TO THE NATIONAL CENTER ON
RESPONSE TO INTERVENTION: [HTTP://WWW.RTI4SUCCESS.ORG/WHATISRTI](http://www.rti4success.org/whatisrti)**

RTI: PERSONAL LITERACY PLANS

A well-crafted curriculum scaffolds instruction and uses appropriately selected texts: it builds on what students already know and can do, provides support to help students practice getting to the “next level” of competence, and gradually removes supports as students acquire independence in the new skills (Van Der Stuyf, 2002). Even “poor readers can be taught [to read] if the [reading] program has the necessary components, the teacher is well prepared and supported, and the students are given time, sufficiently intensive instruction, and incentives to overcome their reading and language challenges” (Moats, 2001).

Along with a well-sequenced curriculum and a whole-school commitment to literacy, continual assessment is a vital component of an effective reading program. Appropriate, frequently applied formal and informal assessments serve to identify any difficulties a student may be having before that student falls too far behind his peers; these assessments guard against any chance a student could fail to progress. Assessment results then guide the selection and use of supplementary supports, instruction, and time to help the student gain the skills that are weak or lacking (Hiskes, 1998).

Rhode Island’s Personal Literacy Plan (PLP) is an example of an RTI framework that provides these kinds of supports. Aligned both philosophically and structurally with the RTI approach in its use of assessment, targeted interventions, and problem-solving strategies, the PLP fits within RTI’s second and third tiers of intervention. The purpose of the PLP process is to work with students who are reading below grade level and help them advance to grade-level proficiency. The PLP is a cyclic, inclusive, and individualized problem-solving approach to documenting and planning instructional supports and intervention strategies, which are continually guided by ongoing assessments. (RIDE, 2005).

The personal nature of the PLP is key. “Struggling readers who need extra help are not identical to one another in their needs. In fact, their needs are most often widely diverse. Because of that, there is no one magic technique, program, or set of materials that works for all students” (Fountas & Pinnell, 2001). Clearly, “good instruction for struggling readers focuses on a difference model, one that meets

students at the point in their literacy development where they are performing and then seeks to move them forward, rather than a deficit model, which focuses on what students do not know” (RIDE, 2005).

FOR FURTHER INFORMATION ABOUT THE PERSONAL LITERACY PLAN, REFER TO RHODE ISLAND DEPARTMENT OF EDUCATION’S [PERSONAL LITERACY PLAN GUIDELINES](#).

NEEDS OF STRUGGLING READERS

The characteristics of all struggling readers fall into some combination of the following categories:

- Limited oral language proficiency
- Poor decoding skills (i.e., how to decipher a written word based on knowledge that letters represent sounds)
- Poor fluency (i.e., the inability to read quickly, accurately, and with appropriate expression and phrasing)
- Limited vocabulary
- Limited background knowledge
- Limited content-area knowledge
- Poor comprehension strategy knowledge and use

(Adapted from National Governors Association Center for Best Practices, 2005)

Research shows that “it is easier, less expensive, and more humane to prevent the onset of serious reading problems than to try to solve them, once they are entrenched” (Carlisle, 2004). In addition, “interventions for struggling readers after third grade are seldom as effective as those in the early years” (Hernandez, 2011). The directive is clear: students need early, quality reading instruction—essentially, whatever it takes in the early grades to prevent reading problems in later years.

The National Center for Education Statistics shows 70 percent of middle and high school students scoring below the “proficient” level in reading. This means that only 30 percent of older students in the United States are reading at even adequate levels. A common stereotype of struggling readers is that they are a minority of students who have pronounced disabilities. The National Assessment of Educational Progress (NAEP, 2009) shows something completely different: less than 10 percent “of 17 year olds, regardless of race/ethnicity . . . are able to comprehend complex texts.” As to the cause, research suggests that “often the real difference between good readers and struggling readers is domain-specific background knowledge” (RIDE, 2003). The challenge of meeting the needs of these

older, struggling readers is no small one; nevertheless, educators now have a powerful array of tools at their disposal (Snow & Biancarosa, 2006) that provide direction for moving forward.

While they deal with some of the same challenges faced by their younger counterparts, older struggling readers—and their teachers—have to address additional and often more complex challenges because of the accretion of years. One basic fact should inform all instructional efforts: “there are no quick fixes” for the older student (Feldman, 2007). And whatever specific approach is used to help bring these readers up to grade-level, the following components will help ensure improvement:

1. **Additional instructional time.** This can take the form of a specific “required elective” class devoted strictly to reading; it can be a core reading class, or it can be a summer school or after-school program. Whatever form it takes, older students need as much practice time as possible to bolster their reading skills and confidence.
2. **Interactive instruction.** One-to-one intervention is proven to be most effective, followed by small, homogeneous groupings. Same-age peers, support staff, or volunteers can provide these types of interventions, as long as they are well trained and supported. Struggling readers make better progress when they have a positive, personal connection with the individual helping them.
3. **Research-based curriculum and professional development.** Giving teachers effective curricula to work from and providing them with the most recent information and training to work with older, struggling readers will serve to enhance their efforts and ultimately result in better student outcomes.
4. **Practice.** With a partner, in a group, silently alone, and at home—just about any form of practice is effective as long as a student is actively engaged in reading.
5. **Student buy-in.** Somehow students themselves must embrace the value of learning to be a good reader. A dynamic, inspiring teacher can help. Older students are also often motivated by regular feedback that allows them to see and monitor their progress (Adapted from Feldman, 2007).

In general, “given the right approach, students will buy in. In fact, they’ll ask why they were allowed to go so far without being taught to read” (Moats, 2001).

Emotional Life of Struggling Readers

When students struggle and falter through their early elementary years in their efforts to learn to read, they frequently end up suffering from a sense of low “self-efficacy”: essentially, they start lacking confidence in their ability to ever read well. What they often tell themselves and others is that they don’t care about reading, or it’s the teacher’s fault they can’t read, or reading is stupid anyway.

However, these students often see themselves as academic failures, and this sense of failure and pessimism about ever learning to read—or becoming successful students—can be the most powerful obstacle teachers face in helping struggling students become better readers. (McCabe & Margous, 2001). Not surprisingly, their sense of failure is exacerbated when these students are regularly asked to read material they simply do not understand.

Changing these attitudes is not easy. But it is possible, particularly if teachers focus first on helping struggling readers experience success in reading, either on their own or with support from an adult. Again, teachers must be constantly vigilant of the reading level of the material they give students. Scaffolding instruction in all content areas is critically important to this effort, as well; these students can learn only by building on their current strengths, which, when successful, can further enhance their sense of accomplishment. In all things, students need to be regularly and frequently reminded of what they *do* know and what they *can* do—they need positive feedback for any effort and answer that even approaches the correct one (Lyons, 2003). In short, struggling readers need to accumulate many more positive experiences with reading than negative ones in order to want to read enough to improve their skills.

Implications for Interventions

Phonemic awareness and decoding

The difference between an emergent reader and a struggling reader in the first grade can be slight, since their instructional needs are often the same. One characteristic of both beginning and struggling readers is that “they often fail to hear and pronounce specific phonemes correctly” (TFA, 2011). In fact, the best predictor of reading difficulty in kindergarten or first grade is a child’s inability to segment words and syllables into constituent sound units (Lyon, 1995). Clearly, that ability to segment phonemes is the most important beginning reading-readiness skill. As well, the ability to decode, or to sound out words, is considered essential for fluent reading in later grades (NICHD 2000). Responding to the needs of struggling readers in the earliest elementary grades is critical, and the focus for teachers is clear: students need to be systematically taught the sound structure of words; without it, they become poor readers. While a carefully structured

Implications for Interventions

curriculum in phonics is helpful for all students, this emphasis on the basic code of language in the early grades is essential for students at risk for reading difficulty.

As with all aspects of literacy, teaching phonics (the predictable relationship between phonemes—the sounds—and the graphemes—the letters that represent the sounds in written language) and phonemic awareness (the “ability to notice, think about, and work with the individual sounds in spoken words,” [Armbruster & Osborn, 2001]) requires both explicit and systematic instruction, as well as formal and informal opportunities to practice. Using rhymes and alliteration in games, scrambling and unscrambling words, and encouraging students to engage their whole bodies by clapping, stomping, or dancing as they count out syllables are all practices that help to reinforce phonemic awareness for young children.

A few struggling readers in upper elementary school and in middle school will need instruction that directly addresses decoding skills. Research has shown that, among fourth graders, those students who show the very weakest reading comprehension also show the greatest difficulties in accurately reading single words (Daane et al., 2005). With systematic, explicit, and intense instruction in phonological awareness, connected with decoding strategies (along with instruction to develop additional skills, such as comprehension and vocabulary), these older, struggling readers can be brought up to grade level (Torgesen et al., 2001). Effective instruction in decoding for older children and adolescents should be fast paced—presented in quick “blasts” so that students are engaged and their practice does not become drawn out or boring. As well, in order to develop accuracy in word reading, these struggling readers need ample practice so that their decoding skills become effortless and expressive (ED, 2010).

Automaticity

Effective literacy instruction in the early grades focuses on two different levels of what is called “automaticity.” Automaticity in general involves the ability to do something without thinking much about it. Most of us ride a bicycle that way—we are performing the task capably, but our minds are elsewhere. “Letter-sound automaticity,” the first level of automaticity as it relates to reading, is gained when students experience repeated exposure to letters and letter combinations to the point where the connection they make between the graphemes and the sound becomes automatic. Since those who struggle with reading often require more time in their efforts to gain automaticity (Flood, Lapp, Squire, & Jensen, 1991), teachers will want to create additional opportunities for these students to practice—playing games that strengthen the connection between the letter they see and its auditory representations, using flash cards, and engaging in any activities that involve

Implications for Interventions

physically creating the letters (e.g., tracing, copying letters, writing words). All of these approaches help younger struggling readers improve their automaticity.

The second level of automaticity involves word recognition, essentially decoding words without being conscious of the process. Good readers recognize words without sounding out each letter, putting the letters together into a word, and finally registering what that word means. By allowing readers to bypass that set of laborious steps, automaticity frees the reader's minds to focus on the meaning of the words within their context, make connections, recognize inferences, and just basically comprehend what he is reading (Van Duzer, 1999). Students who can't automatically recognize most of the words they read are not able to comprehend effectively—and certainly not efficiently—the ideas in the text (Lyon, 1995).

The development of automaticity in word recognition is fairly rapid for students who become good readers; "they may need to see a word only ten times before they can automatically recognize it. However, for those who struggle, they may need to see a word forty times. This reinforces the idea that struggling readers need frequent opportunities to read at their independent reading level" (Beers, 2003).

Research points to a mistake that teachers often make: assuming that "it is the learners' responsibility to practice what is covered in the class until they have acquired target proficiency." However, students, especially struggling readers, "seem to think they have practiced enough after only a few times even if they fall short of being fluent and proficient in the objective of study" (Yoshimura, 2000). As a consequence "of this failure to see eye to eye, many of these lower proficient readers continue to stay at faltering levels of controlled processing" (Warrington, 2006). The solution? Providing motivation and frequent occasions for students to "stick it out with some practice tasks until stages of automaticity have been reached" (Yoshimura, 2000).

Struggling readers need additional practice, with "sight words" and high-frequency words in particular. "Sight words are words students need to know by sight because they don't follow regular decoding rules (e.g., 'been,' 'does'). High-frequency words [are those that] appear so frequently, students need to recognize them instantly" (Beers, 2003). Any strategy that brings struggling readers into frequent, regular, and focused contact with these two categories of words—whether through low-tech means (using flash cards, making index cards, or rereading familiar texts) or high (literacy games on a computer)—will help students gain automaticity in

Implications for Interventions

word recognition. High-frequency words can also be “reinforced by keeping a word wall, and adding words that students see frequently (‘of,’ ‘a,’ ‘that’) in large letters.” (Beers, 2003).

Fluency

Difficulties with fluency while reading may be the key concern for upwards of 90 percent of students with significant problems in comprehension. These readers have a difficult time understanding the meaning of what they read because they are focusing their attention primarily at understanding the meaning of individual words (Duke, Pressley, & Hilden, 2004).

Fluency can be directly addressed in the classroom. Numerous studies have proven that fluency improves when a student reads a passage out loud and repeatedly (National Reading Panel, 2000; Rasinski & Hoffman, 2003). “When children are allowed to re-read familiar material, they are being allowed to learn to be readers, to read in ways which draw on all their language resources and knowledge of the world, to put this very complex recall and sequencing behavior into a fluent rendering of the text” (Clay, 1991).

Like pitching a baseball or reading music, fluency in reading comes from simply practicing it often, using a variety of texts. “It is necessary to read frequently to expand the sight word vocabulary readers need to read fluently, and this is one area where struggling readers fall behind. Fluency does not ‘cause’ comprehension; however, it is a necessary component of successful reading” (Rasinski et al., 2005).

Fluency represents one more area where struggling readers benefit from explicit instruction. When teachers assume the role of a coach—by reading to students, listening to students read out loud, providing direct feedback, and commenting on what constitutes fluency—they are providing effective instruction in fluent reading so that students know exactly what it is. Other strategies include organizing choral readings or readers’ theater in class, assigning audiotope-assisted readings, and using tutors to support accurate and fluent out-loud reading. When these strategies are implemented frequently and regularly, they improve both the oral and the silent-reading fluency of students of all ages (ED, 2002).

It is important, however, for struggling readers to know that speed and fluency are two very different things. While fluency is always desirable, speed is not. Some texts, even for the most accomplished reader, must be read slowly (a poem, a technical manual, a philosophical treatise), while others (comic strips, lists, some fiction) can be read quickly or skimmed.

Implications for Interventions

Vocabulary

Students from low-income families, who are often at-risk for reading difficulties, hear far fewer words in their early childhoods than their wealthier peers. As a result, they come to school with oral language deficits (Hart & Risely, 1995). In general, first-grade students from lower-income groups know half as many words as first-grade students from higher-income groups. "This vocabulary gap, and its companion knowledge gap, only widens with time" (Beck et al., 2002). Higher economic status, however, does not inoculate students from reading problems. One-third of poor readers nationwide are from college-educated families (Moats, 1999).

A lack of vocabulary involves more than simply not knowing many words. Struggling readers often lack word consciousness, including an awareness of the complex and varied nature of words in written and oral language (COI, 2008). Yet in spite of its importance, vocabulary instruction can be fraught with negative stereotypes, particularly for the struggling reader. Indeed, researchers conclude that when implemented inappropriately, vocabulary instruction can be a waste of time (Carlisle, 2004). One of the least effective methods is the "tried and not-so-true" approach of looking up words in either a glossary or a dictionary and then writing down the definitions (Marzano, 2005). While all students benefit from some explicit instruction on how to use dictionaries and glossaries, struggling readers in particular require innovative strategies for learning new words and enhancing their vocabularies.

While teachers can begin to foster the development of vocabulary for struggling readers by simply exposing them to new words (COI, 2008), vocabulary instruction is most effective when it is intentionally varied. "For example, explicit instruction is most appropriate for introducing new vocabulary, while deep understanding and generalization are supported when students actively engage in vocabulary activities and see and use words in a variety of contexts" (COI, 2008). Ensuring this "deep understanding" requires repetition. Even a half dozen direct exposures to a new word do not secure a word's meaning for any reader, let alone a struggling reading. "It takes about 12 rich and varied exposures to a word to develop deep understanding" (Beck, McKeown, Omanson, & Pople, 1985).

A combined approach to vocabulary instruction that includes variety and frequency constitutes what is called "frequent distributed practice," which "helps students maintain and develop concepts and skills. . . . Research suggests that distributed practice does more than simply increase the amount learned; it frequently shifts the learner's attention away from the verbatim details of the material being studied to its deeper conceptual structure" (Dempster, 1993).

Implications for Interventions

Helping struggling readers grasp the “deeper conceptual structures” of texts is especially important if struggling readers are to succeed in the later grades, where most reading in the core curriculum involves reading for content. “Given the importance of academic background knowledge and the fact that vocabulary is such an essential aspect of it, one of the most crucial services that teachers can provide, particularly for students who do not come from academically advantaged backgrounds, is systematic instruction in important academic terms” (Marzano & Pickering, 2005). Indeed, “vocabulary acquisition is crucial to academic development. . . . A foundation of vocabulary knowledge must be in place early if children are going to perform successfully in school” (Baker, Simmons, Kame’enui, 1995).

Vocabulary knowledge can be developed and enhanced for struggling readers through the explicit instruction of morphemes, the smallest individual units of discrete meaning in English. This instruction involves teaching the patterns and meanings of prefixes, suffixes, and root words, a study that allows students to derive meaning from unfamiliar words in texts and that serves to increase a student’s vocabulary exponentially. As such, explicit instruction in morpheme analysis should begin in the first grade and continue through high school (Moats, 2000).

Other strategies that promote vocabulary development across all content areas for struggling readers include classroom discussions about the meaning of words and reading strategies that incorporate new vocabulary directly into activities. After introducing students to any unfamiliar words they will find in a reading assignment, for example, teachers can ask the class to predict what the reading will be about, based on those words. Writing a collaborative paragraph in class using new words can help less proficient students take advantage of a nonthreatening setting to see how new words operate in context. Word games and puzzles also engage more reluctant students in learning new vocabulary. And of course teachers will want to use new words frequently in general classroom discussions and questions.

Comprehension

Struggling readers almost always need explicit instruction in developing a conscious “system” of what to do and how to think before, during, and after they read. Providing these students with a cognitive routine—strategic processes—for reading involves helping them learn steps for what to think about and ask before they read, how to organize the information as they read it, and how to secure the information in their memories after they read. This routine can be taught by talking with students about what they already know about the topic prior to reading (activating background/prior knowledge); providing them with any information they do not have but will need

Implications for Interventions

in order to understand the reading; predicting the questions the text might answer before they start reading; and engaging students in discussions (in pairs, small groups, or the whole class) at various points during the reading to determine if questions are being answered or as new questions arise. Research shows that this kind of instruction is effective in helping struggling readers improve their comprehension (Scammacca et al., 2007).

Early Teaching for Strategic Processing. “Self-monitoring for meaning” refers to the ability among readers to select and use strategies to gauge and improve their comprehension. “Readers of all ages need to be conscious of when they are not creating meaning. The ability to self-monitor meaning enables students to select and use strategies to improve comprehension” (Manning, 2002). While much time in preschool and the early grades is devoted to developing decoding skills, young children are simultaneously developing cognitive strategies and “can learn to apply these strategies to literacy learning if they are in supportive contexts that foster such development” (Schmidt, 2001). The very youngest readers can be taught to monitor their own comprehension—“to be aware of what they do understand, identify what they do not understand, and use appropriate ‘fix-up’ strategies to resolve problems in comprehension” (Armbruster & Osborne, 2001).

Providing explicit instruction in self-monitoring and comprehension strategies can prove vital for young readers who are at-risk of reading failure. These strategies give students clear recourse for what to do when they simply “are not getting it”; the students can then relax knowing they have a framework for consciously and intentionally determining when and how they can judge their own understanding, as well as an arsenal of appropriate tools for seeking help if they need it. They feel capable rather than stuck or lost. When addressing the issue of comprehension, teachers will do well to start by impressing upon all students the fact that “reading is making meaning and not just saying the words” (Manning, 2011).

One effective strategy for supporting self-monitoring for understanding involves reading out loud to students and generating questions—at both the word and the idea level—and making comments throughout, essentially modeling strategies that “self-check” for understanding. Young struggling readers can also be encouraged to re-read something they do not understand, a strategy that good readers resort to automatically. Good readers “know when to expend more decoding effort; they are aware when they have sounded out a word but that word does not really make sense in the context. When good readers have that feeling, they try rereading the word in question. It makes sense to teach young readers to monitor their reading of words in this way” as well as “to

Implications for Interventions

pay attention to whether the decoding makes sense and to try decoding again when the word as decoded is not in synchrony with other ideas in the text and pictures” (Pressley, 2000). And it is never too soon to introduce graphic organizers. Even in the earliest grades and by employing only the simplest pictures, these charts help students learn how to think systematically and categorically, to organize and think about plot or the development of an idea—essentially to see the big picture of how things fit together. Any technique that helps young students recognize patterns serves to aid in their understanding.

Considerations for Older Students. Among those who make reasonable progress in reading during their early school years, too many students start falling behind around fourth grade—something known as “the fourth-grade slump.” In 2009, only 33 percent of fourth graders could read at a “proficient” level. This means that 67 percent of students in this grade could not integrate and interpret text or apply their understanding of the text to draw conclusions and make evaluations (Hernandez, 2011).

Researchers offer possible reasons for why reading skills begin to decline in this grade: fewer picture clues in grade-level texts, an “abundance of new vocabulary words, and an expectation that students absorb information from the text rather than simply read for plot” (Tankersley, 2005). This “slump,” however, does not resolve itself as students move through the later grades: “by grade ten U.S. students place close to the bottom [in reading] among developed nations. . . . In fact, over the past four decades the literacy performance of thirteen- and seventeen-year-olds on the National Assessment of Education Progress has remained stunningly low, seriously compromising the nation’s capacity to compete in a knowledge-based economy” (AEE, 2011).

While a few older readers need help reading single words on a page, clearly the most common problem among most older, struggling readers is comprehension: they can read individual words; they simply do not understand what they read (Snow and Biancarosa, 2006). Therefore older students are better served by a robust focus on “the construction of meaning.”

Ultimately, every struggling adolescent reader has difficulty with reading comprehension. However, the variety of underlying causes for these reading comprehension difficulties makes helping struggling adolescent readers a difficult proposition. The variability in adolescents’ literacy difficulties and the sources of those difficulties more or less guarantee that no single program or instructional method will solve every problem for every adolescent struggling with literacy. (Biancarosa et.al., 2007, p. 34)

Implications for Interventions

Many struggling readers have a limited understanding of the extensive range of reading materials. Teachers need to help these students learn that there are many different purposes for reading—deciphering a statement from a credit card company, developing a political opinion from a newspaper article, being entertained by a novel, following the directions of an instruction manual, and so forth—and that the purpose determines the reader’s approach to the text. Should it be skimmed quickly? Scanned and read selectively? Pondered word by word? Further, when students understand different organizational patterns (text structures) and text features, they are better able to make sense of the text itself.

Another approach to helping older students become conscious of effective ways to read involves “encouraging students to talk about what strategies they think will help them approach a reading assignment, and then talking after reading about what strategies they actually used. This helps students develop flexibility in their choice of strategies” (NCLR, 2007). Well-constructed follow-up conversations comprised of open-ended questions about a reading passage can also contribute significantly to helping students understand what they’ve read. In this way, too, teachers model the kinds of questions that good readers ask. When these discussions involve the whole class, struggling readers can also learn from their more proficient peers about how to begin thinking about a text and construct meaning; in short, habits of mind can be modeled and then practiced.

