

Standards for Primary-Grade Reading: An Analysis of State Frameworks

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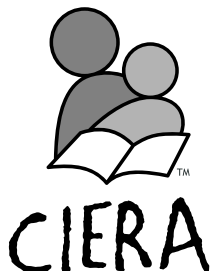
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CIERA Inquiry 3: Policy and Profession

How do state language arts standards influence the way teachers teach and, ultimately, what and how children learn? How does the content and structure of a state's standards influence those efforts?

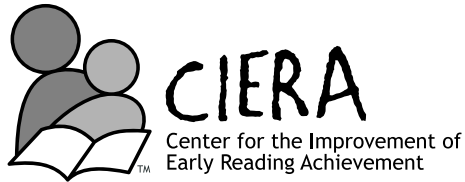
To begin the task of evaluating the impact of state standards on American students, Wixson and Dutro compared the structure and information of state language arts standards. Their analysis focused on the 14 state documents that provided benchmarks or objectives by grade level for grades K-3. The other 28 states either provided a single set of standards for K-12 or separate sets of standards for different grade clusters (e.g., K-3, 4-6, etc.). The analysis of the state standards documents led to several recommendations.

Evaluations of state standards need to be based on defensible criteria and should reflect current research. The criteria used by Wixson and Dutro for this analysis should be useful to districts in evaluating their states' standards for early reading/language arts.



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Standards for Primary-Grade Reading: An Analysis of State Frameworks

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Growing concern for the literacy abilities of youth in the U.S. has focused attention on issues of early reading curriculum, instruction, and assessment. Attention to these issues is manifest in many ways, including the development of state standards aimed at promoting early reading acquisition. Since state standards have the potential to influence everything from district policy to student achievement, their content should be examined closely. This report analyzes state standards for early reading/language arts from two perspectives—what we know about standards and what we know about early reading.

State policymakers have historically delegated authority over public education to local school districts, particularly in matters of curriculum and instruction. Districts have further entrusted the curriculum to teachers or textbook publishers, and have done little to provide or develop instructional guidelines (Massell, Kirst, & Hoppe, 1997). What little direction states or districts have provided has often been limited to listings of course requirements or behavioral objectives. Few states have prescribed the content of courses or curricula, and even fewer have provided instructional guidance (Cohen & Spillane, 1993).

Recently, the involvement of states in curriculum and instruction matters has changed. During the past two decades, many state departments of education have made unprecedented forays into curriculum and instruction. (Massell, Kirst, & Hoppe, 1997). The publication of *A Nation at Risk* (National Commission on Excellence in Education, 1983) set off a firestorm of reform activity. When the initial waves of reform produced disappointing results (cf. Cohen & Spillane, 1992), growing concern about the educational preparation of the nation's youth prompted President Bush and state governors to call an education summit in September 1989 where they agreed on six broad goals for education to be reached by the year 2000 (National Education Goals Panel, 1991).

To this end, Congress established the bipartisan National Council on Education Standards and Testing (NCEST) in June 1991. Six months later, NCEST issued a report recommending national content standards and a national system of assessments based on the new standards (NCEST, 1992). The U.S. Department of Education then pursued a purposeful strategy of education reform based on high standards. The implicit model was California's education reform program, which was started in the mid 1980s by state superintendent Bill Honig. The U.S. Department of Education presupposed that educational improvement should begin with an agreement on content standards that could be implemented at both the national and state levels. The department took guidance in developing national standards from the National Council of Teachers of Mathematics (NCTM), whose *Curriculum and Evaluation Standards for School Mathematics* (1989) preempted the call for standards in 1989.

A standards-based view of reform holds that once broad agreement on what is to be taught and learned has been achieved, everything else in the education system can be redirected toward reaching higher standards. To promote this view, the U.S. Department of Education made awards in 1991 and 1992 to broad-based groups of scholars and teachers who would develop voluntary national standards in science, history, the arts, civics, geography, foreign languages, and English language arts. Competitive awards were also made to states for the purpose of developing curriculum frameworks to include state content standards in all of these subject areas plus mathematics, which already had national standards. The Clinton administration, in support of the same agenda, made Goals 2000 the centerpiece of its education initiatives.

The goal of standards-based reform efforts is to change teaching because without new approaches to teaching, most students' learning will not improve (Cohen, 1995). The key question for reformers has been how to reach that goal. Most have found the answer in new policy instruments that aim to foster changes in teaching and learning, as well as reduce the tangles of regulation, bureaucracy, proliferating policy, and incoherent governance that impede reform (Smith & O'Day, 1990). These new policy instruments are commonly thought to include: new content standards or instructional frameworks; assessments that focus students' and teachers' work on intellectually authentic tasks that are "aligned" with new content standards; more ambitious curricula that are consistent with new standards and assessments; and changes in teacher education that would improve enactment of the new standards (Cohen, 1995).

Since state and local standards are a relatively recent phenomenon, it is not surprising that there has been virtually no research done on their relationship to student achievement. The little research that has been done on standards-based practices focuses instead on the impact of standards on local curricula, instruction, and teacher practices (e.g., Goertz, Floden, & O'Day, 1995). As a starting point for thinking about the relationship between standards and reading acquisition, we focus here on an analysis of the nature and content of early reading/language arts standards. The characteristics of a state's content standards in this area are likely to influence the translation of these standards into state and local curriculum, instruction, and assessment practices. Ultimately, they will affect what students in a particular state learn.

Method

The method used for this analysis is described in the following sections. We focused on selecting criteria for evaluating state standards, identifying the state documents to be analyzed, and establishing the procedures for analysis

Criteria for Evaluating State Standards

Several analyses of state standards in reading/language arts have been conducted by groups such as the American Federation of Teachers (AFT, 1996), the Fordham Foundation (Stotsky, 1997), and the Council for Basic Education (CBE, 1997). Each analysis used a different set of criteria. The sets of criteria were developed largely by the reviewers based on their own experience, reviews of other materials (i.e., curriculum guides), and advice from educators and researchers. This situation poses a problem for the consumers of these evaluations: Different criteria yield different results, and it is unclear how to interpret such differences. For example, a review of the English language arts standards of one state in our sample commissioned by the AFT (1996) resulted in a strong rating on AFT's "common core" criterion, while a review commissioned by the Fordham Foundation found the same state's standards sorely lacking.

First we needed to establish consistency in the criteria used to judge standards documents. We settled upon a set of criteria that representatives of professional and stakeholder organizations had conceived of as guidelines for educational agencies in standards development. This effort was led by the Council of Chief State School Officers (CCSSO) in collaboration with nine other educational organizations including the National Education Goals Panel, AFT, CBE, National Alliance of Business, and Council of Great City Schools (CCSSO, 1996). The six criteria for standards put forward by these groups are as follows:

- Standards should expect and support all students achieving to high levels;
- Content standards should reflect the strengths of the relevant academic disciplines;
- Standards should be specific enough to clearly convey the important academic knowledge and skills that all students should learn, but broad enough to allow for multiple approaches to curriculum, instruction, course design, and assessment;
- A plan should be in place to implement the content standards;
- The standards should be world class;
- The standards must be convincing and understandable to the lay public.

Our analysis of state reading/language arts standards focused on the first three of these criteria, as they are most relevant to the subject matter content of the standards. We were primarily interested in any variability among state standards documents that was likely to impact translation into local

programs of curriculum, instruction, and assessment and, ultimately, student achievement.

Sample Selection

Before we could begin our analysis, we needed to gather together as many states' standards documents as we could. We began by sending letters to all 50 states inquiring about the status of their English language arts standards documents and asking for copies of them if they were available. The response was positive, resulting in our eventual receipt of 35 state documents. For those states that failed to respond, we periodically checked the state departments of education websites. We were eventually able to retrieve 7 additional state documents, for a total of 42 sets of standards. Although several of the eight remaining states have recently completed standards or are currently in the process of drafting them, these documents were not available at the time of analysis, either because the state did not respond to our inquiry or because the document was still in progress.