In addition to asking students to summarize or paraphrase what they’ve just read and understood, teachers can help students in their understanding by providing instruction in how to draw inferences—the skill of understanding what is not exactly spelled out in black and white. Many of the conclusions that we draw and opinions that we develop are based on this ability to infer. Teachers may want to start with discussions about figurative language. “Songs are the best places to start for many students. . . . Analogies and fables can work as well.” (Zwiers, 2004). Advertisements also present a good way to encourage struggling readers to start thinking about inferred meaning and draw conclusions from information that is not directly stated.

Other kinds of research-proven strategies that help students make meaning involve activating a different part of the brain. These include asking students to generate mental pictures (visualize) and draw images about the reading, to make judgments about the text, and to determine and justify the importance of information (IES, September 2010).

Implications for Interventions

The volume of reading: Amount counts

A study of fifth graders reported that the most proficient readers took in over 4,358,000 words per year in their outside-of-school reading, while students at the lowest tenth percentile read only 8,000 words, and students at the second percentile reported reading nothing at all outside of school (Cunningham & Stanovich, 1998). In the process, those proficient readers were getting better at fluency, automaticity, and comprehension; they were increasing their vocabulary; they were being exposed to more ideas, more information, and higher-level thought processes. In short, they were cementing their position in the upper levels of school success. The indifferent and nonreaders were inadvertently contributing to their own academic demise.

Every study of reading volume indicates that struggling readers engage in far less reading activity than do more successful readers . . . and [have] substantially less high-success reading practice. . . . it is extensive engagement in high-success reading activity that provides the opportunity for readers to consolidate the various skills and components of proficient reading. With little high-success practice, readers simply fail to develop the proficiencies that are essential for skilled, autonomous reading. (Allington, 2006, pp. 98–99)

Providing these “high-success” opportunities for reading practice involves many of the same strategies used to motivate students: ensuring an appropriate level of complexity and degree of interest in both required, suggested, and available reading for struggling students. “We might begin to redesign our reading lessons (and our science and social studies lessons) in ways that ensure that all students have easy, frequent access to texts that provide high-success practice, engaging content, and opportunities for literate conversation about those texts” (Allington, 2006).

Motivation

Unfortunately, struggling readers generally do not get the practice they need to become good readers. Their motivation to read anything is often lacking: they “cannot read, so they do not like to read; reading is labored and unsatisfying” (Moats, 2001); there is little about the experience that has been positive or pleasurable for them. It’s no surprise that they are “often less motivated to read than successful readers” (NIL, 2007).

These students often don’t read their school assignments in particular because the age-appropriate materials are too difficult for them or the texts they are able to read are of little interest (Guthrie, Wigfield, & Perencevich, 2004). However, several instructional strategies, both direct and indirect, can serve to engage these students and motivate them. “Texts must be below

Implications for Interventions

students' frustration level, but must also be interesting; that is, they should be high interest and low readability," and the reading material available to them "should represent a wide range of topics" (Snow & Biancarosa, 2006). As well, reading material should be more than just "textbook practice" and take advantage of their interests and connect to their background experiences—giving them the "I've been there! I know that!" experience.

Because "as students progress through the grades, they become increasingly 'tuned out,'" schools need to build "student choices into the school day [as] an important way to reawaken student engagement" (Snow & Biancarosa, 2006). Clearly, "self-determination is critical to motivation. Allowing students to select some of their own reading materials gives students control over their learning. Teachers need to structure and guide student choices, however, so that struggling readers select materials that are appropriate for their reading level and that address the content they are learning" (NIL, 2007).

In addition, "teachers can influence and support student motivation by setting clear goals and expectations (setting a purpose) for reading and writing assignments, focusing students on their own improvement, providing a variety of reading material . . . and providing opportunities for students to discuss reading and writing tasks with one another" (NIL 2007). Sometimes the goal is simply to get a student to read anything. In a well-stocked library or classroom, high-interest material, such as soccer magazines for the budding striker or even video-gaming magazines can be important tools in convincing students that reading matters.

RTI AND STRUGGLING WRITERS

Writing is not a stand-alone skill; it is intimately connected to reading (Biancarosa and Snow, 2004). In fact, intensive writing is a critical element of an effective literacy program, and it is often recommended as a tool for improving reading comprehension (Graham and Hebert, 2010).

Since good writing instruction under the most congenial of circumstances is a challenging undertaking, any effort to support struggling readers to become competent writers demands an additional level of commitment from teachers. However, the ability to write is essential for academic success, for "if students are to make knowledge their own, they must struggle with the details, wrestle with the facts, and rework raw information and dimly understood concepts into language they can communicate to someone else. In short, if students are to learn, they must write" (National Commission on Writing, 2003). As well, "young people who do not have the ability to transform thoughts, experiences, and

ideas into written words are in danger of losing touch with the joy of inquiry, the sense of intellectual curiosity, and the inestimable satisfaction of acquiring wisdom that are the touchstones of humanity” (Graham and Hebert, 2010).

Similar to the process of learning to read, learning to write involves a sequence and “complex synthesis of many skills. Communicating ideas through written expression first requires some proficiency with writing conventions, such as spelling, capitalization, punctuation, word usage, and sentence constructions. Effective writers must also be able to organize, develop, and support their ideas; express their ideas in a focused and coherent manner; and accurately self-evaluate their writing for revising and editing purposes” (Alber-Morgan, 2010). The three tiers of RTI provide a coherent framework for teaching this range of mechanics and skills to struggling readers. Research shows that students learn to write when they are given effective, first-tier instruction, when that instruction is tailored to meet their individual needs, and when the need for interventions is evaluated regularly and the interventions provided early. Just as necessary is the expectation that “each child will learn to write” (Graham, Harris, Larsen, 2002).

As with any complex task, students are best served through a writing curriculum that gives them numerous examples, shows them how to do it (modeling), challenges them in ways that build on the skills they do have (scaffolding), and requires them to practice, practice, practice. When this happens within an RTI framework that is constantly scanning for ways to fine-tune instruction, interventions, and supports to meet the needs of each student, then certainly “each child will learn to write.”

RTI AND CULTURALLY AND LINGUISTICALLY DIVERSE STUDENTS

RTI can give ESL/bilingual teachers a framework to guide their professional decisions about when to provide specialized supplementary instruction and intensive intervention to those students who need such assistance. At this time, less research is available on the use of RTI with ELs than with native English speakers. However, there is sufficient evidence to suggest that RTI can be effective for ELs. Gersten et al. (2007) highly recommend using the RTI components of screening, evidence-based intervention, and progress monitoring with ELs.

In the past, when English learners did not make adequate academic progress, one of the only options available to teachers was to refer the students for an assessment to identify possible learning disabilities. The RTI process offers a preventative framework that provides teachers with research-based practices to address students’ specific needs. For English learners who struggle, teachers need to select those research-based instructional accommodations that will help these students succeed in the academic core (Tier 1). “The key to an effective RTI model is providing instruction in the general education classroom that is in accordance with students’ needs” (Echevarria, 2009).

For RTI to work with ELs it must be culturally responsive and “educators must be knowledgeable in first and second language acquisition principles and culturally responsive pedagogy, as well as have access to specialists who are well-trained in differentiating cultural and linguistic differences from disabilities” (Brown & Doolittle, 2008). According to Vaughn & Ortiz (2010) it is essential that teachers be provided with the resources and supports they need to make decisions and design instructional supports for students. These resources and supports include the following:

- Teachers and other school personnel must receive ongoing, research-based professional development that addresses the topics of oral language, early literacy, students’ home language, contextual considerations, and the cultural background of students. This deep content knowledge will facilitate appropriate decisions about interpreting screening and assessment results and designing appropriate interventions (Brown & Sanford, 2011).
- Fully credentialed bilingual education and ESL teachers must continuously acquire new knowledge of best practices in bilingual education and ESL.
- General education teachers should regularly participate in professional development that is focused on meeting the needs of ELs (e.g., information about bilingual education, appropriate instructional strategies for second-language acquisition, the cultural and linguistic characteristics that serve as assets to the academic success of ELs).

Teachers and other school personnel must have the supports to analyze progress monitoring data in light of the layers of English proficiency levels, English proficiency gain from year to year, time in English language development program, interrupted schooling, degree of difference between English and the first language, access to native language supports and instruction, and progress in native language instruction when available. For example, two ELs with identical cut scores on a reading measure may present with widely varying profiles that would necessitate different responses to the data (Brown & Sanford, 2011).

ELs need to be able to use English not only for day-to-day purposes but also for academic learning and ultimately for negotiating their place in the wider society (Gibbons, 2002). “The difficult times in which we live demand that our classrooms nurture thinking and creative problem-solving abilities as well as sensitivity to the perspectives of those from diverse cultural and linguistic backgrounds. Teachers should see culturally and linguistically diverse students, including ELs, as full members of the school community who have specific learning needs, rather than as a separate group who need to prove themselves linguistically before they can claim their full entitlement (Clegg, 1996). Only in these kinds of instructional spaces will language learning and academic abilities truly develop” (Cummins, 1996).

FOR FURTHER INFORMATION, REFER TO APPENDIX L: KEY PRINCIPLES FOR CRAFTING INTERVENTIONS FOR ENGLISH LANGUAGE LEARNERS.

10. GROWING PROFESSIONALLY: TEACHER PREPARATION, PROFESSIONAL DEVELOPMENT, AND SCHOOL LEADERSHIP

As schooling becomes more demanding and complex, researchers continue to uncover insights into the relationship between teaching and learning. However, there remains one constant: effective teaching significantly impacts student achievement (Kane, Rockoff, & Staiger, 2006; Nye, Konstantopolous, & Hedges, 2004; U.S. Department of Education, 2010). But in order to be successful with all learners, teachers must build and continue to refine a body of knowledge that is a multifaceted tapestry of content knowledge and pedagogy. On demand, teachers must be able to access and apply subject-matter knowledge, technical skills, sophisticated learning tools, and research-based techniques (Archibald et al., 2011).

CHARACTERISTICS OF EFFECTIVE TEACHING

Teaching must lead to improved student achievement. What is understood about how students learn and which instructional strategies work best to engage particular learners continues to evolve. However, research confirms that certain effective teaching practices that can be causally linked to student achievement exhibit specific characteristics. Accomplished professionals demonstrate teaching behaviors (performance) that integrate an essential body of knowledge and several critical dispositions about all learners (CCSSO, 2011):

- **Learning and the Learner.** Teaching begins with an understanding of how learning occurs and how each learner develops. Effective teachers also understand that each learner is unique and brings to their learning prior experiences and abilities; they value differences, including diverse cultures, and maintain an inclusive environment; they understand and use knowledge about developmental patterns among diverse learners; and they hold high expectations for each learner and implement appropriate yet challenging experiences within a variety of learning environments.
- **Content Knowledge.** Competent teachers bring to the classroom a deep understanding of their content and an ability to draw upon that knowledge during the teaching process. As well, they demonstrate the ability to provide meaningful experiences that make content accessible to all learners. They are also able to integrate cross-disciplinary skills (e.g. critical thinking, problem-solving, multimedia communication) to help students learn and apply their new knowledge in relevant ways.
- **Pedagogical Knowledge (instructional practice).** Effective instructors understand and implement a cycle of instruction. They plan instruction that supports every student's learning goals; they employ research-based instructional strategies that are integrated with

GROWING PROFESSIONALLY: TEACHER PREPARATION, PROFESSIONAL DEVELOPMENT, AND SCHOOL LEADERSHIP

cross-disciplinary skills; they monitor learning progress and encourage students to make connections. They understand the multiple uses of—and instruments for—assessment and then apply that knowledge to guide their instructional decisions for all learners.

Several decades ago, Clark and Peterson (1986) described a four-phase cycle of instructional decision making where teachers engage in thought processes before, during, and after classroom instruction. The planning phase is the thinking that teachers do prior to instruction: they think about what assessment results have told them about the needs of their learners, what sequence of instruction will best address those needs, and which materials will help them achieve their goals. They plan deliberate and sequenced instruction. The teaching phase incorporates the mental functions that are performed during the act of teaching. The reflection phase follows as the teacher looks back to compare, analyze, and evaluate the decisions made during instruction. The cycle closes with the application phase, when the teacher plans refinements for future lessons. These refinements are based on the needs of learners, the sequence of instructional skills, classroom materials, and data from assessments—and the cycle begins again.

- **Professional Responsibility.** Safe, productive learning environments are necessary for student learning to occur. These conditions are planned, created, and supported by teachers who continue to learn and grow as professionals. Teaching practice becomes increasingly effective when it is refined through ongoing study, collaboration, and self-reflection. However, learning about current research and updated techniques is not sufficient. Instructors demonstrate their expertise in effective teaching by using professional learning and evidence to continually evaluate and refine their teaching practice.

(Adapted from the Council of Chief State School Officers, 2011)

KNOWLEDGE AND SKILLS NEEDED FOR LITERACY INSTRUCTION

Reading and writing are mutually supportive but cognitively different processes. However, through the ongoing process of meaning making, both acts are rooted in language and share common characteristics: purpose setting, commitment, knowledge activation, planning, self-monitoring, and revision. Given their reciprocal relationship, some of the knowledge and skills required to teach each overlap, while others diverge. Effective instruction requires an in-depth knowledge of developmentally appropriate strategies for supporting these skills and how they operate separately and together.

Early Care and Education

Professionals working in early-care and education programs need to exhibit the characteristics of effective teaching articulated above. Creating a literate environment and fostering pre-literacy and pre-writing skills are primary responsibilities of this cohort. The North Central Regional Educational Laboratory (NCREL) provides a list of expected, age-appropriate teaching behaviors:

GROWING PROFESSIONALLY: TEACHER PREPARATION, PROFESSIONAL DEVELOPMENT, AND SCHOOL LEADERSHIP

- Use developmentally appropriate literacy practice that acknowledges children’s development, interests, and literacy knowledge.
- Read to children daily and allow them to take turns “reading” the material to each other.
- Use a wide range of literacy materials and allow children to experience a variety of literary and informational books and children’s magazines.
- Take time to listen to children to determine their interests, language skills, and areas of need.
- Use children’s home cultures and languages as literacy resources.
- Reread stories multiple times for pleasure and exploration, and invite children to join in the readings, honoring their emergent reading behaviors.
- Create a literacy-rich classroom environment by providing appropriate literacy activities.
- Ensure that appropriate writing materials for children are available.
- Encourage children to compose stories and informational articles in emergent forms and provide opportunities for children to read, share, and display their writing.
- Provide opportunities for reading and writing that will benefit children at every phase of their literacy development.
- Provide writing experiences that allow children to express themselves using developmentally appropriate, unconventional forms.
- Use appropriate, research-based instructional strategies for teaching pre-literacy skills.
- Share with families and/or other caregivers ideas on creating an optimal environment to support young children’s literacy development.
- Participate in professional development activities to increase understanding of emergent literacy and appropriate teaching practices.

(Adapted from NCREL, 1999)

Primary Literacy Instruction

The Primary Grade Reading and Writing Teacher Knowledge Project, funded by the Institute of Education Sciences (IES) at the U.S. Department of Education, examined research-based strategies for effective instruction in reading and writing, along with what teachers need to know and do to effectively do their job. The project identifies the following taxonomies of teacher knowledge:

GROWING PROFESSIONALLY: TEACHER PREPARATION, PROFESSIONAL DEVELOPMENT, AND SCHOOL LEADERSHIP

Table 10.1: Taxonomy of teacher knowledge for teaching reading

Pedagogy	Components of <i>The Comprehensive Literacy Plan</i>
<ul style="list-style-type: none"> ➤ Learning, teaching theory, and models ➤ Learning and teaching philosophies ➤ Teacher self-awareness ➤ Classroom environment ➤ General reading instructional practices ➤ Reading instructional materials, curricula, texts, standards, and programs ➤ Reading assessment 	<ul style="list-style-type: none"> ➤ Language development ➤ Print knowledge ➤ Phonological and phonemic awareness ➤ Word identification and recognition ➤ Spelling ➤ Fluency ➤ Comprehension ➤ Motivation and engagement ➤ 21st Century Literacies ➤ Cultural and linguistic responsiveness ➤ Engaging families

Table 10.2: Taxonomy of teacher knowledge for teaching writing

Pedagogy	Components of <i>The Comprehensive Literacy Plan</i>
<ul style="list-style-type: none"> ➤ Learning, teaching theory, and models ➤ Learning and teaching philosophies ➤ Teacher self-awareness ➤ Classroom environment ➤ General writing instructional practices ➤ Modes and characteristics of effective writing instruction ➤ Writing curriculum, standards, programs, rhetoric, and texts ➤ Writing assessment 	<ul style="list-style-type: none"> ➤ Stages of writing development ➤ Concepts about writing ➤ Spelling ➤ Handwriting ➤ Grammar ➤ Composition ➤ Writing motivation and engagement ➤ 21st Century Literacies ➤ Cultural and linguistic responsiveness ➤ Engaging families

(Adapted from Emma Eccles Jones Center for Early Childhood Education, 2008)

**FOR FURTHER INFORMATION, REFER TO APPENDIX M: TEACHER KNOWLEDGE AND SKILLS-
INSTRUCTION ACROSS THE COMPONENTS OF LITERACY.**

The Shared Responsibility of All Educators

Students' literacy development is a shared responsibility. Teachers across grades (preK–12) and content areas need to hold high literacy expectations for all students and provide explicit, systematic instruction that supports developing student proficiencies in reading, writing, speaking, listening, and language usage (as articulated in the *Rhode Island Early Learning Standards* and the *Common Core State Standards*). The introduction to the *Common Core State Standards* for "Language Arts and Literacy in History, Social Studies/Science, and Technical Subjects" articulates this concept:

The Standards insist that instruction in reading, writing, speaking, listening, and language be a shared responsibility within the school. The K–5 standards include expectations for reading, writing, speaking, listening, and language applicable to a range of subjects, including but not limited to ELA [English language arts]. The grades 6–12 standards are divided into two sections, one for ELA and the other for history/social studies, science, and technical subjects. This division reflects the unique, time-honored place of ELA teachers in developing students' literacy skills while at the same time recognizing that teachers in other areas must have a role in this development as well. (p. 4)

All teachers, from those in the preschool classroom to those in the high school chemistry lab, need a thorough understanding of how children learn to read and write. Furthermore, they need deep knowledge of the various aspects of literacy, such as vocabulary development and the writing process. Actual teaching occurs when research-based instructional strategies are used to apply this knowledge. Taken together, they both constitute the knowledge and skills required for effective literacy instruction.

Effective teachers are also responsive to the unique qualities that each student brings to class, particularly those of culture and language:

Becoming literate in a second language depends on the quality of teaching, which is a function of the content coverage, intensity or thoroughness of instruction, methods used to support the special language needs of second language learners and to build on their strengths, how well learning is monitored, and teacher preparation. (August & Shanahan, 2006, p. 3)

GROWING PROFESSIONALLY: TEACHER PREPARATION, PROFESSIONAL DEVELOPMENT, AND SCHOOL LEADERSHIP

Teachers who are successful in their professions actively seek to develop a culturally responsive pedagogy that communicates high expectations and sends consistent, positive messages to students about their ability to succeed. These messages are based on respect and the belief that all students are capable of achieving academic success.

Culturally responsive teachers promote student engagement by using active teaching methods. For example, using student-controlled discourse gives students the opportunity to control a small portion of the lesson, thus providing the teacher with insights into the student's home culture and social patterns. When students are required to participate in their learning by constructing knowledge and/or helping to craft the curriculum, the teacher is able to effectively reshape instruction in response to student needs. Teachers also facilitate learning by acting as guides or mediators. They find a balance between serving as knowledgeable consultants and providing direct instruction. The use of small-group instruction and cooperative learning strategies also assists students with the development of academic language. Furthermore, teachers who are culturally responsive have positive perceptions about culturally and linguistically diverse students and their families. They demonstrate cultural sensitivity by gaining knowledge of the cultures represented in their classrooms and utilizing that knowledge in the instructional practice to provide culturally mediated instruction (Callins, 2006).

THE CONTINUUM OF PRACTICE

Developing the "craft" of teaching requires high-quality professional experiences that nurture and promote growth along a continuum of practice—from teacher preparation through "accomplished" practice (CCSSO, 2011). In order to ensure high levels of achievement for each student and to articulate the knowledge and skills required by educators in Rhode Island, RIDE developed the Rhode Island Professional Teaching Standards ([RIPTS](#)). Providing "a common and consistent vision" for professional knowledge and skill, these standards offer support across the continuum of practice.

The R IPTS serve as a guide for both faculty members and teaching candidates during teacher preparation to ascertain outcomes for effective teacher preparation programs. As well, the R IPTS give practicing teachers guidance for improving classroom instruction and providing a high-quality learning environment. Finally, the R IPTS provide direction for aligning the goals and activities of high-quality professional development to the needs of educators.

Entering the Profession

Teacher preparation programs are the initial step in developing effective teachers. These pre-service programs need to provide all aspiring teachers, whether they need content for kindergarten or high school, with the foundational skills upon which to build the more advanced knowledge and competencies that exemplify an accomplished, effective teacher. All prospective teachers need a

GROWING PROFESSIONALLY: TEACHER PREPARATION, PROFESSIONAL DEVELOPMENT, AND SCHOOL LEADERSHIP

strong body of knowledge of the subjects they will teach, which encompasses the skills to communicate content knowledge, the ability to help students understand the subject matter, and the components of literacy. This balance of content and pedagogy begins at the teacher preparation level (Mirel, 2011).

Induction

Just as effective veteran teachers are responsible for educational outcomes, so are new teachers. They need to attend to the many interconnected factors of standards, assessments, and curriculum. Several other influences, such as family situations and public resources, impact their work as well. No matter the distractions, learning depends on what happens inside the classroom. With the various complications added to an already-challenging task, new teachers must be supported as they interact with their students to construct new knowledge (Ball & Forzani, 2011).

Induction programs help teachers become more effective—and thus more satisfied—in their profession. As a result, these programs contribute to stability in school culture and to successful instructional outcomes. Because of the effectiveness of induction programs in providing ongoing support and training for new teachers, Rhode Island provides induction programs to accelerate beginning teachers' professional growth and increase academic impact for students. Rhode Island Public Law 16-7.1-2, Accountability for Student Performance, requires that district strategic plans include a process for supporting teachers entering their professional careers.

The practice of supporting novice teachers through a mentoring process has been part of RIDE's expectations for professional growth for several years. Before the updated Basic Education Plan (2009) required schools to provide induction support to novice educators, the Rhode Island Mentor Program Standards ([RIMPS, 2002](#)) provided the framework for implementing mentoring as an integral part of each district's strategic plan (as required by article 31). This framework continues to allow school districts "to examine and redesign mentoring programs that will best meet their own needs and goals as well as those of their beginning teachers" (RIMPS, 2002).

Professional Development

The National Comprehensive Center for Teacher Quality (2011), in a review of literature related to professional development for teachers, identified the following characteristics of high-quality professional development:

- Aligns with school goals, state and district standards and assessments, and other professional learning activities, including formative teacher evaluations
- Focuses on core content and modeling of teaching strategies for the content

GROWING PROFESSIONALLY: TEACHER PREPARATION, PROFESSIONAL DEVELOPMENT, AND SCHOOL LEADERSHIP

- Includes opportunities for the active learning of new teaching strategies
- Provides opportunities for collaboration among teachers
- Includes embedded follow-up and continuous feedback

Professional learning activities that are part of a coherent program of ongoing professional development are more likely to positively impact teachers' practice. Consistent messages that detail what to teach and the effective ways to teach it improve the likelihood that teachers will refine their practice and grow professionally. Approaches to facilitate consistent messaging include building new pedagogical knowledge on what teachers already know and emphasizing content and pedagogy aligned with standards, frameworks, and assessments. Opportunities for teachers to collaborate and communicate while building new knowledge also support this consistency (Cohen & Hill, 2000; Garet et al., 2001; Grant, Peterson, & Shojgreen-Downer, 1996).

Alignment is important to high-quality professional development, as well. Establishing common goals, building a shared vocabulary for instruction (a common language), and giving and receiving constructive feedback about the implementation of new instructional strategies all demonstrate alignment and reduce confusion about what and how to teach (Archibald et al., 2011). School improvement plans and professional teaching standards provide additional guidance for aligning professional activities with goals. Data analysis, progress monitoring, and ongoing evaluation can serve as tools to make judgments about progress and success (Youngs, 2001).

Like their students, teachers need to be motivated if they are to learn and grow professionally. A lack of teacher "buy-in" can hinder their ability to acquire new professional knowledge and apply it in the classroom. Teachers need to see the relevance of core content, its relationship to teaching strategies, and its connection to their classrooms and student achievement. Individual professional learning that is isolated from colleagues and lacks follow-up and/or feedback is ineffective. Some teachers may be motivated to engage in this type of learning; however, increased knowledge alone does not ensure pedagogical changes (Archibald et al., 2011).

Follow-up and Continuous Feedback

Adult learners must be actively engaged in their learning. This means that teachers should have input in planning activities and opportunities to learn new instructional strategies by "doing"—practicing and collaborating with colleagues. In addition, expecting teachers to implement new practices without follow-up and feedback ignores adult learner theory. Follow-up training and continuous feedback that reinforce new practices support sustained pedagogical change (Archibald et al., 2011). This type of support requires time, refinement, and repetition.

GROWING PROFESSIONALLY: TEACHER PREPARATION, PROFESSIONAL DEVELOPMENT, AND SCHOOL LEADERSHIP

Literacy coaching

One model for providing embedded follow-up and continuous feedback involves literacy coaching, an outgrowth of cognitive coaching, peer coaching, and mentoring (Costa & Garmston, 1994; Showers, 1984; Toll, 2005, 2006). Findings on the impact of teacher coaching on student outcomes are limited (Garet et al., 2008; Lockwood, McCombs, & Marsh, 2010). However, some research supports coaching as a powerful learning tool for teachers (Neufeld & Roper, 2003; Poglinco et al., 2003; Neuman & Cunningham, 2009). The International Reading Association (IRA) provides the following definition of a coach for reading or literacy:

. . . a reading specialist who focuses on providing professional development for teachers by giving them the additional support needed to implement various instructional programs and practices. They provide essential leadership for a school's entire literacy program by helping create and supervise long-term staff development processes that support both the development and implementation of literacy programs over months and years. (Literacy Coaching Clearinghouse, 2008)

The term "literacy coach" is preferred by the National Council of Teachers of English (NCTE) because of its broader implications. Educators fulfilling this role are expected to work with "teachers to improve instruction in all areas of the language arts—reading, writing, and oral language development. They also assist teachers in the design and teaching of lessons in other content disciplines where students continue to develop and use their literacy skills." (Literacy Coaching Clearinghouse, 2008). Coaches assume the primary responsibility of assisting classroom teachers to improve their instruction. There are many reasons teachers may need to make changes in their instruction:

- New research findings require "tweaks" in instructional strategies and teachers need to make nuanced changes in their instruction.
- Standards revisions require strict adherence to benchmarks, and teachers need to learn new methods for helping students meet them.
- As a school's student population changes and students' language and learning needs also change, teachers need to meet the needs of their students. (Kise, 2006).

Very often a middle or high school coach is called an *instructional* coach because of the coach's role of supporting teachers across various content areas and 21st Century Literacies. Instructional coaches assist teachers in refining content-based instructional strategies that will help their students continue

GROWING PROFESSIONALLY: TEACHER PREPARATION, PROFESSIONAL DEVELOPMENT, AND SCHOOL LEADERSHIP

to build their literacy skills through content learning. Since the focus of middle and high school teachers is the teaching of specific content, and since each discipline requires specialized literacy knowledge and skills, it is reasonable to expect secondary coaches to support teachers by combining content and literacy (Literacy Coaching Clearinghouse, 2006).

As they support teachers in their daily work, coaches engage in many different types of activities based on adult learning theory. These activities range from informal tasks, such as conversing with a colleague in the hallway, to more formal, embedded activities, such as analyzing a teacher’s videotaped lesson. All of these activities potentially challenge a teacher to improve his or her practice. As such, the activities can also be perceived as involving risk. Bean (2004) provides guidance for the different types of work coaches perform and the perceived risk associated with each type:

Table 10.3: Literacy coaching activities

Literacy Coaching Activities: Levels of Intensity		
<p>Level 1 (Informal; helps to develop relationships)</p> <ul style="list-style-type: none"> ➤ Conversing with colleagues (identifying issues or needs, setting goals, problem-solving) ➤ Developing materials for/with and providing materials to colleagues ➤ Developing curriculum with colleagues ➤ Participating in professional development activities with colleagues (conferences, workshops) ➤ Leading or participating in study groups ➤ Assisting with assessing students ➤ Instructing students to learn about their strengths and needs 	<p>Level 2 (More formal, somewhat more intense; begins to look at areas of need and focus)</p> <ul style="list-style-type: none"> ➤ Co-planning lessons ➤ Holding team meetings (for grade-level teachers, reading teachers, etc.) ➤ Analyzing student work ➤ Interpreting assessment data (helping teachers use results for instructional decision making) ➤ Engaging in individual discussions with colleagues about teaching and learning ➤ Making professional development presentations for teachers 	<p>Level 3 (Formal, more intense; may create some anxiety on the part of a teacher or coach)</p> <ul style="list-style-type: none"> ➤ Modeling and discussing lessons ➤ Co-teaching lessons ➤ Visiting classrooms and providing feedback to teachers ➤ Analyzing videotaped lessons of teachers ➤ Conducting lesson study with teachers

GROWING PROFESSIONALLY: TEACHER PREPARATION, PROFESSIONAL DEVELOPMENT, AND SCHOOL LEADERSHIP

In order to be successful, coaches must be trained and supported. Professionals who assume coaching roles need to have a strong base of knowledge about literacy education: the literacy processes, language acquisition, assessment, and instruction (Frost & Bean, 2006). Secondary-level coaches need additional specialized knowledge to help teachers understand how to develop students' content knowledge and skills so that these skills work in tandem to improve student reading and writing in specific content areas (International Reading Association, 2007).

Furthermore, all coaches need to understand adult learning principles and develop skills in facilitating adult learning. Theories in adult development, learning, and motivation are important in meeting the needs of teachers at different stages of their careers (L'Allier et al., 2010). How to lead and facilitate change, promote reflection, and support the development of organizational/time management skills are also important to successful coaching. These skills can only be built through high-quality, sustained professional development for the coaches themselves. Burkins and Ritchie (2007) suggest that opportunities for coaches to develop their professional expertise are somewhat limited; organizing themselves into their own professional learning community may be one answer to rectifying this limitation.

Support from administrators is also crucial to coaching success. To increase teachers' sense of accountability and to better understand literacy development and instruction, school principals must participate in the coaching work (Burkins, 2007; Casey, 2006; Kral, 2007; Steiner & Kowal, 2007; Toll, 2008). Building coaching into school and district infrastructures allows the work to progress faster and be embedded more deeply (Shanklin, 2007). Two specific kinds of support are needed:

- Structural supports that include a detailed job descriptions, ongoing professional development, common planning times, and a school literacy team
- Relational supports that include modeling, collaboration, and participation for teachers (Kral, 2007; Shanklin, 2007)

Coaching will look different at different grade levels, in various subject-area classrooms, and with teachers who possess different levels of literacy and pedagogical expertise. Effective coaching, however, shares common characteristics. The Advisory Board of the Literacy Coaching Clearinghouse (Shanklin, 2006) lists six characteristics of effective coaching. The table below explains each characteristic and links each to the role of a building-level literacy coach.

GROWING PROFESSIONALLY: TEACHER PREPARATION, PROFESSIONAL DEVELOPMENT, AND SCHOOL LEADERSHIP

Table 10.4: Characteristics of effective coaching

Characteristics of Effective Literacy Coaching	Role of a Literacy Coach at the Building Level
Involves collaborative dialogue for teachers at all levels of knowledge and experience	<ul style="list-style-type: none"> ➤ Carefully includes all teachers, regardless of knowledge and experience, in professional learning
Facilitates the development of a school vision about literacy that is site-based and linked to district goals	<ul style="list-style-type: none"> ➤ May lead, or is a member of, the school literacy committee ➤ Helps a school determine the qualities of excellent literacy instruction that it wants to strive for ➤ Answers questions of and advises the school principal about literacy learning ➤ Facilitates teacher study groups ➤ Leads or organizes other professional learning opportunities around literacy instruction
Demonstrates and supports evidence-based learning for both student and teacher	<ul style="list-style-type: none"> ➤ Helps teachers examine student work and suggests assessments ➤ Models and gives assessments and interprets data ➤ May enter data ➤ Assists in response to intervention efforts ➤ Evaluates coaching efforts and other professional development offerings
Provides ongoing, job-embedded professional learning	<ul style="list-style-type: none"> ➤ Works to embed professional learning in the context of the school ➤ Works alongside teachers during the day ➤ Implements sound practices for adult learning ➤ Helps teachers keep professional learning going after coaching cycles end
Involves classroom observations that are cyclical and that build knowledge over time	<ul style="list-style-type: none"> ➤ Understands gradual release of responsibility ➤ Helps teachers develop a means to reflect upon their own teaching and make improvements ➤ Understands differences in the literacy strategies needed for particular content disciplines
Is supportive rather than evaluative	<ul style="list-style-type: none"> ➤ Helps teachers uncover areas where growth is needed ➤ Assists teachers in being reflective about their own teaching ➤ Understands gradual release and approximation of new learning

(Adapted from Shanklin, 2006)

GROWING PROFESSIONALLY: TEACHER PREPARATION, PROFESSIONAL DEVELOPMENT, AND SCHOOL LEADERSHIP

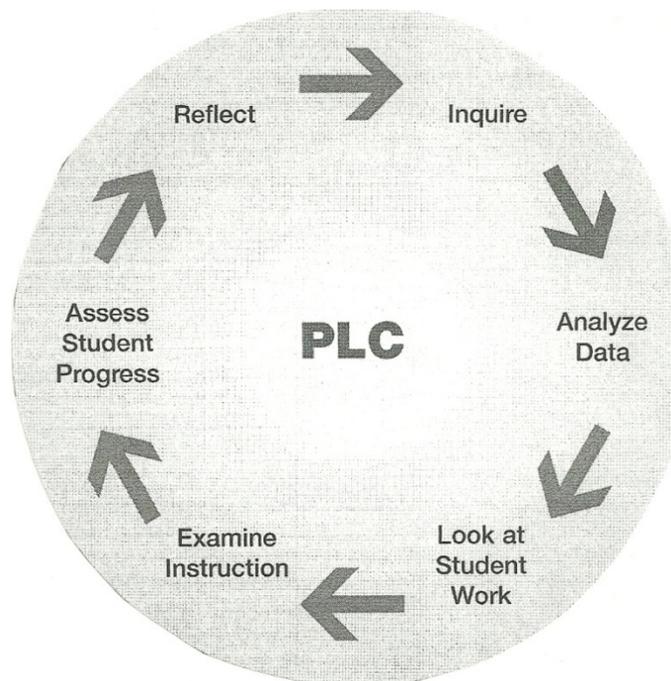
Professional learning communities (PLCs)

A professional learning community is a model of collaborative inquiry that facilitates continuous feedback and follow-up. These communities of practice are grounded in a participant-driven commitment to solve problems, analyze data, and reflect on the success of instructional practices. The professionals involved, who are usually school-based, possess a shared concern or interest that moves their inquiry forward. They engage in a cycle of joint activities and discussions that lead to developing a shared practice (Wenger et al., 2002). Professional learning communities are guided by a number of core beliefs:

- Staff professional development is critical to student learning.
- Professional development is most effective when it is collaborative and collegial.
- Collaborative work should involve inquiry and problem solving in the context of daily teaching. (Servage, 2008)

Sustained activities include identifying and discussing common concerns and needs, solving problems, deepening professional relationships, and coaching each other. Many PLCs have been established to support teachers in using data and student work to identify refinements, supports, and interventions to meet students' learning needs (Jacobs & Yendol-Hoppey, 2010; Thessin & Starr, 2011).

The following model of a PLC—a cycle of inquiry—is provided by Thessin and Starr (2011):



GROWING PROFESSIONALLY: TEACHER PREPARATION, PROFESSIONAL DEVELOPMENT, AND SCHOOL LEADERSHIP

Activities within this PLC cycle include the following:

- **Inquire.** Read/research the issue teachers wish to address.
- **Analyze data.** Analyze appropriate, available data to identify the problem to be addressed. Specific data might include state assessment results, grade-level assessment data, classroom observation data, or the number of failures in a particular subject.
- **Look at student work.** Examine examples of authentic student work in order to ascertain a clearer picture of student thinking and understanding within the focus area.
- **Examine instruction.** Any issue related to instruction is reframed as a “challenge of practice.” A protocol is developed to address the instructional focus or “challenge,” and PLC members observe classroom instruction, providing feedback and debriefing after the observational process.
- **Assess student progress.** Teachers give brief common assessments, grade, and discuss the results, determining areas for re-teaching and/or review.
- **Reflect:** Teachers reflect on their teaching and student progress and develop an action plan for moving forward by monitoring and adjusting student learning.

Like all effective professional development initiatives, professional learning communities do not just happen. But when teachers can make a clear connection to the school’s improvement goals and when they are involved in creating and leading the PLC process, these professionals develop ownership and support for the process. Successful PLCs also require their participants to learn how to work together effectively, which may be uncomfortable at the beginning. Perhaps most importantly, administrators and teachers need to be trained and have opportunities to practice each step of the cycle (Thessin & Starr, 2011).

SCHOOL LEADERSHIP

Site administrators exert widely ranging influence on their school in general and on the instruction of literacy in particular. Administrators help to set and enforce policy, support teacher focus and excellence, and contribute to the collective belief about what is important and the spirit in which that importance is addressed. However, school leadership is not just the purview of those individuals who hold the specific title of administrator. Every educator in a school carries the capacity to lead the way in introducing and establishing effective literacy practices. And more often than not a positive culture of contagion develops when teachers use and promote effective practices—formally through literacy teams or informally by simply using them and sharing the results. Good news spreads when even just one person starts something new that works.

Literacy programs that are culturally responsive may be initiated by school leadership, by school literacy teams, or by individual teachers who are working to best serve their students. The literacy

GROWING PROFESSIONALLY: TEACHER PREPARATION, PROFESSIONAL DEVELOPMENT, AND SCHOOL LEADERSHIP

team that develops the school’s vision and articulates the specific needs for literacy instruction must also carefully share that vision with the entire community. The composition of this important team is not formulaic; it is unique to the context and community of a particular school. However team members should represent the school’s stakeholders: administrators, teachers, reading specialist, support and resource specialist, students (particularly at the secondary level), parents, and community members (Vogt & Shearer, 2007).

REFER TO APPENDIX A AND B FOR TOOLS TO ASSIST IN PLANNING AND EVALUATING SCHOOL LITERACY PROGRAMS AND APPENDIX C FOR GUIDANCE IN SELECTING CORE READING PROGRAMS.

Expectations for Early Care and Education Leadership

Administrators working in early care and education programs need to exhibit leadership by providing vision and supporting the creation of literate environments that foster pre-literacy and pre-writing skills. The North Central Regional Educational Laboratory (NCREL) articulates the following expectations for early childhood leaders:

- Review research and remain current about child development and effective literacy practices.
- Develop an understanding of developmentally appropriate literacy practice that acknowledges children’s development, interests, and literacy knowledge.
- Work with staff to provide a developmentally appropriate curriculum in reading and writing that is challenging yet attainable and that addresses the needs of all children.
- Ensure that appropriate screenings and assessments are used to determine intervention programs for children who are experiencing reading problems and those who are at risk of developing reading problems.
- Support teachers in implementing high-quality, developmentally appropriate literacy practices in their classrooms.
- Provide staff members with ongoing professional development to increase their knowledge of children’s literacy development and their skill in implementing effective, developmentally appropriate instructional practices.
- Work to develop an extensive library of varied literacy resources, including literary and informational texts, for younger children.
- Reach out to parents and families to provide literacy-based informational programs for developing literacy skills in young children.
- Work with community groups and libraries to provide informational programs for parents.

(Adapted from NCREL, 1999)

GROWING PROFESSIONALLY: TEACHER PREPARATION, PROFESSIONAL DEVELOPMENT, AND SCHOOL LEADERSHIP

Expectations for K–12 Administrators

As they create and communicate the school’s framework for literacy success, building principals assume a critical role (The Partnership for Reading, 2003). Research confirms that effective school leaders exhibit certain behaviors. Murphy (2004) combines these behaviors into a model for leadership in literacy.

Table 10.5: Murphy’s model of literacy leadership

Developing Mission and Goals	<ul style="list-style-type: none"> ➤ Framing school goals ➤ Communicating school goals
Managing Educational Production Function	<ul style="list-style-type: none"> ➤ Promoting quality instruction ➤ Supervising and evaluating instruction ➤ Allocating and protecting instructional time ➤ Coordinating the curriculum ➤ Monitoring student progress
Promoting an Academic Learning Climate	<ul style="list-style-type: none"> ➤ Establishing positive expectations and standards ➤ Maintaining high visibility ➤ Providing incentives for teachers and students ➤ Promoting professional development
Developing a Supportive Work Environment	<ul style="list-style-type: none"> ➤ Creating a safe and orderly environment ➤ Providing opportunities for meaningful student involvement ➤ Developing staff collaboration and cohesion ➤ Securing outside resources in support of school goals ➤ Forging links between the home and the school

Fullan (2005) acknowledges that instructional leaders need to focus on both short- and long-term outcomes. Leading and facilitating school change is difficult work because after the work begins it must continue to move forward. Sustainable literacy reform cannot flourish without deep ownership by the principal, the teachers, and the larger community. Taylor (2007) asserts that a principal leading school-wide reading reform also needs deep knowledge about research-based reading instruction and

GROWING PROFESSIONALLY: TEACHER PREPARATION, PROFESSIONAL DEVELOPMENT, AND SCHOOL LEADERSHIP

a solid understanding of what effective instruction looks like. Rhode Island values strong school leadership and provides guidance through its Standards for Educational Leadership:

School leadership matters. It matters to everyone directly and indirectly connected to schools. For the students who attend schools in Rhode Island, the quality of school leadership affects their school experiences and their levels of achievement. For the educators who work in Rhode Island schools, leadership affects their professional lives and their working conditions as well as how they conduct the important work of improving student learning. School leadership also affects the confidence that families and other community members have that their children are receiving a quality education and that the community's resources are being used efficiently and effectively. (*Standards for Educational Leadership in Rhode Island, 2008, p. 7*)

FOR FURTHER INFORMATION, PLEASE ACCESS

[HTTP://WWW.RIDE.RI.GOV/EDUCATORQUALITY/EDUCATOREVALUATION/EVALSTAND.ASPX](http://www.ride.ri.gov/educatorquality/educatorevaluation/evalstand.aspx)

GLOSSARY

21st Century Literacies

The proficiencies that twenty-first century readers and writers must be able to demonstrate: developing proficiency with the ever-evolving tools of technology; building relationships with others to pose and solve problems collaboratively and cross-culturally; designing and sharing information with global communities to meet a variety of purposes; managing, analyzing, and synthesizing multiple streams of simultaneous information; creating, critiquing, analyzing, and evaluating multi-media texts; and attending to the ethical responsibilities required by these complex environment (adapted from The National Council of Teachers of English).

At risk for reading difficulties

Children whose educational careers are imperiled because they do not read well enough to ensure understanding and to meet the rising demands of literacy (Snow, Burns, & Griffin, 1998).

Authentic discussion

A conversation consisting of a genuine dialogue or inquiry into a problem or issue. There is no pre-determined answer (Johannessen, 2003).

Authentic text

1. Text materials representative of the real world; nonacademic text; as bus schedules; directions for assembling a computer, etc.

2. In student programs, text that has not been altered in form or content, as original publications in children’s literature or books designed for guided reading instruction.
(retrieved from http://www.dpi.state.nd.us/standard/perform/archive/ELA_glossary.pdf)

Cognate

1. Descended from the same language or form (retrieved from <http://dictionary.reference.com/browse/cognate>).

2. Derived from the same word in an ancestral language (retrieved from <http://wordnetweb.princeton.edu/perl/webwn?s=cognate&sub=Search+WordNet&o2=&o0=1&o8=1&o1=1&o7=&o5=&o9=&o6=&o3=&o4=&h>).

Connected text

Words grouped syntactically into phrases and sentences.

Cultural competence

‘Culture’ refers to integrated patterns of human behavior that include the language, thoughts, communications, actions, customs, beliefs, values, and institutions of racial, ethnic, religious, or social groups.

‘Competence’ implies having the capacity to function effectively as an individual and an organization within the context of the cultural beliefs, behaviors, and needs presented by consumers and their communities (adapted from Cross et al., 1989).