As we perused the documents we received, we realized that we would have to pare our sample down even further. Of the 42 state documents in our sample, 2 provided only K–12 standards, 26 provided standards by grade-level clusters, 3 provided grade clusters plus additional benchmarks or objectives for the primary grades, and 11 provided standards and benchmarks/objectives for each grade level from K–12. The breakdowns by state are summarized in Table 1. Since our interest was in early reading standards, the 14 documents that provided grade-by-grade information for grades K–3 were the focus for our analysis.

Table 1: Reading Language Arts Documents Reviewed

ORGANIZATION		
K–12 Only		
Alaska	Missouri	
Grade Clusters		
Arizona	Kentucky	New York
Arkansas	Louisiana	Oregon
Colorado	Michigan	Pennsylvania
Delaware	Montana	Rhode Island
Florida	Nebraska	Tennessee
Hawaii	Nevada	Vermont
Illinois	New Hampshire	Wisconsin
Indiana	New Jersey	Wyoming
Kansas	New Mexico	
Grade Clusters Plus K–3 Breakouts		
Massachusetts	North Carolina	Washington
Individual Grade Levels for K–12		
Alabama	Mississippi	Utah
California	Ohio	Virginia
Georgia	Oklahoma	West Virginia
Idaho	Texas	

While the identity of the 14 states is evident in Table 1, our intention was not to single out any state as exemplary or deficient. Insofar as the 14 states on whose standards this analysis focuses attend to the content of literacy learning in the primary grades, their efforts should be applauded. To ensure anonymity, the 14 states are identified throughout the remainder of this report by letters of the alphabet.

Procedures for Analysis

We began by familiarizing ourselves with each of the 42 documents. Next we examined each in detail according to the three criteria gleaned from the CCSSO report. We conducted two distinct analyses, evaluating both specificity and content as described below. In all of our analyses, *standards* are defined as the general statements about what students should know and be able to do that tend to remain constant across grade levels and clusters. *Benchmarks* or *objectives* are defined as the more specific statements about what students should know and be able to do that usually vary across grade levels and clusters.

Specificity Analysis

The specificity analysis addressed both the complexity and the level of detail of the reading/language arts standards documents. For these analyses we focused on the 14 states providing standards and benchmarks at the individual grade levels K–3.

The complexity analysis relied on straightforward, objective procedures (e.g., counting numbers of benchmarks at each developmental level). We examined the various ways that the states chose to parse reading. How many headings and subheadings were included in a document? What aspects of reading and other language arts were represented by the headings (e.g., Word Recognition, Literature, Oral Language, Speaking, etc.)?

The analysis aimed at level of detail involved counting the number of benchmarks within the area of reading/language arts. We were interested in the differences among the documents in the level of detail represented in their benchmarks, and wondered how this might impact local flexibility in the creation of systems of curriculum, instruction, and assessment.

Content Analysis

The content analysis had two components: an analysis of content coverage, and an analysis of content appropriateness. The content coverage analyses examined the curricular path and areas covered in the state standards documents, while the content appropriateness analyses addressed both the inclusion of inappropriate content and the exclusion of important content.

The analysis of the areas covered and content appropriateness required that we develop content criteria for the early grade levels. Identifying subject matter criteria for the content analysis of early reading/language arts standards was difficult. A logical starting point seemed to be the National Council of Teachers of English/International Reading Association (NCTE/IRA) *Standards for English Language Arts* (1996). Unfortunately, these standards are written at the K–12 level and don't include information that can be used to evaluate content at individual grade levels. Instead, we used a combination of four documents that synthesize and summarize current research

related to reading acquisition: *Becoming a Nation of Readers* (Anderson et al., 1985); *Beginning to Read* (Adams, 1990); *Preventing Reading Difficulties in Young Children* (National Research Council, 1998); and *Improving the Reading Achievement of America's Children: 10 Research-Based Principles* (CIERA, 1998). We reviewed these materials for commonalities and constructed a set of criteria from the information that appeared in at least three of the four research syntheses (see Table 2). Additionally, to address the CCSSO demand that states support learning for *all* students, we considered the issue of English as a Second Language and/or bilingual learners, examining whether or not the state documents explicitly attend to the needs of those particular children.