Decoding

The ability to apply knowledge of letter-sound relationships, including that of letter patterns, to correctly pronounce written words (adapted from Reading Rockets @ <http://www.readingrockets.org/helping/target/phonics/>).

Deconstruct complex text

To break apart the language in a text in order to build understanding; may occur at the word, clause, or whole-text levels. This practice supports building students’ language skills, especially as it relates to the task or function they are being asked to perform (adapted from Girard & Spycher, 2007).

Digitally literate	Able to use, comprehend, and manipulate computer-related content and processes in order to accomplish personal, academic, and social goals (Labbo, 2004).
Encoding	Identifying the letter or letter pattern that corresponds to each sound.
Fluency	The ability to read text accurately, quickly, and with smoothness and expression (National Reading Panel, 2000)
Graphemes	Printed symbols; most commonly known as letters
Literacy	The ability to read, write, speak, and listen to communicate with others effectively. Literacy is also the ability to think and respond critically across content areas.
Metacognition	Those higher order thinking processes that are actively controlled by a thinker and that provide the thinker with useful strategies for engaging more fully and productively in learning. <i>Thinking about one's thinking.</i>
Models of thought	Various models of the reading processes. Such models provide educators with a deeper understanding of reading processes, where breakdowns in comprehension can occur, and what strategies can improve these processes (2005 Rhode Island PreK-12 Literacy Policy). Appendix E provides an example.
Morphology	The study of word formation.
Onset(s)	The part of the syllable that precedes the vowel of the syllable. In the word <i>stop</i> , <i>st</i> is the onset). Onsets and rimes work together. (retrieved from: http://www.sil.org/linguistics/GlossaryOfLinguisticTerms/WhatIsAnOnset.htm)
Oral language	The production or comprehension of spoken language (including vocabulary and grammar).
Orthography	The study of representing the sounds of a language through printed symbols, a language's spelling patterns.
Phonemes	The smallest units of sound that make a difference in a word's meaning.
Phonemic awareness	The ability to notice, think about, and work with the individual sounds in spoken words.
Phonics	The relationship between the letters (graphemes) of written language and the individual sounds (phonemes) of spoken language (National Reading Panel, 2000).
Phonological awareness	An understanding that spoken language conveys thoughts as words and words are composed of sounds specific to that language; the ability to attend to and manipulate units of sound in speech (syllables, onsets and rimes, and phonemes) independent of meaning.
Phonology	The study of phonemes or speech sounds or, in the case of signed language, hand shapes.

Pragmatics	The effective use of language.
Print knowledge/awareness	An understanding of the forms of written language and how it works (functions); the basis for learning how to read connected text lies in print awareness. Also called “concepts of print.”
Read-aloud(s)	A planned oral reading of a book or passage from a text, usually chosen because of its relation to a concept or topic of study. The purpose of a read-aloud can be to give students practice in listening, help them develop background knowledge necessary for independent reading, increase comprehension skills, and develop critical thinking. Teachers and parents can also use read-alouds, in conjunction with commentary/discussion of the text, to model reading strategies that aid in comprehension.
Reading	The fluent execution and coordination of word recognition and text comprehension.
Rime(s)	The part of a syllable which consists of its vowel and any consonant sounds that come after it. In the word <i>stop</i> , <i>-op</i> is the rime. Onsets and rimes work together. (retrieved from: http://www.sil.org/linguistics/GlossaryOfLinguisticTerms/WhatIsARime.htm)
Sight vocabulary	Those words that a reader can say instantly, without applying any form of word analysis (adapted from Shanker & Cockrum, 2009).
Story grammar	The basic elements of a story, along with the names for those elements; e.g., setting, character, conflict.
Structural analysis	The process of determining a word’s meaning by examining its prefixes, suffixes, and/or root.
Syntax	The ordering of and the relationship between the words and other structural elements in phrases and sentences (Glossary, The English Learning for Preschoolers Project, retrieved from http://www.cpin.us/p/pel/glossary.htm)
Vocabulary	The knowledge of words and word meanings (Lehr, Osborn, & Hiebert, 2004).
Writing	The ability to compose text effectively for various purposes and audiences.

CITED WORKS

- 2010 Rhode Island Kids Count Factbook. (2010). Providence, RI: Rhode Island KIDS COUNT.
Retrieved from
http://www.rikidscount.org/matriarch/documents/10_Factbook_Indicator_52.pdf
- Aaron, P.G., Wilczynski, S., & Keetay, V. (1998). The anatomy of word-specific memory. In C. Hulme & J. Malatesha (Eds.). *Reading and Spelling: Development and Disorders* (pp. 405-19). Mahwah, NJ: Lawrence Erlbaum Associates.
- Adams, J.J. (1990). *Beginning to read: Thinking and learning about print*. Cambridge: MIT Press.
- Adams, M.J., Foorman, B.R., Lundberg, I., & Beeler, T. (1998). *Phonemic awareness in young children*. Baltimore: Brookes.
- Alber-Morgan, Sheila. (2010). *Using RTI to teach literacy to diverse learners, K-8*. Thousand Oaks, CA: Corwin Press.
- Alexander, P.A. (2002, January) The struggling adolescent reader: A new perspective on an enduring problem. Keynote presentation at the Adolescent Literacy Workshop, sponsored by the National Institute of Child Health and Human Development, Washington, D.C.
- Allen, J. (1999). *Words, words, words: Teaching vocabulary in grades 4-12*. York, ME: Stenhouse.
- Alliance for Excellent Education (AEE). (2006). *Paying double: Inadequate high schools and community college remediation*. Policy Brief. Washington, DC: Author. Retrieved from
www.all4ed.org/files/archive/publications/remediation.pdf
- Alliance for Excellent Education (2011, April). *Engineering solutions to the national crisis in literacy: How to make good on the promise of the common core state standards* (Policy Brief). Washington, DC: Author. Retrieved from
<http://www.all4ed.org/files/EngineeringSolutionsLiteracy.pdf>
- Allington, R. L. (2006). Fluency: Still waiting after all these years. In S.J. Samuels and A.E. Farstrup (Eds.), *What Research Has to Say About Fluency Instruction* (pp. 94-105). Newark, DE: International Reading Association. Retrieved from
http://www.learner.org/workshops/teachreading35/pdf/fluency_still-wait.pdf
- Almasi, J. & Gambrell, L. (1994). *Sociocognitive conflict in peer-led and teacher-led discussions of literature*. College Park, MD: National Reading Research Center.
- Alverman, D.E. (1999). Are we trend spotters or tale spinners? A report from the field. In J.R. Dugan, P.E. Linder, W.M. Linek, & E.G. Sturtevant (Eds.), *Advancing the World of Literacy: Moving into the 21st Century* (pp. 8-25). Commerce, TX: College Reading Association.
- Alvermann, D.A. & Guthrie, J.T. (1993). *Themes and directions of the National Reading Research Center*. Retrieved from
http://www.eric.ed.gov/ERICDocs/data/ericdocs2sql/content_storage_01/000019b/80/13/43/aa.pdf
- American Federation of Teachers. (2005). *Reading comprehension instruction: Participant manual*. Washington, DC: American Federation of Teachers ER&D Program.

- Anderman, E.M., & Midgley, C. (1992). Changes in achievement goal orientations, perceived academic competence, and grades across the transition to middle-level schools. *Contemporary Educational Psychology*, 22(3), 269-298.
- Anderson, R.C. (1996). Research foundations to support wide reading. In V. Creany (Ed.), *Promoting reading in developing countries* (pp. 55-57). Newark, DE: International Reading Association.
- Anderson, R. C. & Freebody, P. (1981). Vocabulary knowledge. In J. Guthrie (Ed.), *Comprehension and teaching: Research reviews* (pp. 77-117). Newark, DE: International Reading Association.
- Anderson, R.C., Hiebert, E.G., Scott, J.A., & I.A.G. Wilkinson. (1985). *Becoming a nation of readers: The report of the commission on reading*. Champaign, IL: Center for the Study of Reading.
- Anderson, R. C., & Nagy, W. E. (1992). The vocabulary conundrum. *American Educator*, 16 (Winter), 14-18, 44-47.
- Anderson, R.C. & Pearson, P.D. (1984). A schema-theoretic view of basic processes in reading comprehension. In P.D. Pearson, R. Barr, M. L. Kamil & P. Mosenthal (Eds.), *Handbook of reading research* (pp. 255-292). White Plains, NY: Longman.
- Anderson, R.C., Wilson, P.T., & Fielding, L.C. (1988). Growth in reading and how children spend their time outside of school. *Reading Research Quarterly*, 23, 285-303.
- Anderson, T.H. & Armbruster, B.A. (1984). Content area textbooks. In R.C. Anderson, J. Osborn, & R.J. Tierney (Eds.). *Learning to Read in American Schools* (pp. 193-224). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Anglin, J. M. (1993). Vocabulary development: A morphological analysis. *Monographs of the Society for Research in Child Development*, 58(10), 1-166.
- Applebee, A., & Langer, J., (2009). What is happening in the teaching of writing? *English Journal*, 98, pp. 18-28.
- Archibald, S., Cogshell, J.G., Croft, A., & Goe, L. (2011 February). High quality professional development for all teachers: Effectively allocating resources (Research & policy brief). Washington, DC: National Comprehensive Center for Teacher Quality. Retrieved from <http://www.gtcenter.org/sites/default/files/docs/HighQualityProfessionalDevelopment.pdf>
- Argüelles, M.E. (2005, August). Components of effective reading instruction for English language learners (PowerPoint presentation). Presented at the Rhode Island Reading First Summer Leadership Institute, Warwick, RI.
- Armbruster, B.B., Lehr, F., & Osborn, J. (2001). *Put reading first: The research building blocks for teaching children to read*. Washington, DC: National Institute for Literacy.
- August, D., Carlo, M., Dressler, C., & Scow, C. (2005) The critical role of vocabulary development for English language learners. *Learning Disabilities: Research & Practice*, 20, 50-57.
- August, D. & Hakuta, K., Eds. (1997). *Improving schooling for language-minority children: A research agenda*. National Research Council (U.S.) Committee on Developing A Research Agenda on the Education of Limited English-Proficient and Bilingual Students. Washington, DC: National Academy Press.

- August, D., & Shanahan, T. (Eds.). (2006). *Developing Literacy in second-language learners: Report of the national literacy panel on literacy-minority children and youth (Executive Summary)*. Mahwah, NJ: Lawrence Erlbaum Associates, Publishers. Retrieved from http://www.cal.org/projects/archive/nlpreports/Executive_Summary.pdf
- Baghban, M. (2007). *Scribbles, labels, and stories: The role of drawing in the development of writing*. *Young Children* (January 2007), 20-27.
- Bailey, A. L. (Ed.). (2007). *The language demands of school: Putting academic language to the test*. Princeton, NJ: Yale University Press.
- Baker, S. K., Simmons, D. C., Kameenui, E. J. (1995). *Vocabulary acquisition: Synthesis of the research*. Retrieved from <http://www.eric.ed.gov:80/PDFS/ED386860.pdf>
- Baldwin, R.S. and Schatz, E.I. (1985). *Context clues are ineffective with low frequency words in naturally occurring prose*. *National Reading Conference Yearbook*, 34, 132-135.
- Ball, D.L. & Forzani, F.M. (2011). *Building a common core for learning to teach and connecting professional learning to practice*. *American Educator*, 35(2). 17-21; 38-39.
- Ball, E. & Blachman, B. (1991). *Does phoneme awareness training in kindergarten make a difference in early word recognition and developmental spelling?* *Reading Research Quarterly*, 26, 49-66.
- Batalova, J., Fix M., & Murray, J. (2007). *Measures of change: The demography and literacy of adolescent English learners—A report to Carnegie Corporation of New York*. Washington, DC: Migration Policy Institute.
- Baumann, J.F. & Duffy, A.M. (1997). *Engaged reading for pleasure & learning: A report from the National Reading Research Center*. Athens, GA: National Research Center.
- Baumann, J.R. & Kame'enui, E.J. (1991). *Research on vocabulary instruction: Ode to Voltaire*. In J. Flood, J. Jensen, D. Lapp, & J.R. Squire (Eds.), *Handbook of Research on Teaching the English Language Arts* (pp. 604-632). New York: Macmillan.
- Baumann, J. F., Kame'enui, E. J., & Ash, G. E. (2003). *Research on vocabulary instruction: Voltaire redux*. In J. Flood, D. Lapp, J. R. Squire, & J. M. Jensen (Eds.), *Handbook on research on teaching the English language arts* (2nd ed., pp. 752-785). Mahwah, NJ: Lawrence Erlbaum Associates.
- Bean, R.M. (2004). *Promoting effective literacy instruction: The challenge for literacy coaches*. *The California Reader*, 37(3), 58-63.
- Beck, I.L. (2005). *Making sense of phonics: The hows and whys*. New York: Guilford.
- Beck, I.L. (1989). *Improving practice through understanding reading*. In L.B. Resnick & L.E. Klopfer (eds.), *Toward the thinking curriculum: Current cognitive research* (1989 ASCD yearbook, pp. 40-58). Alexandria, VA: Association for Supervision and Curriculum Development; Hillsdale, NJ: Erlbaum.
- Beck, I. & McKeown, M. (1991). *Conditions of vocabulary acquisition*. In R. Barr, M.L. Kamil, P. Mosenthal, & P.D. Pearson (Eds.), *Handbook of reading research* (Vol. 2, pp. 789-814). White Plains, NY: Longman.

- Beck, I. L., & McKeown, M. G. (2001). Text talk: Capturing the benefits of read aloud experiences for young children. *The Reading Teacher*, 55, 10-20.
- Beck, I., McKeown, M., & Kucan, L. (2002). *Bringing words to life: Robust vocabulary instruction*. New York: Guilford.
- Beck, I., McKeown, M., & Omanson, R.C. (1987). The effects and uses of diverse vocabulary instructional techniques. In M. McKeown & M.E. Curtis (Eds.), *The nature of vocabulary acquisition* (pp. 147-163). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Beck, I. L., McKeown, M. G., Omanson, R. C., & Pople, M. T. (1985). Some effects of the nature and frequency of vocabulary instruction on the knowledge and use of words. *Reading Research Quarterly* 20.
- Becker, W. C. (1977). Teaching reading and language to the disadvantaged – What we have learned from field research. *Harvard Educational Review*, 47, 518-543.
- Beers, K. (2003). *When kids can't read*. Portsmouth, NH: Heinemann.
- Benson, V. (2003). Informing literacy: A new paradigm for assessing non-fiction. *New England Reading Journal*, 39, 13-20.
- Berninger, V., Abbott, R., Abbott, S., Graham, S., & Richards, T. (2002) Writing and reading: connections between language by hand and language by eye. *Journal of Learning Disabilities*, 35, 39-56.
- Berninger, V., Cartwright, A., Yates, C., Swanson, H. L., & Abbott, R. (1994). Developmental skills related to writing and reading acquisition in the intermediate grades: Shared and unique variance. *Reading and Writing: An Interdisciplinary Journal*, 6,161-196.
- Berninger, F., & Fuller, F. (1992). Gender differences in orthographic, verbal, and compositional fluency: implications for assessing writing disabilities in primary grade children. *Journal of School Psychology*, 30, 363-82.
- Berninger, V., Fuller, F., & Whitaker, D. (1996). A process model of writing development: Across the life span. *Educational Psychology Review*, 8, 193-205.
- Berninger, V., Vaughn, V., Abbott, R., Abbott, S., Rogan, L., Brooks, A., Reed, E., & Graham, S. (1997) Treatment of handwriting problems in beginning writers: Transfer from handwriting to composition. *Journal of Educational Psychology*, 89, 652-666.
- Bialystok, E. (2007). Acquisition of literacy in bilingual children: A framework for research. *Language Learning*, 57, 45-77.
- Bialystok, E. (1991). Metalinguistic dimensions of bilingual language proficiency. In E. Bialystok (Ed.). *Language processing in bilingual children*. Cambridge, UK: Cambridge University Press.
- Bialystok, E., Shenfield, T., & Codd, J. (2000). Languages, scripts, and the environment: Factors in developing concepts of print. *Developmental Psychology*, 36(1), 66-76.
- Biancarosa, G., Palincsar, A.S., Deshler, D.D., & Nair, M. (2007). Adolescent literacy: Myths and realities. In D.D. Deshler, A.S. Palincsar, G. Biancarosa, & M. Nair (Eds.), *Informed Choices for*

- Struggling Adolescent Readers: A research-based guide to instructional programs and practices (pp. 11–36). Newark, DE: International Reading Association.
- Biancarosa, G. & Snow, C.E. (2004). Reading next: A vision for action and research in middle and high school literacy: A report from Carnegie Corporation of New York. Washington, DC: Alliance for Excellent Education.
- Bickart, T. (1998). Summary report of report of preventing reading difficulties in young children. Washington, DC: Teaching Strategies.
- Biemiller, A. (2003). Teaching vocabulary in the primary grades. In J.F. Baumann & E.J. Kame'enui (Eds.), Vocabulary instruction: Research and practice (pp. 28-40). New York: Guilford.
- Biemiller, A., & Slonim, N. (2001). Estimating root word vocabulary growth in normative and advantaged populations: Evidence for a common sequence of vocabulary acquisition. *Journal of Educational Psychology*, 93(3), 498- 520.
- Blachman, B., Ball, E., Black, R., & Tangel, D. (1994). Kindergarten teachers develop phoneme awareness in low-income, inner-city classrooms: Does it make a difference? *Reading and Writing*, 6, 1-18.
- Blachowicz, C., & Fisher, P. (2000). Vocabulary instruction. In M. Kamil, P. Mosenthal, P. D. Pearson & R. Barr (Eds.), *Handbook of Reading Research* (Vol. 3, pp. 503-523). Mahwah, NJ: Lawrence Erlbaum Associates.
- Blachowicz, C.L.Z. & Fisher, P. (2004). Keep the "fun" in fundamental. In J.F. Bauman & E.J. Kame'enui (Eds.), *Vocabulary instruction* (pp.219-238). New York: Guilford.
- Blachowicz, C.L.Z. & Fisher, P.J. (2007). Best practices in vocabulary instruction. In L.B. Gambrell, L.M. Morrow, & M. Pressley (Eds.), *Best practices in literacy instruction* (3rd ed., pp. 178-203). New York: Guilford.
- Blachowicz, C. & Ogle, D. (2008). *Reading comprehension: strategies for independent learners* (2nd Ed.). New York: Guilford.
- Blank, M. (2001). Classroom discourse: A key to literacy. In K.G. Butler & E.R. Silliman (Eds.), *Speaking, reading, and writing in children with language and learning disabilities: New paradigms in research and practice* (pp.151-174). Mahwah, NJ: Lawrence Erlbaum Associates.
- Block, C.C. & Duffy, G.S. (2008). Research on teaching comprehension: Where we've been and where we're going. In C.C. Block & S.R. Parris (Eds.) *Comprehension Instruction: Research-based best practices* (2nd ed., pp. 19-37). New York: Guilford.
- Block, C.C., Rodgers, L.L., & Johnson, R.B. (2004). *Comprehension process instruction: Creating reading success in grades K-3*. New York: Guilford.
- Boardman, A. G., Roberts, G., Vaughn, S., Wexler, J., Murray, C. S., & Kosanovich, M. (2008). *Effective instruction for adolescent struggling readers: A practice brief*. Portsmouth, NH: RMC Research Corporation, Center on Instruction. Retrieved from <http://www.centeroninstruction.org/files/Practice%20Brief-Struggling%20Readers.pdf>
- Booth, D. & Swartz, L. (2004) *Literacy techniques: For building successful readers and writers* (2nd ed.). Portland, ME: Stenhouse.

- Boscolo, P., & Gelati, C. (2007). Best Practices in Promoting Motivation for Writing. In S. Graham, C. MacArthur, & J. Fitzgerald (Eds.) *Best Practices in Writing Instruction* (pp. 202-221). New York: Guilford.
- Brabham, E.G. & Lynch-Brown, C. (2002). Effects of teachers' reading-aloud styles on vocabulary acquisition and comprehension in early elementary grades. *Journal of Educational Psychology*, 94(3), pp. 465-473.
- Bradley, B.A. & Stahl, S.A. (2001). Learning the alphabet. Retrieved from <http://www.ciera.org/library/presos/2001/2001nrc/01nrcstahl/01nrcsta.pdf>
- Bradley, L. & Bryant, P. (1983). Categorizing sounds and learning to read: A causal connection. *Nature*, 30, 419-421.
- Brice, R.G. (2004). Connecting oral and written language through applied writing strategies. *Intervention in School and Clinic*, 40, 38-47.
- Bromley, K. (2007). Best practices in teaching writing. In L.B. Gambrell, L.M. Morrow, & M. Pressley (Eds.), *Best Practices in literacy instruction* (3rd ed., 243-263).
- Brown, J. & Doolittle, J. (2008). A Cultural, Linguistic, and Ecological Framework for Response to Intervention with English Language Learners. National Center for Culturally Responsive Educational Systems (NCCREST). Retrieved from http://www.nccrest.org/Briefs/Framework_for_RTI.pdf
- Brown, J.E. & Sanford, A. (2011). RTI for English language learners: Appropriately using screening and progress monitoring tools to improve instructional outcomes. Retrieved from <http://www.rti4success.org/pdf/rtiforells.pdf>
- Brozo, W.G. (2010). The role of content literacy in an effective RTI program. *The Reading Teacher*, 64(2), 147-150.
- Brozo, W.G. & Puckett, K. (2009). *Supporting content literacy with technology*. Boston: Allyn & Bacon.
- Bruning, R., & Horn, C. (2000). Developing motivation to write. *Educational Psychologist*, 34, 25-37.
- Bryant, D.P., Goodwin, M., Bryant, B.R., & Higgins, K. (2003). Vocabulary instruction for students with learning disabilities: A review of the research. *Learning Disability Quarterly*, 26, 117-128.
- Burkins, J. (2007). *Coaching for balance: How to meet the challenges of literacy coaching*. Newark, DE: International Reading Association.
- Burkins, J. & Ritchie, S. (2007). Coaches coaching coaches. *Journal of Language and Literacy Education* [On-line], 3(1), 32-47. Available: <http://jolle.coe.uga.edu/wp-content/uploads/2013/03/Burkins-J.-Ritchie-S..pdf>
- Burns, M.S., Griffin, P., and Snow, C.E. (1999). *Starting out right: A guide to promoting children's reading success*. Washington, DC: National Academy Press.
- Butler, R. (1995). Motivational and informational functions and consequences of children's attention to peers' work. *Journal of Educational Psychology*, 87(3), 347-360.