Table 2: Criteria and Definitions for Early English Language Arts Content

Foundations of Literacy	
Phonemic Awareness	Being consciously aware that phonemes exist as extractable and manipulable components of spoken words.
Concepts about Print	Understanding the various forms and functions of written language.
Experience with Text	Having many and varied experiences with text including listening and responding to text read aloud.
Word Identification	
Letter Knowledge	Naming and recognizing the letters of the alphabet.
Meaning-based Word Recognition Strategies	Determining the spoken language equivalent of a written word using meaning-based strategies such as contextual analysis.
Spelling-Sound Word Recognition Strategies	Determining the spoken language equivalent of a written word using grapho-phonetic strategies such as sound-spelling correspondences and common spelling conventions (phonics).
Sight Words	Reading frequently occurring words by sight.
Fluency	Reading orally with ease, expressiveness, and appropriate phrasing.
Comprehension	
Prior Knowledge	Drawing on a store of knowledge about a topic to construct meaning.
Comprehension Strategies	Employing appropriate strategies during reading to construct meaning from text (e.g., inferencing, identifying crucial information, monitoring, summarizing, and question generating).
Vocabulary	Understanding the definitions of words and the variety of contexts in which the words are used.
Literature	
Experience with Literature	Interacting with literary works that offer information and enjoyment and that reflect diverse perspectives and experiences.
Genre	Understanding various forms, purposes, and conventions of literature and text.
Habits and Attitudes	
Read for Enjoyment	

Analyzing the curricular path involved a close examination of the 14 documents that contained grade-level information. We needed to determine the extent to which these documents provided benchmarks that logically built upon one another through grade-level progressions. For this portion of the analysis, we examined all of the state documents in our sample with an eye toward their coverage of content. The analysis of content appropriateness, however, was limited to the 14 documents with standards and benchmarks at individual grade levels. This analysis was based on our reading of current research addressing the skills and processes that are crucial to early reading achievement and providing guidance as to the developmental levels at which children can be expected to master specific skills.

For the analysis of content coverage, we had to rely on our judgment of whether a document adequately addressed a certain criterion and, therefore, required a different procedure from the more objective analyses. Often a document's inclusion or exclusion of standards and benchmarks reflecting the criteria was very straightforward. Other times it was less clear. To ensure the reliability of our ratings, two people separately analyzed all of the content criteria. If a difference arose in the analysis of a criterion within a state's document, the discrepancy was resolved through discussion. The percentage of agreement between the two reviewers before discussion was 93 percent.

Analyses of State Standards

We present our analyses of state standards for early reading/language arts first, with a summary of findings related to the CCSSO specificity criterion. These analyses are followed by a summary of the findings of the content analysis in relation to the CCSSO criteria regarding support for all students achieving at high levels and attention to the strengths of the academic discipline.

Specificity Analysis

The CCSSO consensus document indicates that standards should be specific enough to provide sufficient substance to ensure that both curricula and assessments will work toward a common end. At the same time, standards should not be so prescriptive that they inhibit the professional judgment of districts and individual teachers, or deny them the flexibility that they need to tailor instructional strategies to the individual needs of students.

The CCSSO document recognizes the difficulties in providing sufficient specificity while allowing for flexibility. There is a long tradition of local control in America's education system that remains strong today. The extent to which a state should dictate what students in all the schools within their boundaries should learn is a question that can only be resolved by each jurisdiction.

Level of specificity is an extremely important issue in standards evaluation. Many national and state standards documents, including the NCTE/IRA Standards for English Language Arts (1996), have been criticized for lack of specificity (Ravitch, 1995). But there is no consensus on what the optimum level of specificity is. Those who taught or participated in some way in reading education in the 1970s will remember the dissatisfaction with overly specified curricula (cf. Johnson & Pearson, 1975). The literature was replete with criticisms such as “minimums have become maximums” or “we can’t see the forest for the trees.” In fact, the curricula that are being criticized today as “too soft” or “undemanding” were developed in response to concerns about highly specified curricula focused on basics at the expense of higher-order skills and processes.