- Byrne, B. & Fielding-Barnsley, R. (1991). Evaluation of a program to teach phonemic awareness to young children. *Journal of Educational Psychology*, 83, 451-455.
- Byrne, B. & Fielding-Barnsley, R. (1993). Evaluation of a program to teach phonemic awareness to young children: A 1-year follow up. *Journal of Educational Psychology*, 85, 104-111.
- Byrne, B. & Fielding-Barnsley, R. (1995). Evaluation of a program to teach phonemic awareness to young children: A 2- and 3- year follow up and a new preschool trial. *Journal of Educational Psychology*, 87, 488-503.
- Calderón, M. (2004). *No teacher left behind: Teaching English language learners*. Washington, DC: National Clearinghouse for English language learners/George Washington University.
- Calderón, M. (2004). *Writing for English Language Learners in secondary schools*. Downey, CA: Southern California Comprehensive Assistance Center.
- Callins, T. (2006). *Culturally responsive literacy instruction (Practitioner Brief Series)*. Tempe, AZ: National Center for Culturally Responsive Educational Systems, Arizona State University. Retrieved from http://www.nccrest.org/Briefs/Literacy_final.pdf
- Campbell, J. R., Voelkl, K., & Donahue, P. L. (2000). *NAEP 1996 trends in academic progress*. (NCES 97-985r). Washington, DC: U.S. Department of Education, National Center for Education Statistics.
- Carlisle, J.F. (2000). Awareness of the structure and meaning of morphologically complex words: Impact on reading. *Reading and Writing*, 12, 169-190.
- Carlisle, J. (2004). Meeting the literacy needs of struggling readers in the early elementary years. Presentation at the Summer Conference of the Center for the Improvement of Early Reading Achievement. Retrieved from <http://www.ciera.org/library/presos/2004/csi/jfcarl.pdf>
- Carnegie Council on Advancing Adolescent Literacy (CCAAL). (2010). *Time to act: An agenda for advancing adolescent literacy for college and career success*. New York, NY: Carnegie Corporation of New York. Retrieved from http://carnegie.org/fileadmin/Media/Publications/PDF/tta_Main.pdf
- Carnegie Corporation (Carnegie). (2010). *Advancing adolescent literacy: The cornerstone of school reform*. New York: Carnegie Corporation of New York. Retrieved from <http://carnegie.org/publications/search-publications/pub/365/>
- Casbergue, R., & Plauché, M.B. (2003). Immersing children in non-fiction: Fostering emergent research and writing. In D. Barone & L. Morrow (Eds.), *Literacy and young children: Research-based practices* (pp. 243-260). New York: Guilford.
- Casbergue, R. & Plauché, M. (2005). Emergent writing: Classroom practices that support young writers' development. In R. Indrisano & J. Paratore (Eds.), *Learning to write, writing to learn* (pp. 8-25). Newark, DE: International Reading Association.
- Casey, K. (2006). *Literacy coaching: The essentials*. Portsmouth, NH: Heinemann.
- Caspe, M., Lopez, M.E., & Wolos, C. (2007). *Family Involvement in Elementary School Children's Education, Winter/Spring 2007 (#2)*. Cambridge, MA: Harvard Family Research Project. Retrieved from <http://www.hfrp.org/publications-resources/browse-our-publications/family-involvement-in-elementary-school-children-s-education>

- Cassar, M., Treiman, R., Moats, L.C., Pollo, T.C., & Kessler, B. (2005). How do the spellings of children with dyslexia compare with those of nondyslexic children? *Reading and Writing* 18 (1), 27-49.
- Castle, J.M., Riach, J., & Nicholson, T. (1994). Getting off to a better start in reading and spelling: The effects of phonemic awareness instruction within a whole language program. *Journal of Educational Psychology*, 86, 350-359.
- Chall, J.S. (1996). *Stages of reading development* (2nd Ed.). Fort Worth, TX: Harcourt Brace College Publishers.
- Chamot, A. U., & O'Malley, J. M. (1994). *The CALLA handbook: Implementing the Cognitive Academic Language Learning Approach*. Reading, MA: Addison-Wesley.
- Clark, C. M., & Peterson, P. L. (1986). Teachers' thought processes. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed., pp. 255-296). New York: Macmillan.
- Clay, Marie. (1991). *Becoming literate*. Portsmouth, NH: Heinemann.
- Clegg, J. (1996). *Mainstreaming ESL: Case studies in integrating ESL students into the mainstream curriculum*. Bristol, PA: Multilingual Matters.
- Cloud, N., Genesee, F., & Hamayan, E. (2009). *Literacy instruction for English language learners: A teacher's guide to research-based strategies*. Portsmouth, NH: Heinemann.
- Cohen, D.K. & Hill, H.C. (2000). Instructional policy and classroom performance: The mathematics reform in California. *Teachers College Record*, 102(2), 294-343.
- Coker, (2006). The Impact of first-grade factors on the growth and outcomes of urban schoolchildren's primary-grade writing. *Journal of Educational Psychology*, 98, 471-488.
- Coker, D. (2007). Writing instruction for young children: Methods targeting the multiple demands that writers face. In S. Graham, C. MacArthur, & J. Fitzgerald (Eds.), *Best practices in writing instruction* (pp. 101-118). New York: Guilford.
- Collier, V. P. (1995). Acquiring a second language for school. *Directions in Language & Education*, 1(4), 1-10.
- Collier, V. P., & Thomas, W. P. (2009). *Educating English learners for a transformed world*. Albuquerque, NM: Fuente Press.
- Committee on Developments in the Science of Learning, (2000). *How people learn: Brain, mind, experience, and school: Expanded edition*. Washington, DC: National Academy Press.
- Common Core State Standards Initiative. (2010, June). *Common Core Standards for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects*. Retrieved from <http://www.corestandards.org/the-standards/english-language-arts-standards>
- Costa, A.L. & Garmston, R.J. (1994). *Cognitive Coaching: A foundation for Renaissance Schools*. Norwood, MA: Christopher-Gordon.

- Council of Chief State School Officers (2007). Adolescent Literacy Toolkit. Retrieved from http://programs.ccsso.org/projects/adolescent_literacy_toolkit/about_the_toolkit/
- Council of Chief State School Officers (2011, April). Interstate Teacher Assessment and Support Consortium (InTASC) model core teaching standards: A resource for state dialogue. Washington, DC: Author. Retrieved from http://www.ccsso.org/Documents/2011/InTASC_Model_Core_Teaching_Standards_2011.pdf
- Cross T., Bazron, B., Dennis, K., & Isaacs, M. (1989). Towards a culturally competent system of care, volume I. Washington, D.C.: Georgetown University Child Development Center, CASSP Technical Assistance Center.
- Cummins, J. (1978). Bilingualism and the development of metalinguistic awareness. *Journal of Cross-Cultural Psychology*, 9 (2), 131-149.
- Cummins, J. (1996). *Negotiating identities: Education for empowerment in a diverse society*. Ontario, CA: California Association for Bilingual Education.
- Cummins, J. (2000). *Language, power, and pedagogy: Bilingual children in the crossfire*. Tonawanda, NY: Multilingual Matters.
- Cunningham, A. (1990). Explicit versus implicit instruction in phonemic awareness. *Journal of Experimental Child Psychology*, 50, 429-444.
- Cunningham, A.E., & Stanovich, K. (1998). What reading does for the mind. *American Educator* 22, (Spring/Summer), 8-15.
- Cunningham, P.M. (2003). What research says about teaching phonics. In L.M. Morrow, L.B. Gambrel & M. Pressley (Eds.), *Best practices in literacy instruction* (2nd ed., pp. 65-85). New York: Guilford.
- Cunningham, P.M. (2007). Best practices in teaching phonological awareness and phonics. In L.B. Gambrell, L.M. Morrow & M. Pressley (Eds.), *Best practices in literacy instruction* (3rd ed., pp.159-177). New York: Guilford.
- Curtis, M.E. (2004). Adolescents who struggle with word identification: Research and practice. In T.L. Jetson & J.A. Dole (Eds.), *Adolescent literacy research and practice* (pp. 119-134). New York: Guilford.
- Daane, M. C., Campbell, J. R., Grigg, W. S., Goodman, M. J., & Oranje, A. (2005). *Fourth-grade Students Reading Aloud: NAEP 2002 Special Study of Oral Reading*. Washington, DC: U.S. Department of Education. Retrieved from <http://nces.ed.gov/nationsreportcard/pubs/studies/2006469.asp>
- Darling-Hammond, L.D., & Garcia-Lopez, S.P. (2002). What is diversity? In L. Darling-Hammond, J. French, & S.P. Garcia-Lopez (Eds.), *Learning to teach for social justice* (pp. 9-12). New York: Teachers College Press.
- Dearing, E., McCartney, K., Weiss, H. B., Kreider, H., & Simpkins, S. (2004). The promotive effects of family educational involvement for low-income children's literacy. *Journal of School Psychology*, 42(6), 445-460.
- Deci, E., Koestner, R., & Ryan, R. (1999). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological Bulletin*, 125(6), 627-68.

- Dempster, Frank N. (1993). Exposing Our Students to Less Should Help Them Learn More. Phi Delta Kappan, February. Retrieved from <http://www.studentsfriend.com/onhist/dempster.pdf>
- Dickinson, D.K. & McCabe, A. (2001) Bringing it all together: The multiple origins, skills, and environmental supports of early literacy. *Learning Disabilities Research & Practice*, 16, 186-202.
- Dickinson, D.K. & Tabors, P.O. (2001). *Beginning literacy with language: Young children at home and school*. Baltimore, MD: Brookes.
- Dickson, S.V., Simmons, D.C., & Kame'enui, E.J. (1998). *Beginning literacy with language: Young children learning at home and school*. Baltimore: Brookes.
- Dole, J. (2007). English language arts literacy Q & A. In Council of Chief State School Officers Adolescent Literacy Toolkit. Retrieved from http://programs.ccsso.org/projects/adolescent_literacy_toolkit/about_the_toolkit/
- Donovan, C. A., & Smolkin, L. B. (2002). Genre, content, and other factors to consider in the selection of books for elementary science instruction. *The Reading Teacher*, 55, 502-533.
- Duke, N., & Kays, J. (1998). "Can I say 'once upon a time'?" Kindergarten children developing knowledge of information book language. *Early Childhood Research Quarterly*, 13(2), 295-318.
- Duke, N.K. & Bennett-Armistead, V.S. (2003). *Reading and writing informational texts in the primary grades: Research-based practices*. New York: Scholastic.
- Duke, N.K., Martineau, J.P., Frank, K.A., & Bennett-Armistead, V.S. (2003). 33.6 minutes per day: What happens when we include more informational text in first grade classrooms? Unpublished manuscript, Michigan State University.
- Duke, N.K. & Pearson, P.D. (2002). Effective practices for developing reading comprehension. In A.E. Farstrup & S.J. Samuels (Eds.), *What research has to say about reading instruction* (3rd ed., pp. 205-242). Newark, DE: International Reading Association.
- Duke, N.K., Purcell-Gates, V., Hall, L.A., & Tower, C. (2006). Authentic literacy activities for developing comprehension and writing. *The Reading Teacher*, 60(4), 344-355.
- Durkin, D. (1966) *Children who read early*. New York: Teachers College Press.
- Durkin, D. (1993). *Teaching them to read* (6th ed.) Old Tappan, NJ: Allyn and Bacon.
- Dutro, S. & Kinsella, K. (2010). English language development: Issues and implementation at grades six through twelve. In F. Ong & V. Aguila (Eds.), *Improving Education for English learners: Research-based approaches* (pp. 151-209). Sacramento, CA: CDE Press.
- Echevarria, J. & Hasbrouck, J. (2009, July). Response to Intervention and English Language Learners. CREATE Brief. Center for Research on the Educational Achievement and Teaching of English Language Learners. Retrieved from <http://www.cal.org/create/publications/briefs/pdfs/response-to-intervention-and-english-learners.pdf>
- Echevarria, J., Vogt, M., & Short, D. J. (2008). *Making content comprehensible for English learners: The SIOP model* (3rd ed.) Columbus, Ohio: Allyn & Bacon/ Merrill.

- Edmonds, R. R. (1979). Effective Schools for the Urban Poor. *Educational Leadership* 37 (10).
- Edwards, P.A., Turner, J.D., & Mokhtari, K. (2008). Balancing the assessment of learning and for learning in support of student literacy achievement. *The Reading Teacher*, 61(8), 682-684. doi: 10.1598/RT.61.8.12
- Ehri, L.C. (2002). Phases of acquisition in learning to read words and implications for teaching. *British Journal of Educational Psychology: Monograph Series*, 1, 7-28.
- Ehri, Linnea (2005). "Learning to Read Words: Theory, Findings, and Issues." *SCIENTIFIC STUDIES OF READING*, 9(2), 167-188. Lawrence Erlbaum Associates, Inc.
- Ehri, L.C. (2004). Teaching phonics and phonemic awareness: an explanation of the National Reading Panel meta-analyses. In P. McCardle & V. Chhabra (Eds.), *The Voice of Evidence in Reading Research* (pp. 153-186). Baltimore: Brookes.
- Eisenhart, C. (2007). Oral language development: the foundation for literacy. Power Point presentation for RI Reading First Leadership Meeting. Retrieved from: <http://www.scribd.com/doc/49002128/Oral-Language-Development>
- Eisenhart, C. (2008, April). Oral language development: The foundation for literacy. Paper presented at the Rhode Island Reading First Conference, Warwick, RI.
- Ellis, E.S. & Farmer, T. (2003). The clarifying routine elaborating vocabulary instruction. Retrieved from http://www.ldonline.org/ld_indepth/teaching_techniques/ellis_clarifying.html
- Emma Eccles Jones Center for Early Childhood Education, Utah State University. (2008 May). The primary grade reading & writing teacher knowledge project. Presentation at the 2008 International Reading Association Convention, Atlanta, GA. Retrieved from http://www.usu.edu/ecc/images/pdf/presentations/primary_grade_reading.pdf
- Ervin, Ruth A. Ervin. (2011). Considering Tier 3 within a Response-to-Intervention model. Retrieved from <http://www.rtinetwork.org/essential/tieredinstruction/tier3/consideringtier3>
- Escamilla, K., & Hopewell, S. (2010). Transitions to biliteracy: Creating positive academic trajectories for emerging bilinguals in the United States. In J. Petrovic (Ed.), *International perspectives on bilingual education: Policy, practice, controversy*. Charlotte, NC: Information Age Publishing.
- Falconer, L. (2010). Encouraging preschoolers' early writing efforts: Take another look at that scribble. Retrieved from <http://www.childcareexchange.com/library/5019684.pdf>
- Feldman, Kevin. (2007). Older, struggling readers: What works. Retrieved from http://opi.mt.gov/pub/RTI/Training/FeldmansBiasedBib_Older.pdf
- Feldgus, E.G. & Cardonick, I., (1999). *Kid writing: A systematic approach to phonics, journals, and writing workshop*. Bothell, WA: Wright Group.
- Fitzgerald, J. & Shanahan, T. (2000), Reading and writing relations and their development. *Educational Psychologist*, 35(1), 39-50.
- Fletcher, J.M. & Lyon, G.R. (1998). Reading: A research-based approach. In W.M. Evers (Ed.), *What's gone wrong in America's classrooms?* (pp. 49-90). Stanford, CA: Hoover Institution Press.

- Flood, J., Lapp, L., Squire, J., & Jensen, J. (2003). *Handbook of research on teaching the English language arts*. Mahwah, NJ: Lawrence Erlbaum.
- Florida Center for Reading Research. (2005). *Comprehensive glossary of reading terms*. Retrieved from <http://www.fcrr.org/Curriculum/glossary/GlossaryOfReading.pdf>
- Fountas, I. & Pinnell, G.S. (2001). *Guiding reading and writers, Grades 3-6*. Portsmouth, NH: Heinemann.
- Francis, D. J., Lesaux, N.K., & August, A. (2006). *Language of instruction*. In D. August, & T. Shanahan (Eds.), *Developing literacy in second-language learners: Report of the National Literacy Panel on language-minority children and youth* (pp. 365-414). Mahwah, NJ: Lawrence Erlbaum Associates.
- Francis, D., Rivera, M., Lesaux, N., Kieffer, M., & Rivera, H. (2006). *Practical Guidelines for the Education of English Language Learners: Research-Based Recommendations for Instruction and Academic Interventions*. (Under cooperative agreement grant S283B050034 for U.S. Department of Education). Portsmouth, NH: RMC Research Corporation, Center on Instruction. Retrieved from <http://www.centeroninstruction.org/files/ELL1-Interventions.pdf>
- Freeman, Y. S., Freeman, D. E., & Mercuri, S. (2002). *Closing the achievement gap: How to reach limited formal schooling and long term English language learners*. Portsmouth, NH: Heinemann.
- Frost, S. & Bean, R.M. (2006, September). *Qualifications for literacy coaches: Achieving the gold standard*. Retrieved from <http://www.literacycoachingonline.org/briefs/LiteracyCoaching.pdf>
- Fullan, M. (2005). *Leadership & sustainability: System thinkers in action*. Thousand Oaks, CA: Corwin.
- Gambrell, L.B., & Morrow, L.M. (1996). *Motivating contexts from literacy learning*. In L. Baker, P. Afflerbach, & D. Reinking (Eds.), *Developing engaged readers in school and home communities* (pp.115-136). Mahwah, NJ: Lawrence Erlbaum Associates.
- García, E. E. (2005) *Teaching and learning in two languages: Bilingualism and schooling in the United States*. New York, NY: Teachers College Press.
- Garcia, P. & Nagy, S.K. (1993) *English as a second language for the workplace: Worker education curriculum guide*. Chicago: Northeastern Illinois University, Chicago Teachers' Center.
- Garet, M.S., Cronen, S., Eaton, M., Kurki, A., Ludwig, M, Jones, W. et al. (2008). *The impact of two professional development interventions on early reading instruction and achievement* (NCEE 2008-4030). Washington, DC: National Center on Education Evaluation and regional Assistance, Institute of Education Services, U.S. Department of Education. Retrieved from <http://ies.ed.gov/ncee/pdf/20084030.pdf>
- Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). *What makes professional development effective? Results from a national sample of teachers*. *American Educational Research Journal*, 38(4), 915–945.
- Gaskins, I.W. (2003). *Taking charge of reader, text, activity, and context variables*. In A.P. Sweet & C.E. Snow, *Rethinking reading comprehension: Solving problems in the teaching of literacy* (pp. 141-165). New York: Guilford.
- Gee, J. P. (2007). *Social linguistics and literacies: Ideology in discourses*. New York: Taylor & Francis.

- Genishi, C. (1988). Young children's oral language development. Urbana, IL: ERIC Clearinghouse on Elementary and Early Childhood Education. (ERIC Document Reproduction Service No. ED301361)
- Gentry, J.R. (1982). An analysis of developmental spelling in GNYS at WRK. *The Reading Teacher*, 36, 192-200.
- Gentry, J.R. (2000). A retrospective on invented spelling and a look forward. *The Reading Teacher*, 54, 318-332.
- Gersten, R. (2007). Math literacy Q & A. In Council of Chief State School Officers Adolescent Literacy Toolkit. Retrieved from http://programs.ccsso.org/projects/adolescent_literacy_toolkit/about_the_toolkit/
- Gersten, R. (2005, June). Issues Related to Reading Instruction for English Language Learners (ELL). Presentation for the Eastern Regional Reading First Technical Assistance Center, Tallahassee, FL.
- Gersten, R., Baker, S.K., Shanahan, T., Linan-Thompson, S., Collins, P., & Scarcella, R. (2007). Effective Literacy and English Language Instruction for English Learners in the Elementary Grades: A Practice Guide (NCEE 2007-4011). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from <http://ies.ed.gov/ncee/wwc/pdf/practiceguides/20074011.pdf>
- Gersten, R. & Geva, E. (2003). Teaching reading to early language learners. *Educational Leadership*, 60, 44-49.
- Gibbons, P. (2002). *Scaffolding language, scaffolding learning: Teaching second language learners in the mainstream classroom*. Portsmouth, NH: Heinemann.
- Gibbons, P. (2009). *English learners, academic literacy, and thinking*. Portsmouth, NH: Heinemann.
- Gillon, G.T. (2003). *Phonological awareness: From research to practice*. New York: Guilford Press.
- Girard, V. & Spycher, P. (2007). Deconstructing language for English language learners. Retrieved from http://www.scoe.org/docs/ah/AH_girard.pdf
- Goldenberg, C. (2008). Teaching ELLs: What the research does and does not say. *American Educator*, 32(2), 8-44. Retrieved from http://www.aft.org/pubs-reports/american_educator/issues/summer08/goldenberg.pdf
- Goldberg, A., Russell, M, & Cook, A. (2003). The effect of computers on student writing: A meta-analysis of studies from 1992 to 2002. Retrieved from <http://ejournals.bc.edu/ojs/index.php/jtla/article/view/1661/1503>
- Goldenberg, C., & Coleman, R. (2010). *Promoting academic achievement among English learners: A guide to the research*. Thousand Oaks, CA: Corwin.
- González, V. (1999). *Language and cognitive development in second language learning: Educational implications for children and adults*. Boston: Allyn and Bacon.
- González, N., Moll, L. C., & Amanti, C. (2005). (Eds.). *Funds of knowledge: Theorizing practices in households, Communities and classrooms*. Mahwah, NJ: Lawrence Erlbaum Associates.

- Goodson, B., Layzer, C., Simon, P., & Dwyer, C. (2009). *Early beginnings: Early literacy knowledge and instruction*. Washington, DC: National Institute for Literacy.
- Goswami, U. (2001). Early phonological development and the acquisition of literacy. In S.B. Neuman & D.K. Dickinson (Eds.), *Handbook of early literacy research* (pp. 111-125). New York: Guilford.
- Goswami, U. (2002). Phonology, reading development, and dyslexia: A cross-linguistic perspective. *Annals of Dyslexia*, 52(1), 139-163.
- Gottlieb, M., & Hamayan, E. (2007). Assessing oral and written language proficiency: A guide for psychologists and teachers. In G. B. Esquivel, E. C. Lopez, & S. G. Nahari (Eds.), *Handbook of multicultural school psychology: An interdisciplinary perspective*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Gottlieb, M., Katz, A., & Ernst-Slavit, G. (2009). Paper to practice: Using the English language proficiency standards in PreK-12 classrooms. Alexandria, VA: Teachers of English to Speakers of Other Languages.
- Grabe, W. (1991). Current developments in second language reading research. *TESOL Quarterly*, 25, 375-406.
- Graham, S. (2005). Strategy instruction and the teaching of writing: A meta-analysis. In C. MacArthur, S. Graham, & J. Fitzpatrick (Eds.), *Handbook of writing research*. New York: Guilford.
- Graham, S., & Harris, K. R., (2000). The Role of Self-Regulation and Transcription Skills in Writing and Writing Development. *Educational Psychologist*, 35(1), 3-12.
- Graham, S., Harris, K. R., & Larsen, L. (2001). Prevention and intervention of writing difficulties for students with learning disabilities. *Learning Disabilities Research and Practice* 17.
- Graham, S., Harris, K.R., & Loynachan, C. (1993). The basic spelling vocabulary list. *Journal of Educational Research*, (86), 363-368.
- Graham, S., & Hebert, M., (2010). *Writing to read: Evidence for how writing can improve reading*. Washington, DC: Alliance for Excellent Education. Retrieved from http://carnegie.org/fileadmin/Media/Publications/WritingtoRead_01.pdf
- Graham, S. & Perrin, D. (2007). *Writing next: Effective strategies to improve writing of adolescents in middle and high schools. A report to Carnegie Corporation of New York*. Washington, DC: Alliance for Excellent Education.
- Grant, S. G., Peterson, P. L., & Shojgreen-Downer, A. (1996). Learning to teach mathematics in the context of systemic reform. *American Educational Research Journal*, 33(2), 509-541.
- Graves, M. F. (2000). A vocabulary program to complement and bolster a middle-grade comprehension program. In B. M. Taylor, M. F. Graves, & P. van den Broek (Eds.), *Reading for meaning: Fostering comprehension in the middle grades* (pp. 116-135). New York: Teachers College Press.
- Graves, M.F. (2006). *The vocabulary book: Learning & instruction*. New York: Teachers College Press.

- Graves, M.F. & Watts-Taffe, S.M. (2002). The place of word consciousness in a research-based vocabulary program. In A.E. Farstrup & S.J. Samuels (Eds.), *What research says about reading instruction*. Newark, ED: International Reading Association.
- Gritter, K. (2011). Promoting Lively Literature Discussion. *The Reading Teacher*, 64(6), pp. 445-449.
- Gunning, T. G. (2003). *Creating literacy instruction for all children* (4th ed.). Boston: Allyn and Bacon.
- Guthrie, J. T., Bennett, L., & McGough, K. (1994). *Concept-oriented reading instruction: An integrated curriculum to develop motivations and strategies for reading*. College Park, MD: National Reading Research Center.
- Guthrie, J.T, and Humenick, N.M. (2004). Motivating students to read: Evidence for classroom practices that increase reading motivation and achievement. In P. McCardle and V. Chhabra (Eds.), *The Voice of Evidence in Reading Research* (pp. 329-354). Baltimore: Brookes.
- Guthrie, J.T. & Wigfield, A. (2000). Engagement and motivation in reading. In M.L. Kamil, et al. (Eds.) *Handbook of reading research*, (pp. 403-422). Mahwah, NJ: Lawrence Erlbaum.
- Guthrie, J. T. & Wigfield, A. (1997). *Reading engagement: Motivating readers through integrated instruction*. Newark, DE: International Reading Association.
- Hall, S. & Moats, L. (1999). *Straight talk about reading: How parents can make a difference during the early years*. Chicago, IL: Contemporary Books.
- Harris, T.L. & Hodges, R.E. (1981). *A Dictionary of Reading and Related Terms*. Newark, NJ: International Reading Association.
- Hart, B. & Risley, T.R. (1995). *Meaningful differences in the everyday experience of young American children*. Baltimore: Brookes.
- Harvey, S. & Goudvis, A. (2000). *Strategies that work: Teaching comprehension to enhance understanding*. Portland, ME: Stenhouse.
- Hayes, D.P. & Ahrens, M.G. (1988). Vocabulary simplification for children: A special case of 'motherese'? *Journal of Child Language*, 15, 395-410.
- Alliance for Excellent Education. (2011). *Engineering solutions to the national crisis in literacy: How to make good on the promise of the Common Core State Standards*. Policy Brief, Retrieved from <http://www.all4ed.org/files/EngineeringSolutionsLiteracy.pdf>
- Heller, R. & Greenleaf, C. (2007). *Literacy instruction in the content areas: Getting to the core of middle and high school improvement*. Washington, DC: Alliance for Excellent Education.
- Hempenstall, K. (2001). Some issues in phonics instruction: Implicit and explicit phonics instruction. Retrieved from <http://www.educationnews.org/articles/some-issues-in-phonics-instruction---implicit-and-explicit-phonics-instruction-.html>
- Hernandez, D. J. (2011). *Double jeopardy: How third-grade reading skills and poverty influence high school graduation*. The Annie E. Casey Foundation. Retrieved from <http://www.aecf.org/>

- Hess, R.D. & Holloway, S. (1984). Family and school as educational institutions. In R.D. Parke (Ed.), *Review of child development research: The family* (pp. 179-222). Chicago: University of Chicago Press.
- Hiebert, E. (2008, October 6). Reading content-area texts: What's involved for English language learners. Paper presented at the CREATE conference, Minneapolis, MN.
- Hillocks, G., Jr. (1986). Research on written composition: New directions for teaching. Urbana, IL: National Conference on Research in English/ERIC Clearinghouse on Reading and Communication Skills.
- Hiskes, D. (1998). Explicit or implicit phonics: Therein lies the rub. Right to Read Report. National Right to Read Foundation. Retrieved from http://www.nrrf.org/essay_Explicit_or_Implicit_Phonics.html
- Honig, B., Diamond, L., & Gutlohn, L. (2000). Teaching reading sourcebook for Kindergarten through eighth grade, CORE. Navato, CA: Arena Press.
- Hoover-Dempsey, K. V., Battiato, A., Walker, J. M. T., Reed, R. P., DeLong, J. M., & Jones, K. P. (2001). Parental involvement in homework. *Educational Psychologist*, 36, 195-210.
- Hynd, C. (1999). Teaching students to think critically using multiple texts in history. *Journal of Adolescent & Adult Literacy*, 42, 428-436.
- Institute of Education Sciences (IES). (2010) *Improving Adolescent Literacy: Effective Classroom and Intervention Practices Improving Reading Comprehension in Kindergarten Through 3rd Grade*. National Center for Education Evaluation and Regional Assistance.
- International Reading Association. (1999). *Adolescent literacy, A position statement*. Newark, DE: Author.
- International Reading Association. (2001). *Family literacy and the school community: A partnership for lifelong learning*. Newark, DE: Author.
- International Reading Association. (2002). *Family-school partnerships: Essential elements of literacy instruction in the United States*. Newark, DE: Author.
- International Reading Association. (2007, May). Self-assessment for middle and high school literacy coaches. Retrieved from <http://www.literacycoachingonline.org/library/resources/self-assessmentformshsliteracycoaches.attachment/attachment/selfassessmentPrint.pdf>
- Irvin, J., Buehl, D., and Klemp, R.M. (2003). *Reading and the high school student: Strategies to enhance literacy*. Boston: Allyn and Bacon.
- Isaacs, M. and Benjamin, M. (1991). *Towards a culturally competent system of care, volume II, programs which utilize culturally competent principles*. Washington, D.C.: Georgetown University Child Development Center, CASSP Technical Assistance Center.
- Jacobs, J. & Yendol-Hoppey, D. (2010). Supervisor transformation within a professional learning community. *Teacher Education Quarterly*, Spring 2010, 97-114.
- Johannessen, Larry R. (2003). Strategies for initiating authentic discussion. *English Journal*, v93 n1 p73-79 Sep 2003.

- Johnson, C. J., & Anglin, J. M. (1995). Qualitative developments in the content and form of children's definitions. *Journal of Speech and Hearing Research*, *38*, 612-629.
- Johnson, D. (1999). Critical issues: Addressing the literacy needs of emergent and early readers. Retrieved from <http://www.eric.ed.gov:80/PDFS/ED480227.pdf>
- Jolly, Hayden B. (1981). Teaching basic function words. *The Reading Teacher*, November.
- Joshi, R.M., Treiman, R., Carreker, S., & Moats, L.C. (2008). How words cast their spell: Spelling is an integral part of learning the language, not a matter of memorization. *American Educator*, Winter, 6-8, 10-13, 16, 42.
- Juel, C. (1988). Learning to read and write: A longitudinal study of 54 children from first to fourth grades. *Journal of Educational Psychology*, *80*(4), 437-447.
- Juel, C. (1991). Beginning reading. In R. Barr, M.L. Kamil, P.B. Mosenthal, & P.D. Pearson (Eds.) *Handbook of Reading Research* (Vol. 2, pp. 759-788). White Plains, NY: Longman.
- Kadlic, M. & Lesiak M. (February 2003). Early reading and scientifically-based research: Implications for practice in early childhood education programs. National Association of State Title I Directors Conference, Office of Student Achievement & School Accountability: U.S. Department of Education.
- Kamberelis, G. (1999). Genre development and learning: Children writing stories, science reports and poems. *Research in the Teaching of English*, *33*(4), 403-460.
- Kame'enui, E., Carnine, D., Dixon, R., Simmons, D., & Coyne, M. (2002). *Effective teaching strategies that accommodate diverse learners* (2nd ed.). Upper Saddle River, NJ: Merrill/Prentice Hall.
- Kame'enui, E. and Simmons, D.C. (2000). Planning and evaluation tool for effective school-wide reading programs. Presentation at the Institute for the Development of Educational Achievement, College of Education, University of Oregon.
- Kamil, M.L. (2003). *Adolescents and literacy: Reading for the 21st century*. Washington, DC: Alliance for Excellent Education.
- Kamil, M.L., Borman, G.D., Dole, J., Kral, C.C., Salinger, T., & Torgesen, J. (2008). *Improving adolescent literacy: Effective classroom and intervention practices: A Practice Guide* (NCEE #2008-4027). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from <http://ies.ed.gov/ncee/wwc/>
- Kane, T. J., Rockoff, J. E., & Staiger, D. O. (2006). What does certification tell us about teacher effectiveness? Evidence from New York City (NBER Working Paper No. 12155). Cambridge, MA: National Bureau of Economic Research.
- Katzir, K., Youngsuk, K., Wolf, M., O'Brien, B., Kennedy, B., Lovett, M., & Morris, R. (2006). Reading fluency: The whole is more than the parts. *Annals of Dyslexia*, *56*(1), 51-82.
- Keene, E.O. & Zimmermann, S. (1997). *Mosaic of thought: Teaching comprehension in a reader's workshop*. Portsmouth, NH: Heinemann.

- KewalRamani, A., Gilbertson, L., Fox, M., and Provasnik, S. (2007). Status and trends in the education of racial and ethnic minorities (NCES 2007-039). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC. Retrieved from <http://steinhardt.nyu.edu/metrocenter.olde/programs/TACD/documents/StatusandTrends.pdf>
- Kise, J. (2006). Differentiated coaching: A framework for helping teachers change. Thousand Oaks, CA: Corwin Press.
- Kist, W. (2005). New literacies in action: Teaching and learning in multiple media. New York: Teachers College Press.
- Klein, P. (2008). What works? Research into practice: Content literacy (Research Monograph #13). Retrieved from <http://www.edu.gov.on.ca/eng/literacynumeracy/inspire/research/contentLiteracy.pdf>
- Klotz, M.B., & Canter, A. (2006). Response to intervention: A primer for parents. National Association of School Psychologists Resources. Retrieved from <http://www.nasponline.org/resources/factsheets/rtiprimer.aspx>
- Kral, C. (2007). Principal support for literacy coaches. Literacy Coaching Clearinghouse Brief. Retrieved from <http://www.literacycoachingonline.org/briefs/PrincipalSupportFinal3-22-07.pdf>
- Kreider, H., Caspa, M., Kennedy, S. & Weiss, H. (2007). Family involvement in middle and high school students' education, Spring 2007 (#3). Cambridge, MA: Harvard Family Research Project. Retrieved from <http://www.hfrp.org/publications-resources/publications-series/family-involvement-makes-a-difference/family-involvement-in-middle-and-high-school-students-education>
- Kuhn, M.R. & Rasinski, T. (2007) Best practices in fluency instruction. In L.B. Gambrell, L.M. Morrow, & M. Pressley (Eds.) Best Practices in Literacy Instruction (3rd ed., pp. 204-219). New York: Guilford.
- Kuhn, M., and Stahl, S. (1998). Teaching children to learn word meaning from context: A synthesis and some questions. *Journal of Literacy Research*, 30, 119-148.
- Kuhn, M.R. & Stahl, S.A. (2003). Fluency: A review of developmental and remedial practices. *Journal of Educational Psychology*, 95(1), 3-21.
- Kupcha, J. (2010). Early language and literacy development. Washington, DC: Zero to Three. Retrieved from <http://www.zerotothree.org/child-development/early-language-literacy/earlyliteracy2pagehandout.pdf>
- Kurns, S. (2009). Moving RtI into schools: Examples from central Iowa (PowerPoint presentation). Retrieved from: <http://ctl.uoregon.edu/pd/cf09/presentation/Moving%20RtI%20Into%20Schools%20and%20Infrastructure%20Building>
- Labbo, L.D. (2004). Author's computer chair. *The Reading Teacher*, 57(7), 688-691.
- L'Allier, S., Elish-Piper, L., & Bean, R.M. (2010). What matters for elementary literacy coaching? Guiding principles for instructional improvement and student achievement. *The Reading Teacher*, 63(7), 544-554.

- Langer, J. (1990). The process of understanding: Reading for literary and informative purposes. *Research in the Teaching of English*, 24, 229-260.
- Langer, J.A. (2001). Beating the odds: Teaching middle and high school students to read and write well. *American Educational Research Journal*, 38(4), 837-880.
- Lapp, D., Flood, J., & Ranck-Buhr, W. (1995). Using multiple text formats to explore scientific phenomena in middle school classrooms. *Reading and Writing Quarterly: Overcoming Learning Difficulties*, 11, 173-186.
- Learning First Alliance. (2000). *Every child reading: A professional development guide*. Washington, DC: Author.
- Lee, C.D. & Spratley, A. (2010). *Reading in the disciplines: The challenges of adolescent literacy*. New York, NY: Carnegie Corporation of New York.
- Lehr, F., Osborn, J., & Hiebert, E.H. (2004). *Research-based practices in early reading series" A focus on vocabulary*. Honolulu, HI: Pacific Resources for Education and Learning.
- Leipzig, D.H. (2001). What is reading? Retrieved from <http://www.readingrockets.org/article/352>
- Lesaux, N. (2008). Turn up the volume on academic talk. *Best Practice and Research Base*. National Geographic Reach. Retrieved from <http://www.ngsp.com/Resources/ProfessionalDevelopment/ProfessionalLearninginAction/tabid/1568/Default.aspx>
- Lesiak, J. L. (1997). Research based answers to question about emergent literacy in kindergarten. *Psychology in the Schools*, 34(2), 143-160.
- Leu, D.J, Kinzer, C.K., Coiro, J.L. & Cammack, D.W. (2004). Toward a theory of new literacies emerging from the internet and other information and communication technologies. In R.B. Ruddell & N.J. Unrau (Eds.) *Theoretical models and processes of reading* (5th ed., pp. 1570-1613). Newark, DE: International Reading Association.
- Lewis, A. (2002, September 10-11). Study examines successful and unsuccessful collaborative learning. Paper presented at the 2002 CREST Annual Conference, Los Angeles.
- Lieberman, I.Y., Shankweiler, D., & Liberman, A.M. (1989). The alphabetic principle and learning to read. In D. Shankweiler and I.Y. Liberman (Eds.), *Phonology and reading disability: Solving the reading puzzle*. Ann Arbor: University of Michigan Press.
- Lindemann, E. (1995). *A rhetoric for writing teachers*, 3rd edition. New York: Oxford University Press.
- Literacy Coaching Clearinghouse (2008). Role of a literacy coach. Retrieved from http://www.literacycoachingonline.org/aboutus/literacy_coach.html
- Lockwood, J. R., McCombs, J. S., & Marsh, J. (2010). Linking reading coaches and student achievement: Evidence from Florida middle schools. *Educational Evaluation & Policy Analysis*, 32(3), 389-406.
- Lundberg, I., Frost, J., & Petersen, O. (1988). Effects of an extensive program for stimulating phonological awareness in preschool children. *Reading Research Quarterly*, 23, 263-284.

- Lutz, E. (1986). Invented spelling and spelling development. Retrieved from <http://www.readingrockets.org/article/267/>
- Lyon, G. R. (1995). Toward a definition of dyslexia. *Annals of Dyslexia* 45.
- Lyon, G.R. & Fletcher, J.M. (2001). Early identification, prevention, and early identification for children at-risk for reading failure. Retrieved from http://www.cdl.org/resource-library/articles/early_id.php?type=subject&id=10
- Lyons, C.A. (2003). *Teaching struggling readers: How to use brain based research to maximize learning*. Portsmouth, NH: Heinemann.
- Malloy, J.A. & Gambrell, L.B. (2008). New insights on motivation in the literacy classrooms. In C.C. Block & S.R. Parris *Comprehension instruction: Research-based best practices* (2nd ed., pp. 226-238). New York: Guilford.
- Manning, M. (2002). Self-monitoring reading. *Teaching Pre K-8*, January.
- Marchant, G. J., Paulson, S. E., & Rothlisberg, B. A. (2001). Relations of middle school students' perceptions of family and school contexts with academic achievement. *Psychology in the Schools*, 38, 505-519.
- Marcon, R. (1999). Positive relationships between parent school involvement and public school inner-city preschoolers' development and academic performance. *School Psychology Review*, 28(3), 395-412.
- Marzano, R. (1992). *A different kind of classroom: Teaching with dimensions of learning*. Alexandria, VA: Association of Supervision and Curriculum Development.
- Marzano, R. J., & Pickering, D. J. (2005). *Building academic vocabulary*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Mathes, P. (2011). *The Case for Early Intervention in Reading*. Policy Brief, Alliance for Excellent Education. Retrieved from http://www.mheresearch.com/assets/products/6512bd43d9caa6e0/reading_early_intervention_research_base.pdf
- Mazzoni, S.A. & Gambrell, L.B. (2003). Principles of best practice: Finding the common ground. In L.M. Morrow, L.B. Gambrell, & M. Pressley (Eds.), *Best practices in literacy instruction* (2nd ed., pp. 9-22). New York: Guilford.
- McCabe, P., & Howard, M. (2001). Enhancing the self-efficacy of struggling readers. *The Clearing House* 75 (1).
- McKenna, M.C., Labbo, L.D, Reinking, D. & Zucker, T.A. (2007). Effective uses of technology in literacy instruction. In L.B. Gambrell, L.M. Morrow & M. Pressley (Eds.) *Best Practices in Literacy Instruction* (3rd edition, pp. 344-372). New York: Guilford.
- McBride-Chang, C. (1999) Reinterpreting the development of reading skills. *Reading Research Quarterly*, 45(2), 285-308.

- McDonough, J., & Shaw, C., (1993/1994). Evaluating ELT materials. In *Materials and methods in ELT* (63–80). Cambridge, MA: Blackwell.
- McGill-Franzen, A., Allington, R., Yokoi, L., & Brook, G. (1999). Putting books in the room seems necessary but not sufficient. *Journal of Educational Research*, 93, 67-74.
- McKenna, M.C. & Stahl, S.A. (2003). *Assessment for reading instruction*. New York: Guilford.
- McKeown, M., Beck, I., Omanson, R.C., & Pople, M.T. (1985). Some effects of the nature and frequency of vocabulary instruction in the knowledge and use of words. *Reading Research Quarterly*, 20, 522-535.
- McKeown, M.G. & Beck, I.L. (2003). Direct and rich vocabulary instruction. In J.F. Baumann & E.B. Kame'enui (Eds.), *Vocabulary Instruction: Research to practice* (pp. 13-27). New York: Guilford.
- McREL (Ed.) (September, 1999). *Including Culturally and Linguistically Diverse Students in Standards-Based Reform: A Report on McREL's Diversity Roundtable I*. Denver: McREL (Mid-continent Research for Education and Learning).
- Medo, M. & Ryder, R. (1993). The effects of vocabulary instruction on readers' ability to make casual connections. *Reading Research and Instruction*, 33(2), 119-134.
- Meltzer, J. & Hamann, E. (2005). Meeting the literacy development needs of adolescent English language learners through content-area learning (Part two: Focus on classroom teaching and learning strategies). Providence, RI: Education Alliance at Brown University. Retrieved from http://www.alliance.brown.edu/pubs/adlit/adell_litdv1.pdf
- Metsala, J. & Walley, A. (1998). Spoken vocabulary growth and the segmental restructuring of lexical representations: Precursors to phonemic awareness and early reading ability. In J. Metsala & L. Ehri (Eds.), *Word recognition in beginning literacy* (pp. 89-120). Mahwah, NJ: Lawrence Erlbaum Associates.
- Meyer, A. & Rose, D.H. (1999a). *Developing reading recognition*. In A. Meyer & D.H. Rose (Eds.), *Learning to read in the computer age*. Cambridge, MA: Brookline Books.
- Meyer, A. & Rose, D.H. (1999b). *Learning to read in the computer age*. Cambridge, MA: Brookline Books.
- Meyer, L., Wardrop, J., Stahl, S., & Linn, R. (1994). Effects of reading storybooks aloud to children. *Journal of Educational Research*, 88, 69–85.
- Mirel, J. (2011). Bridging the "widest street in the world: Reflections on the history of teacher education. *American Educator*, 35(2), 6-12.
- Moats, L. (2004). Efficacy of a structured, systematic language curriculum for adolescent poor readers. *Reading & Writing Quarterly*, 20(2), 145-159.
- Moats, L. (1998). Teaching decoding. *American Educator*, Spring/Summer, 42-49, 95-96.

- Moats, L.C. (1999). Teaching reading IS rocket science: What expert teachers of reading should know and be able to do. Washington, DC: American Federation of Teachers. Retrieved from <http://www.aft.org/pdfs/teachers/rocketscience0304.pdf>
- Moats, L.C. (2000). Speech to print: Language essentials for teachers. Baltimore, MD: Paul H. Brookes Publishing.
- Moats, L.C. (2001). When older students can't read. *Educational Leadership* 58 (6), 36-40.
- Moats, L. C. (2003). The necessity of the alphabetic principle to phonemic awareness instruction. *Reading and Writing: An Interdisciplinary Journal* 16 (4).
- Moats, L.C. (2004). Science, language, and imagination in the professional development of reading teachers. In P. McCardle & V. Chhabra (Eds.), *The Voice of Evidence in Reading Research* (pp. 269-287). Baltimore: Brookes.
- Moats, L.C. (2005). How spelling supports reading and why it is more regular and predictable than you may think. *American Educator*, Winter, 12-16, 20-22, 42-43.
- Mohan, B. (1986). *Language and content*. Reading, MA: Addison-Wesley.
- Moje, E.B. (2007). Science literacy Q & A. In Council of Chief State School Officers Adolescent Literacy Toolkit. Retrieved from http://programs.ccsso.org/projects/adolescent_literacy_toolkit/about_the_toolkit/
- Moje, E.B. & Hinchman, K. (2004). Culturally responsive practices for youth literacy learning. In T.L. Jetton & J.A. Doles (Eds.), *Adolescent literacy research and practice* (pp. 321-350). New York: Guilford.
- Moje, E.B. & Speyer, J. (2008). The reality of challenging texts in high school science and social studies: How teachers can mediate comprehension. In K.A. Hinchman & H. Thomas (Eds.), *Best practices in adolescent literacy* (pp. 185-210). New York: Guilford.
- Moll, L.C., Amanti, C., Neff, D., & Gonzalez, N. (1992). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. *Theory into Practice* 31, 132-141.
- Moorman, G. & Horton, J. (2007). Millennials and how to teach them. In J. Lewis & G. Moorman (Eds.), *Adolescent literacy instruction: policies and promising practices* (pp. 263-285). Newark, DE: International Reading Association.
- Moss, B. (2005). Making a case and a place for effective content area literacy instruction in the elementary grades. *The Reading Teacher*, 59(1), 46-56.
- Moughamian, A. C., Rivera, M. O., & Francis, D. J. (2009). *Instructional models and strategies for teaching English language learners*. Portsmouth, NH: RMC Research Corporation, Center on Instruction.
- Murphy, J. (2004). *Leadership for literacy: Research-based practice, PreK-3*. Thousand Oaks, CA: Corwin.
- Murray, B. (2006). Using decodable text. Retrieved from http://www.auburn.edu/academic/education/reading_genie/decodable.html

- Nagy, W. E. (1988). Teaching vocabulary to improve reading comprehension. Newark, DE: International Reading Association.
- Nagy, W.E. (2005). Why vocabulary instruction needs to be long-term and comprehensive. In E.H. Hiebert & M.L. Kamil (Eds.) Teaching and learning vocabulary: Bringing research to practice (pp. 27-44). Mahwah, NJ: Lawrence Erlbaum Associates.
- Nagy, W.E. & Anderson, R.C. (1984). How many words are there in printed school English? Reading Research Quarterly, 19, 304-330.
- Nagy, W.E. & Scott, J. (2000). Vocabulary processes. In M. Kamil, P. Mosenthal, P.D. Pearson, & R. Barr (Eds.), Handbook of Reading Research (Vol. 3, pp. 269-284). Mahwah, NJ: Lawrence Erlbaum Associates.
- National Assessment of Educational Progress (NAEP). (2009). The NAEP achievement levels by grade. IES National Center for Education Statistics. Retrieved from <http://nces.ed.gov/nationsreportcard/reading/achieveall.asp>
- National Association for the Education of Young Children & International Reading Association.(1998). Learning to read and write: Developmentally appropriate practices for young children. Young Children, 53(4), 30-46. Retrieved from <http://www.naeyc.org/files/naeyc/file/positions/PSREAD98.PDF>
- National Capital Language Resource Center (NCLRC). (2007). The essentials of language teaching. Retrieved from <http://www.nclrc.org/essentials/reading/stratread.htm>
- National Center on Education and the Economy (NCEE) and the University of Pittsburgh. (2001). Speaking & listening for preschool through third grade: New standards. Washington, DC: Author.
- National Center for Education Statistics (NCES). 2004. The condition of education. Washington, DC: Government Printing Office. Retrieved from <http://nces.ed.gov/pubs2004/2004076.pdf>
- National Commission on Writing in America's Schools and Colleges. (2003). The Neglected "R": The need for a writing revolution. New York: College Entrance Examination Board. Retrieved from <http://www.vantagelearning.com/docs/myaccess/neglectedr.pdf>
- Archibald, S., Coggshall, J. G., & Goe, L. (2011). High-Quality Professional Development for All Teachers: Effectively Allocating Resources. National Comprehensive Center for Teacher Quality. Retrieved August 2011 from <http://www.tqsource.org/publications/HighQualityProfessionalDevelopment.pdf>.
- National Council of Teachers of English. (2007). 21st century literacies: A policy research brief. Urbana, IL: Author. Retrieved from <http://www.ncte.org/library/NCTEFiles/Resources/PolicyResearch/21stCenturyResearchBrief.pdf>
- National Council of Teachers of English. (2009). Writing assessment: A position statement. Urbana, IL: Author. Retrieved from: <http://www.ncte.org/cccc/resources/positions/writingassessment>
- National Early Literacy Panel. (2008). Developing early literacy: A scientific synthesis of early literacy development. Washington, DC: National Institute for Literacy.

- National Governors Association Center for Best Practices. (2005). Reading to achieve: A governor's guide to adolescent literacy. Washington, DC: Author.
- National Institute for Literacy, (2009). Early beginnings: Early literacy knowledge and instruction. Washington, DC: Author.
- National Institute for Literacy (NIFL), National Institute for Child Health and Human Development, and United States Department of Education. (2007). What content-area teachers should know about adolescent literacy. Washington, DC: Author.
- National Institute of Child Health and Human Development (NICHD). (2000). Report of the National Reading Panel. Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction: Reports of the sub-groups (NIH publication No. 00-4754). Washington, DC: U.S. Government Printing Office.
- National Institute on Deafness and Other Communication Disorders. (2000). Speech and language development milestones. Retrieved from <http://www.nidcd.nih.gov/health/voice/pages/speechandlanguage.aspx>
- National Parent Teacher Association. (2004). National Standards for Parent/Family Involvement Programs. Alexandria, VA: Author.
- Neufeld, B., & Roper, D. (2003). Coaching: A strategy for developing instructional capacity—Promises, and practicalities. Washington, DC: The Aspen Institute and Providence, RI: Annenberg Institute for School Reform. Retrieved from <http://annenberginstitute.org/pdf/Coaching.pdf>
- Neuman, S.B. (1998). How can we enable all children to achieve? In S. B. Neuman & K. Roskos (Eds.), *Children achieving: Best practices in early literacy* (2nd ed., pp. 18-32). Newark, DE: International Reading Association.
- Neuman, S.B. (1999). Books that make a difference: A study of access to literacy. *Reading Research Quarterly*, 34, 286-301.
- Neuman, S.B. & Cunningham, L. (2009). The impact of a practice-based approach to professional development: Coaching makes a difference. *American Educational Research Journal*, 46(2), 532-546.
- Neuman, S.B. & Roskos, K. (2005). Whatever happened to developmentally appropriate practice in early literacy? [Electronic version]. *Beyond the Journal: Young Children on the Web*. Retrieved from <https://www.naeyc.org/files/naeyc/file/Publications/ArticleExamples/02Neuman.pdf>
- Ng, M.M., Guthrie, J.T., VanMeter, P., McCann, A., & Alao, S. (1998). How do classroom characteristics influence intrinsic motivations for literacy? *Reading Psychology*, 19(4), 319-398.
- Nieto, S. (2008). *Affirming diversity: The sociopolitical context of multicultural education* (5th ed.). New York: Allyn & Bacon.
- Nye, B., Konstantopoulos, S., & Hedges, L. V. (2004). How large are teacher effects? *Educational Evaluation & Policy Analysis*, 26(3), 237-257.
- Oakhill, J. & Cain, K. (2007). Introduction to comprehension development. In K. Cane & J. Oakhill (Eds.), *Children's Comprehension Problems in Oral and Written Language* (pp. 3-40). New York: Guilford.

- O'Brien, D. G., Stewart, R. A., & Moje, E. B. (1995). Why content literacy is difficult to infuse into the secondary school: Complexities of curriculum, pedagogy, and school culture. *Reading Research Quarterly*, 30(3), 442-465.
- Ogle, D. & Lang, L. (2007). Best practices in adolescent literacy instruction. In L.B. Gambrell, L.M. Morrow, & M. Pressley (Eds.), *Best practices in literacy instruction* (3rd. ed., pp. 127-156). New York: Guilford.
- Olinghouse, N.G (2009). Writing assessment for struggling learners. *Perspectives in Language and Literacy*, Summer, 15-18.
- Olive, T. & Kellogg, R. T. (2002). Concurrent activation of high- and low-level production processes in written composition. *Memory & Cognition*, 30 (4), 594-600.
- O'Malley, M. & Chamot, A. (1990). *Learning strategies in second language acquisition*. London: Cambridge University Press.
- Ovando, C.J., Collier, V. P., Combs, M.C., & Cummins, J. (2002). *Bilingual and ESL classrooms: Teaching in multicultural contexts*. New York: McGraw-Hill.
- Pajares, F. and Valiante, G. (2008). Self-efficacy, beliefs, and motivation in writing development. In C. MacArthur, S. Graham, & J. Fitzgerald (Eds.) *Handbook of Writing Research* (pp. 158-170).
- Paris, S., Lipson, M.Y., & Wixson, K.K. (1983). Becoming a strategic reader. *Contemporary Educational Psychology*, 8, 293-316.
- Paris, S., Lipson, M.Y., & Wixson, K.K. (1994). Becoming a strategic reader. In R.B. Ruddell, M.R. Ruddell, & H. Singer (Eds.), *Theoretical models and processes of reading* (pp. 788-810). Newark, DE: International Reading Association.
- Paris, S.G., Carpenter, R.D., Paris, A.H., & Hamilton, E.E. (2005). Spurious and genuine correlate of children's reading comprehension. In S.G. Paris & S.A. Stahl (Eds.) *Children's reading comprehension and assessment* (pp. 131-160). Mahwah, NJ: Lawrence Erlbaum Associates.
- Paris, S.G., Cross, D.R. & Lipson, M.Y. (1984). Informed strategies for learning: A program to improve children's reading awareness and comprehension. *Journal of Educational Psychology*, 76, 1239-1252.
- Paris, S. G., Wasik, B. A., & Turner, J. C. (1991). The development of strategic readers. In R. R. Barr, M. L. Kamil, P. Mosenthal, & P. D. Pearson (Eds.), *The handbook of reading research*(Vol. 2, pp. 609-640). New York: Longman.
- Partnership for Reading. (2003). *Reading: Putting it first. Getting it right*. Washington, DC: Author.
- Payne, R. K. (2003). *A framework for understanding poverty*. Highlands, TX: aha! Process, Inc.
- Pearson, P.D. & Duke, N.K. (2001). Comprehension instruction in the primary grades. In C.C. Block and M. Pressley (Eds.), *Comprehension Instruction: Research-based Best Practices* (pp. 247-258). New York: Guilford.
- Pearson, P.D. & Fielding, L. (1982) Listening comprehension. *Language Arts*, 59, 617-629.

- Pearson, P. D., Hiebert, E. H., & Kamil, M. L. (2007). Vocabulary assessment: What we know and what we need to learn. *Reading Research Quarterly* 42 (2).
- Pearson, P.D., Raphael, T.E., Benson, V.L., & Madda, C.L. (2007) Balance in comprehensive literacy instruction: Then and now. In L.B. Gambrell, L.M Morrow, & M. Pressley (Eds.), *Best practices in literacy instruction* (3rd ed., pp. 30-54). New York: Guilford.
- Pearson, P.D., Roehler, L.R., Dole, J.A., & Duffy, G.C. (1992). Developing expertise in reading comprehension. In S.J. Samuels & A.E. Farstrup (Eds.), *What research has to say about reading instruction* (2nd Ed., pp. 147-199). Newark, DE: International Reading Association.
- Penno, J.F., Wilkinson, I.A.G., & Moore, D.W. (2002). Vocabulary acquisition from teacher explanation and repeated listening to stories: Do they overcome the Matthew effect? *Journal of Educational Psychology*, 94(1), 23-33.
- Pensky, M. (2001). Digital native, digital immigrant. Retrieved from <http://www.marcpensky.com/writing/pensky%20-%20digital%20natives,%20digital%20immigrants%20-%20part1.pdf>
- Peregoy, S.F. & Boyle, O.F. (2001). *Reading, writing, and learning in ESL: A resource book for K-12 teachers* (3rd ed.). New York: Longman.
- Peregoy, S.F. & Boyle, O.F. (2009). *Reading, writing, and learning in ESL: A resource book for K-12 teachers* (5th ed.). Boston: Pearson.
- Pérez, B. & Torres-Guzmán, M.E. (2002). *Learning in two worlds: An integrated Spanish/English bi-literacy approach* (3rd ed.). Boston: Allyn & Bacon.
- Perie, M., Marion, S. & Gong, B. (2009). Moving toward a comprehensive assessment system: A framework for considering interim assessments. *Educational Measurement: Issues and Practice*, 58(3), 5-13.
- Peterson, C., Caverly, D., Nicholson, S., O'Neal, S., Cusenbary, S., & Southwest Texas State University. (2003). *Building reading proficiency at the secondary level: A guide to resources*. Austin, TX: Southwest Educational Development Laboratory.
- Peterson, S. (2008) Influence of gender on writing development. In C. MacArthur, S. Graham, & J. Fitzgerald (Eds.) *Handbook of Writing Research* (pp. 311-323). New York: Guilford.
- Poglinco, S., Bach, A., Hovde, K., Rosenblum, S., Saunders, M., & Supovitz, J. (2003). *The heart of the matter: The coaching model in America's Choice Schools*. Philadelphia: Consortium for Policy Research in Education, University of Pennsylvania. Retrieved from http://www.cpre.org/images/stories/cpre_pdfs/AC-06.pdf
- Pressley, M. (1998). *Reading instruction that works: The case for balanced teaching*. New York: Guilford.
- Pressley, M. (2000). Comprehension instruction: What makes sense now, what might make sense soon. In M.L. Kamil, P.B. Mosenthal, P.D. Pearson, & R. Barr (Eds.), *Handbook of Reading Research: Volume III*. Mahwah, NJ: Lawrence Erlbaum.
- Pressley, M. (2000). What should comprehension instruction be the instruction of? In M. Kamil, P. Mosenthal, P.D. Pearson, & R. Barr (Eds.) *Handbook of Reading Research* (Vol. 3, pp. 545-562). Mahwah, NJ: Lawrence Erlbaum Associates.

- Pressley, M. (2006). *Reading instruction that works: The case for balanced teaching* (3rd ed.). New York: Guilford.
- Pressley, M. & Afflerback, P. (1995). *Verbal protocols of reading: The nature of constructively responsive reading*. Hillsdale, NJ: Lawrence Erlbaum, 1995.
- Pressley, M., Gaskins, I.W., & Fingeret, L. (2006) Instruction and development of reading fluency in struggling readers. In S.J. Samuels & A.E. Farstrup (Eds.), *What research has to say about fluency instruction* (pp. 47-69). Newark, DE: International Reading Association.
- Pressley, M., Johnson, C.J., Symons, S., McGoldrick, J.A., & Kurita, J.A. (1989). Strategies that improve children's memory and comprehension of what is read. *Elementary School Journal*, 89, 3-32.
- Pressley, M., Wharton-McDonald, R., Allington, R., Block, C., Morrow, L., Tracey, D., Baker, K., Brooks, G., Cronin, J., Nelson, E., & Woo, D. (2001). A study of effective first-grade literacy instruction. *Scientific Studies of Reading*, 5, 35-58.
- Pressley, M. & Woloshyn, V. (1995). *Cognitive strategy instruction that really improves children's academic performance*. Cambridge, MA: Brookline Press.
- Pritchard, R., and Honeycutt, R. (2007). Best practices in implementing a process approach to teaching writing. In S. Graham, C. MacArthur, & J. Fitzgerald (Eds.) *Best Practices in Writing Instruction* (pp. 28-49). New York: Guilford.
- Purcell-Gates, V. (1996). Stories, coupons, and the "TV Guide": Relationships between home literacy experiences and emergent literacy knowledge. *Reading Research Quarterly*, 31(4), 406-428.
- Rasinski, T.V. (2004). *Assessing reading fluency*. Honolulu, HI: Pacific Resources for Education and Learning. Retrieved from <http://www.lewistonschools.net/departments/curriculum/ELA/AssessingFluency.Rasinski.pdf>
- Rasinski, T.V. (2006) Fluency: An oft-neglected goal of the reading program. In C. Cummins (Ed.), *Understanding and implementing Reading First initiatives: The changing role of administrators* (pp. 60-71). Newark, DE: The International Reading Association.
- Rasinski, T. V., & Hoffman, J. V. (2003). Theory and research into practice: Oral reading in the school literacy curriculum. *Reading Research Quarterly*, 38, 510-522.
- Rasinski, T. V., Padak, N. D., McKeon, C. A, Wilcong, L. G., Friedauer, J. A., & Heim, P. (2005). Is reading fluency a key for successful high school reading? *Journal of Adolescent and Adult Literacy* 49(1), 22-27.
- Rath, L. K. (2002). Get wild about reading: Using "Between the lions" to support early literacy. *Young Children*, 57(2), 80-87.
- Rathvon, N. (2004). *Early reading assessment: A practitioner's handbook*. New York: Guilford.
- Reed, J.H., Schallert, D.L., Beth, A.D., & Woodruff, A.L. (2004). Motivated reader, engaged writer: The role of motivation in the literate acts of adolescence. In T.L. Jettson & J.A. Dole (Eds.), *Adolescent literacy research and practice* (pp. 251-282). New York: Guilford.
- Resnick, L.B., & Snow, C.E. (2009). *Speaking and listening for preschool through third grade*. Newark, DE: National Center on Education and the Economy and University of Pittsburgh.

- Resnick, L., Hall, M.W., & Fellows of the Institute for Learning. (2001). The principles of learning: Study tools for educators [CD-ROM]. Pittsburg, PA: Institute for Learning, Learning Research and Development Center, University of Pittsburgh.
- Rhode Island Board of Regents. (2009). Basic education program regulations. Providence, RI: Rhode Island Department of Elementary and Secondary Education.
- Rhode Island Department of Education. (RIDE). (2007 September). The Rhode Island Professional Teaching Standards. Providence, RI: Author. Retrieved from http://www.ride.ri.gov/EducatorQuality/DOCS/General_Documents/PDF/RIPTS%20Final%2008-2008.pdf
- Rhode Island Department of Elementary and Secondary Education (RIDE). (2011). Secondary Regulations Guidance. Retrieved August 2011 from www.ride.ri.gov/HighSchoolReform/docs/2011/Guidance_Final_2011.doc
- Rhode Island Department of Education (RIDE). (2010). Rhode Island Criteria and Guidance for the Identification of Specific Learning Disabilities. Retrieved from http://www.ride.ri.gov/Special_Populations/Programs_Services/SLD%20Guidance%20-%20web.pdf
- Rhode Island Department of Elementary and Secondary Education (RIDE). (1996). Literacy for ALL students: The Rhode Island English language arts framework. Providence, RI: Author.
- Rhode Island Department of Elementary and Secondary Education (RIDE). (2002 January). Rhode Island Mentor Program Standards. Providence, RI: Author. Retrieved from <http://www.ride.ri.gov/EducatorQuality/DOCS/mentoring/Rhode%20Island%20Mentor%20Program%20Standards%20%20January-02%20x.pdf>
- Rhode Island Department of Elementary and Secondary Education (RIDE). (2003). Initial guidance for the literacy component of the regulations of the Board of Regents for Elementary and Secondary Education regarding public high schools and ensuring literacy for students entering high school. Retrieved from http://www.ride.ri.gov/HighSchoolReform/DOCS/PDFs/HIGH%20school%20reform/Section%2004_Literacy%20Guidance%204.pdf
- Rhode Island Department of Elementary and Secondary Education (RIDE). (2003). Literacy Section 4.0 of the Regulations Regarding Public High Schools and Ensuring Literacy for All Students Entering High School. Providence, RI: Author.
- Rhode Island Department of Elementary and Secondary Education. (2013). Personal Literacy Plan Guidelines (3rd ed.). Providence: RI: Author.
- Rhode Island Department of Elementary and Secondary Education (RIDE). (2007). Reading Grade Level and Span Expectations K-12. Providence, RI: Author.
- Rhode Island Department of Elementary and Secondary Education (RIDE). (2008 December). Standards for Educational Leadership in Rhode Island. Providence, RI: Author. Retrieved from http://www.ride.ri.gov/EducatorQuality/DOCS/General_Documents/PDF/Leadership%20Standards%201.29.2009.pdf
- Rhode Island Department of Elementary and Secondary Education (RIDE). (2011, May). Secondary Regulations Guidance. Providence, RI: Author.

- Rhode Island Department of Elementary and Secondary Education (RIDE). (2011, March). Regulations of the Board of Regents for Elementary and Secondary Education K-12 Literacy, Restructuring of the Learning environment at the middle and high school levels, and proficiency based graduation requirements (PBGR) at High Schools. Providence, RI: Author.
- Rhode Island Department of Elementary and Secondary Education (RIDE). (2005). Rhode Island PreK-12 Literacy Policy. Providence, RI: Author.
- Rhode Island Department of Elementary and Secondary Education (RIDE). (2004). Rhode Island State Assessment Program 2004, Writing Assessment Guide to Interpretation. Providence, RI: Author.
- Rhode Island Department of Elementary and Secondary Education (RIDE). (2009). Transforming Education in Rhode Island: Strategic Plan 2010-2015. Providence, RI: Author.
- Rhode Island Department of Elementary and Secondary Education (RIDE). (2005). Writing/Oral Communication Grade Level and Span Expectations K-12. Providence, RI: Author.
- Rhode Island Department of Human Services and the Rhode Island Department of Elementary and Secondary Education (RIDE). (2003). Rhode Island Early Learning Standards. Providence, RI: Authors.
- "Rhode Island Literacy and Dropout Prevention Act." R.I.G.L. 16-67-1 et seq.
- Rhodes , L. K., & Shankin, N. L. (1993). *Windows into Literacy: Assessing learners K-8*. Portsmouth, NH: Heinemann.
- Rose, David H., & Meyer, Anne (2002). *Teaching Every Student in the Digital Age: Universal Design for Learning*, Chapter 4: What is Universal Design for Learning? ASCD. Retrieved from http://www.cast.org/teachingeverystudent/ideas/tes/chapter4_1.cfm
- Rosenblatt, L.M. (1991). Literature—S.O.S.! *Language Arts*, 68, 444-448.
- Rosenblatt, L.M. (2005). *Making meaning with texts: Selected essays*. Portsmouth, NH: Heinemann.
- Rosenblatt, L.M. (1994). The traditional theory of reading and writing. In R.B. Ruddell, M.R. Ruddell, & H. Singer (Eds.), *Theoretical Models and Processes of Reading* (4th Ed., 1363-1398). Newark, DE: International Reading Association.
- Roskos, K.A., Tabors, P., Tabors, O., & Lenhart, L. A., & Morrow, L.M. (2004). Oral language and early literacy in preschool: Talking, reading, and writing. Newark, DE: International Reading Association.
- Roth, F.P., Speece, D.L., Cooper, D.H., & De La Paz, S. (1996). Unresolved mysteries: How do metalinguistics and narrative skills connect with early reading. *Journal of Special Education*, 30 (3), 257-277.
- Routman, R. (2005). *Writing essentials: Raising expectations and results while simplifying teaching*. Portsmouth, NH: Heinemann.
- Salahu-Din, D., Persky, H., and Miller, J. (2008). The nation's report card: Writing 2007 (NCES Publication No. 2008-468). Washington, DC: U.S. Department of Education, Institute of

Educational Sciences, National Center for Educational Statistics. Retrieved from http://nces.ed.gov/nationsreportcard/pdf/main2007/2008468_1.pdf

Scammacca, N., Roberts, G., Vaughn, S., Edmonds, M., Wexler, J., Reutebuch, C. K., &

Shanker, J.L. & Cockrum, W.A. (2009). *Locating and correcting reading difficulties* (9th edition). Boston: Allyn & Bacon.

Torgesen, J. K. (2007), Interventions for adolescent struggling readers: A meta-analysis with implications for practice. Portsmouth, NH: RMC Research Corporation, Center on Instruction. Retrieved from <http://www.centeroninstruction.org/files/Meta-analysis%20Struggling%20Readers.pdf>

Scarborough, H. S. (2001). Connecting early language and literacy to later (dis)abilities: Evidence, theory and practice. In S. Neuman and D. Dickinson (Eds.), *Handbook for research in early literacy* (pp. 97-110). New York: Guilford.

Scarcella, R. (1990). *Teaching language minority students in the multicultural classroom*. Englewood Cliffs, NJ: Prentice-Hall.

Schickedanz, J. A. (1998). What is developmentally appropriate practice in early literacy? Consider the alphabet. In S. B. Neuman & K. A. Roskos (Eds.), *Children achieving: Best practices in early literacy* (pp. 20-37). Newark, DE: International Reading Association.

Schmar-Dobler, E. (2003). Reading on the Internet: The link between literacy and technology. *Journal of Adolescent & Adult Literacy*, 47(1), 80-85.

Schmitt, M.C. (2001). The development of children's strategic processing. *Reading Psychology*, 22, 129-151.

Schunk, D.H. & Zimmerman, B.J. (1997). Developing self-efficacious readers and writers: The role of social and self-regulatory processes. In J.T. Guthrie & A. Wigfield (Eds.), *Reading for engagement: Motivating readers through integrated instruction* (pp. 34-50). Newark, DE: International Reading Association.

Scott, J.A. & Nagy, W.E. (2003). Developing word consciousness. In J.F. Baumann & E.J. Kame'enui (Eds.) *Vocabulary instruction: Research and practice* (pp. 201-217). New York: Guilford.

Senechal, M., & LeFevre, J. A. (2002). Parental involvement in the development of children's reading skill: A five-year longitudinal study. *Child Development*, 73, 445-460.

Servage, L. (2008). Critical and transformative practices in professional learning communities. *Teacher Education Quarterly*, Winter 2008, 63-77.

Shanahan, C. (2007). Social studies literacy Q & A. In Council of Chief State School Officers *Adolescent Literacy Toolkit*. Retrieved from http://programs.ccsso.org/projects/adolescent_literacy_toolkit/about_the_toolkit/

Shanahan, T. (2004). Overcoming the dominance of communication: Writing to think and learn. In T.L. Jetton & J.A. Doles (Eds.), *Adolescent literacy research and practice* (pp. 59-74). New York: Guilford.

- Shanahan, T. (2008). Relations among oral language, reading, and writing development. In C. MacArthur, S. Graham, & J. Fitzgerald (Eds.) *Handbook of Writing Research* (pp. 171-183). New York: Guilford.
- Shanahan, T. (2008). Ten things you ought to know about reading comprehension (PowerPoint presentation). Presentation at a literacy symposium hosted by Macmillan/McGraw-Hill, Cosa Mesa, CA (November). Retrieved from <http://timothyshanahan8.googlepages.com/10thingseveryteachershouldknowaboutr.ppt>
- Shanahan, T., Callison, K., Carriere, C., Duke, N. K., Pearson, P. D., Schatschneider, C., & Torgesen, J. (2010). *Improving reading comprehension in kindergarten through 3rd grade: A practice guide* (NCEE 2010-4038). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from <http://whatworks.ed.gov/publications/practiceguides>
- Shanahan, T. & Shanahan, C. (2008). Teaching disciplinary literacy to adolescents: Rethinking content area literacy. *Harvard Educational Review*, 78(1), 40-59.
- Shanklin, N.L. (2006). What are the effective characteristics of effective literacy coaching? Literacy Coaching Clearinghouse. Retrieved from <http://www.literacycoachingonline.org/briefs/CharofLiteracyCoachingNLS09-27-07.pdf>
- Shanklin, N.L. (2007). What supports do literacy coaches need from administrators in order to succeed? Literacy Coaching Clearinghouse. Retrieved from <http://www.literacycoachingonline.org/briefs/LCSupportsNSBrief.pdf>
- Shaywitz, S. (2003). *Overcoming dyslexia*. New York: Alfred A. Knopf.
- Short, D., & Fitzsimmons, S. (2007). *Double the work: Challenges and solutions to acquiring language and academic literacy for adolescent English language learners – A report to Carnegie Corporation of New York*. Washington, DC: Alliance for Excellent Education.
- Showers, B. (1984). *Peer coaching: A strategy for facilitating transfer of training*. Eugene, OR: Center for Educational Policy and Management.
- Simonsen, S. & Singer, H. (1992). Improving reading instruction in the content areas. In S.J. Samuels & A.E. Farstrup, *What research has to say about reading instruction* (pp. 200-219). Newark, DE: International Reading Association.
- Singer, B. & Bashir, A. (2004). Developmental variations in writing. In C.A. Stone, R.R. Stillman, B.J. Ehren, & K. Apel (Eds.). *Handbook of language and literacy: Development and disorders* (pp. 559-582). New York: Guilford.
- Smith, M.W., Brady, J.P., & Clark-Chiarelli, N. (2008). *Early Language & Literacy Classroom Observation: K-3 Tool, research edition*. Baltimore: Brookes.
- Snow, C. (2002). *Reading for understanding; Toward a research and development program in reading comprehension*. Santa Monica, CA: RAND. Retrieved from http://rand.org/pubs/monograph_reports/MR1465/MR1465.pdf
- Snow, C.E., Burns, M.S., & Griffin, P. (Eds.). (1998). *Preventing reading difficulties in young children*. Washington, DC: National Academy Press.

- Snow, C.E., Griffin, P., & Burns, M.S. (Eds.). (2005). Knowledge to support the teaching of reading: Preparing teachers for a changing world. San Francisco: Jossey-Boss.
- Spandel, V. (2001). Creating writers through 6-trait writing assessment and instruction (3rd ed.). New York: Longman.
- Spolsky, B. (1989). Conditions for second language learning. Oxford, UK: Oxford University Press.
- Stahl, S.A. (2000). Phonics they really use: Phonics in a balanced reading program. Presentation at CIERA Summer Institute in Ann Arbor, MI (August). Retrieved from <http://www.ciera.org/library/presos/2000/2000-CSI/stahl/csi-stahl-phonics.pdf>
- Stahl, S.A. (2004). What do we know about fluency? In P. McCardle and V. Chhabra (Eds.). The voice of evidence in reading research (pp.187-211). Baltimore: Brookes.
- Stahl, S.A. & Heubach, K. (2005). Fluency-oriented reading instruction. *Journal of Literacy Research*, 37, 25-60.
- Stanovich, K. E. (1986). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *Reading Research Quarterly*, 21, 360-367.
- Steiner, L., & Kowal, J. (2007). Issue brief: Principal as instructional leader: Designing a coaching program that fits. Washington, DC: The Center for Comprehensive School Reform and Improvement. Retrieved from <http://eric.ed.gov/ERICWebPortal/contentdelivery/servlet/ERICServlet?accno=ED49925>
- Storch, S.A. & Whitehurst, G.J. (2002). Oral language and code-related precursors to reading: Evidence from a longitudinal structural model. *Developmental Psychology*, 38, 934-947.
- Strickland, K & Strickland, R. (2000). Making assessment elementary. Portsmouth, NH: Heinemann.
- Strommen, L. & Mates, B. (2004). Learning to love reading: Interviews with older children and teens. *Journal of Adolescent & Adult Literacy* 48, 188-200.
- Strong, W. (2006). Write for insight: Empowering content area learning, grades 6 – 12. Boston: Pearson Publishers.
- Sulzby, E. (1989). Forms of writing and rereading from writing: Example List (Appendix 2.1). In J.M. Mason (Ed.), *Reading and Writing Connections* (pp. 51-63). Boston: Allyn & Bacon.
- Sweet, A.P. (1997). Teacher perceptions of student motivation and their relation to literacy learning. In J.T. Guthrie and A. Wigfield (Eds.), *Reading engagement: motivating readers through integrated instruction* (pp. 86-101). Newark, DE: International Reading Association.
- Tang, S. & Hall, V. (1995). The overjustification effect: A meta-analysis. *Applied Cognitive Psychology*, 9(5), 365-404.
- Tankersley, Karen. (2005). The struggling reader. Retrieved from <http://www.ascd.org/publications/books/104428/chapters/The-Struggling-Reader.aspx>
- Taylor, B. M. (2007). The what and the how of good classroom reading instruction in the elementary grades. Minneapolis, MN: University of Minnesota Center for Reading Research. Retrieved from <http://cehd.umn.edu/Reading/documents/reports/Taylor-report.pdf>

- Taylor, B. M., Pearson, P. D., Clark, K. F., & Walpole, S. (1999). Beating the odds in teaching all children to read. Center for the Improvement of Early Reading Achievement. Retrieved from <http://www.ciera.org/library/reports/inquiry-2/2-006/2-006.html>
- Tchudi, S.N. & Yates, J. (1983). Teaching writing in the content areas: Senior high school. West Haven, CT: National Education Association.
- Teach for America (TFA). (2011). Elementary literacy. Retrieved from http://www.teachingasleadership.org/sites/default/files/Related-Readings/EL_2011.pdf
- Teale, W., & Yokota, J. (2000). Beginning reading and writing: Perspectives on instruction. In D. S. Strickland & L. M. Morrow (Eds.), Beginning reading and writing (pp. 3-21). Newark, DE: International Reading Association.
- Texas Education Agency. (2002a). Comprehension instruction: 2002 online revised edition. Austin, TX: Author. Retrieved from www.tea.state.tx.us/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=2147486269&libID=2147486268
- Texas Education Agency. (2002b). Guidelines for examining phonics and word recognition. Austin, TX: Author. Retrieved from <http://www.tea.state.tx.us/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=2147486268&libID=2147486267>
- Texas Education Agency & University of Texas. (2002). Texas teacher reading academies (Presenter guide master). Austin, TX: Author.
- Thessin, R.A. & Starr, J.P. (2011). Supporting the growth of effective professional learning communities districtwide. *Phi Delta Kappan*, 92(6), 48-54.
- Tierney, W. G., Bailey, T., Constantine, J., Finkelstein, N., & Hurd, N. F. (2009). Helping students navigate the path to college: What high schools can do: A practice guide (NCEE #2009-4066). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from <http://ies.ed.gov/ncee/wwc/publications/practiceguides/>
- Tolchinsky, L., (2008). The emergence of writing. In C. MacArthur, S. Graham, & J. Fitzgerald (Eds.) *Handbook of Writing Research* (pp. 83-95).
- Toll, C.A. (2006). *The literacy coach's desk reference: Processes and perspectives for effective coaching*. Urbana, IL. National Council of Teachers of English.
- Toll, C. A. (2008). *Surviving but not yet thriving: Essential questions and practical answers for experienced literacy coaches*. Newark, DE: International Reading Association.
- Tompkins, G.E. (2003). *Literacy for the 21st Century*. Upper Saddle River, NJ: Pearson Education.
- Topping, K.J. (1995). *Paired reading, writing, and spelling: The handbook for teachers and parents*. London, UK: Continuum International Publishing Group.
- Torgesen, J.K. (2005). *Dyslexia, and other things that make it difficult to learn to read proficiently* (PowerPoint presentation). Keynote presentation at meetings of the Utah Branch of The International Dyslexia Association, Salt Lake City, UT (March). Retrieved from http://www.fcr.org/science/pdf/torgesen/Utah_keynote.pdf

- Torgesen, J.K. (2006). A comprehensive K-3 reading assessment plan: Guidance for school leaders. Portsmouth, NH. RMC Research Corporation, Center on Instruction. Retrieved from <http://www.centeroninstruction.org/files/K%2D3%20Reading%2Epdf>
- Torgesen, J. K., Alexander, A. W., Wagner, R. K., Rashotte, C. A., Voeller, K. S., & Conway, T (2001). Intensive remedial instruction for children with severe reading disabilities: Immediate and long-term outcomes from two instructional approaches. *Journal of Learning Disabilities* 34.
- Torgesen, J.K., Houston, D.D., Rissman, L.M., Decker, S.M., Roberts, G., Vaughn, S., Wexler, J., Francis, D.J., Rivera, M.O., & Lesaux, N. (2007). Academic literacy instruction for adolescents: A guidance document from the Center on Instruction. Portsmouth, NH: RMC Research Corporation, Center on Instruction.
- Torgesen, J., Houston D., Rissman, L., & Kosanovich, K. (2007). Teaching all students to read in elementary school: A guide for principals. Portsmouth, NH: RMC Research Corporation, Center on Instruction. Retrieved from <http://www.centeroninstruction.org/files/Principals%20Guide%20Elementary.pdf>
- Torgesen, J.K. & Mathes, P.G. (1998). What every teacher should know about phonological awareness. Tallahassee, FL: Florida Department of Education, Division of Public Schools and Community Education, Bureau of Instructional Support and Community Services.
- Treiman, R. & Bourassa, D. (2000). The development of spelling skill. *Topics in Language Disorders*, 20(3), 1-18.
- Treiman, R., Sotak, L., & Bowman, M. (2001). The roles of letter names and letter sounds in connecting print and speech. *Memory and Cognition*, 29, 505-514.
- Treiman, R., Tincoff, R., Rodriguez, K., Mouzaki, A., and Francis, D.J. (1998). The foundations of literacy: Learning the sounds of letters. *Child Development*, 69, 1524-1540.
- Troia, G. (2004). A focus on phonological awareness acquisition and intervention [Electronic version]. *Current Practice Alerts*, Summer 2004 (10). Retrieved from http://s3.amazonaws.com/cmi-teaching-ld/alerts/9/uploaded_files/original_alert10.pdf?1301000988
- Tucker, James. (2011). Beyond Compliance Toward Improvement. The Special EDge 24 (2) The Sacramento, CA: California Department of Education.
- United States Department of Education (ED). (2002). Improving fluency: Researched-based Instruction in reading. Retrieved from <http://www2.ed.gov/admins/lead/read/rb/edlite-slide012.html>
- United States Department of Education. (2010). A blueprint for reform: The reauthorization of the Elementary and Secondary Education Act. Washington, DC: Author. Retrieved from <http://www2.ed.gov/policy/elsec/leg/blueprint/blueprint.pdf>
- United States Department of Education. (n.d.). Part IV: Glossary, Office of Civil Rights, Programs for English Language Learners. Retrieved from <http://www2.ed.gov/about/offices/list/ocr/ell/edlite-glossary.html>
- Urquhart, V. & McIver, M. (2001). Teaching writing in the content areas. Alexandria, VA: ASCD and McREL.

- Vacca, R.T. and Vacca, J.L. (2003). Content area reading: Literacy and learning across the curriculum. Boston: Allyn and Bacon.
- Vacca, R.T. & Vacca, J.L. (2005). Content area reading: Literacy and learning across the curriculum, 8th ed.. Boston: Pearson.
- Valdés, G. (2001). Learning and not learning English: Latino students in American schools. New York: Teachers College Press.
- Van Der Stuyf, R.R. (2002). Scaffolding as a teaching strategy. Retrieved from <http://condor.admin.cuny.cuny.edu/~group4/Van%20Der%20Stuyf/Van%20Der%20Stuyf%20Paper.doc>
- Vaughn, S. & Linan-Thompson, S. (2004). Research-based methods of reading instruction, grades K-3. Alexandria, VA: Association of Supervision and Curriculum Design.
- Vaughn, S. & Ortiz, A. (2010). Response to intervention for reading for English language learners. RTI Action Network. Retrieved from <http://www.rtinetwork.org/learn/diversity/englishlanguagelearners>
- Vogt, M.E. & Shearer, B.A. (2007). Reading specialist and literacy coaches in the real world (2nd ed.). Boston: Pearson Education.
- Vygotsky, L. (1978). Mind in society: The development of higher psychological processes. Edited and translated by, M. Cole, V. John-Steiner, S. Scribner, & E. Souberman. Cambridge, MA: Harvard University Press.
- Vygotsky, L. (1962). Thought and language. Cambridge, MA: MIT Press.
- Wagner, R. K. & Torgesen. J.K. (1987). The nature of phonological processing and its causal role in the acquisition of reading skills. Psychological Bulletin, 101, 192-212.
- Wallach, M.A. & Wallach, L. (1979). Helping disadvantaged children learn to read by teaching them phoneme identification skills. In L.A. Resnick & P.A. Weaver (Eds.), Theory and Practice of Early Reading (Vol. 3, pp. 227-259). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Wamba, N.G. (2010). Poverty and literacy: an introduction. Reading & Writing Quarterly: Overcoming Learning Difficulties, 26 (3), 189-194.
- Warrington, S. D. (2006). Building automaticity of word recognition for less proficient readers. The Reading Matrix 6 (1). Retrieved from <http://www.readingmatrix.com/articles/warrington/article.pdf>
- Weaver, C. (2000). Reading Process and Practice, 3rd ed. Portsmouth, NH: Heinemann. Retrieved from <https://www.heinemann.com/shared/onlineresources/e00377/chapter14.pdf>
- Weiss. H., Caspe, M., & Lopez, M. E. (2006). Family Involvement in Early Childhood Education, Spring 2006 (#1). Cambridge, MA: Harvard Family Research Project. Retrieved from <http://www.hfrp.org/publications-resources/browse-our-publications/family-involvement-in-early-childhood-education>
- Wenger, E., McDermott, R., & Snyder, W.N. (2002). Communities of practice: Learning, meaning, and identity. New York: Cambridge University Press.

- What Works Clearinghouse. (2007). Beginning reading. Retrieved from <http://ies.ed.gov/pubsearch/pubsinfo.asp?pubid=WWCtrbr07>
- Wasik, B.A. & Bond, M.A. (2001). Beyond the pages of a book: Interactive book reading and language development in preschool classrooms. *Journal of Educational Psychology*, 93, 243-250.
- WestEd for the California Department of Education. (2005). English learning for preschoolers project: Glossary. Retrieved from <http://www.cpin.us/p/pel/glossary.htm>
- Whitehurst, G. J., & Lonigan, C. J. (1998). Child development and emergent literacy. *Child Development*, 69(3), 848-872.
- WIDA Consortium. (2004). English language proficiency standards for English language learners in kindergarten through grade 12: Frameworks for large-scale state and classroom assessment, overview document. Wisconsin: Author.
- Wigfield, A. (2004). Motivation for reading during the early adolescent and adolescent years. In D.S. Strickland & D.E. Alvermann (Eds.), *Bridging the literacy achievement gap, grades 4-12*, (pp. 56-69). New York: Teachers College Press.
- Wigfield, A. (1997). *Motivation for reading: Individual, home, textual & classroom perspectives*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Wigfield, A. & Guthrie, J.T. (1997). Relation of children's motivation for reading to the amount and breadth of their reading. *Journal of Educational Psychology*, (89), 420-432.
- Wilhelm, J.D., Baker, T., & Dube, J. (2001). *Strategic reading: Guiding the lifelong literacy of adolescents*. Portsmouth, NH: Heinemann.
- Williams, J. (1980). Teaching decoding with an emphasis on phoneme analysis and phonemic blending. *Journal of Educational Psychology*, 72, 1-15.
- Willis, A. (2000). Critical Issue: Addressing Literacy Needs in Culturally and Linguistically Diverse Classrooms. Retrieved from www.ncrel.org/sdrs/areas/issues/content/contareas/reading/li400.htm
- Winchell, D. & Elder, D. (1992). Writing in the geography curriculum. *Journal of Geography*, 91(6), 273-276.
- Wolf, M.K., Crosson, A.C., & Resnick, L.B. (2004). Classroom talk for rigorous reading comprehension. *Reading Psychology*, 26(1), 23-53.
- Yopp, H.K. and Yopp, R.E. (2009). Phonological awareness is child's play [Electronic version]. *Beyond the Journal: Young Children on the Web*. Retrieved from <http://journal.naeyc.org/btj/200901/pdf/BTJPhonologicalAwareness.pdf>
- Yopp, R.H. & Yopp, H.K. (2000). Supporting phonemic awareness development in the classroom. *The Reading Teacher*, 54(2), 130-143.
- Yore, L.D. (2003). Examining the literacy component of science literacy: 25 years of language arts and science research. *International Journal of Science Education*, 25, 689-725.

- Yoshimura, F. (2000). Automaticity theory and EFL in Japan: With some specific applications for reading. literacy across cultures. Retrieved from <http://www2.aasa.ac.jp/~dcdycus/LAC2000/yoshimura.htm>
- Youngs, P. (2001). District and state policy influences on professional development and school capacity. *Educational Policy*, 15(2), 278–301.
- Zimmerman, B. J., & Risemberg, R. (1997). Research for the future: Becoming a self-regulated writer: A social cognitive perspective. *Contemporary Educational Psychology*, 22(1), 73-101.
- Zimmermann, S. & Hutchins, C. (2003). *Seven keys to comprehension*. New York: Three Rivers Press.
- Zwiers, J. (2004). *Building reading comprehension habits in grades 6–12*. Newark, DE: International Reading Association.
- Zwiers, J. (2008). *Building academic language: Essential practices for content classrooms*. San Francisco: Josey-Bass.