Before we repeat the mistakes of the past, we need to more closely examine the standards under review and their implications for instruction and assessment. Both the complexity and the level of detail in state reading standards are important areas of analysis because they are likely to impact the development of local systems of curriculum, instruction, and assessment in ways that will significantly effect student achievement.

Complexity

There is considerable variability among the 14 state documents in the complexity of the reading/language arts standards by grade level. Some documents are organized simply with a small number of headings and no subheadings, while others have complex organizations with multiple headings and subheadings. The writers of the state frameworks documents made a fundamental decision about the parsing of reading alone and in relation to other language arts such as speaking, writing, and listening. Ten of the 14 documents have a separate heading for Reading or Reading in combination with another area such as Language or Literature. Three documents have separate headings for Literature, and two documents are organized in terms of goals that cut across the areas of the language arts (e.g., Effective Communicators).

Some documents divide Reading into a relatively small number of areas. For example, one state in our sample has just one area—Reading/Literature, while another breaks Reading into two areas—Reading Comprehension and Reading Vocabulary. In contrast, one of the more complex parsings of Reading provides 12 subareas: Print Awareness; Phonological Awareness; Letter-Sound Relationships; Word Identification; Fluency; Variety of Texts; Vocabulary Development; Comprehension; Literary Response; Text Structures/Literary Concepts; Inquiry/Research; and Culture.

There is not a one-to-one correspondence between the breakdown of reading content into categories and subcategories and the total number of specific benchmarks or objectives in a given document. The 9 documents with low numbers of headings (one to twelve) at each grade level provide an average of 45 benchmarks per grade level (with a range from 14 to 102); while the 5 documents with more headings (16 to 23) at each grade level provide an average of 63 benchmarks per grade level (with a range from 38 to 103). It is clear that there can be considerable detail within a document, even when few differentiations are made within the domain of reading.

The way Reading is parsed is likely to have a significant impact on how local curriculum is organized, how instructional time is spent, how assessments

are developed and configured, and how student achievement is communicated to external audiences. For example, if Literature is set apart by a sub-heading as an important component of the overall Reading curriculum rather than included only as one of several dozen benchmarks under the general heading of Reading, then the explicit study of literature is likely to claim more instructional time than it would otherwise. These are not trivial matters in efforts to promote reading acquisition.

Level of Detail

As with the complexity analysis, there is considerable variability in the level of detail provided by the benchmarks or objectives in the 14 documents under investigation. Benchmarks/objectives vary from highly detailed to quite general. Highly detailed benchmarks often read like lists of skills and instructional activities rather than achievable goals. For example, a kindergarten benchmark from one state reads, "Select suitable pictured word to complete orally presented, grade-level appropriate sentence." This document has numerous, highly specific benchmarks describing instructional activities, rather than curricular guidelines that could be easily translated into activities by districts or teachers.

In contrast, benchmarks that are very general are often broad goals rather than guidelines for what students should know and be able to do. This can be seen in the following first-grade benchmark included in one state's document: "Develop a sight word vocabulary." This benchmark describes a broad goal, but it provides no guidance as to how many and/or what kinds of words might be most appropriate for first graders to know by sight. This is an example of a benchmark that needs to be more focused and include specific information in order to be useful to educators. The balance intended by the writers of the *Criteria for Standards* (CCSSO, 1996) likely lies somewhere between the highly specific and the overly general.

As a rule of thumb, the greater the number of benchmarks a document provides, the more detailed they are and, conversely, the fewer the number of benchmarks the more general they are. This generalization does not hold true for every document, though, and many documents are characterized by unevenness in the level of detail. We chose two state documents that have a small number of headings and subheadings to illustrate these differences (see Table 3). The benchmarks for State N read like a list of disjointed parts that do not come together as a whole. Benchmarks such as "use basic mechanics such as end marks and capitalization" carry the same weight as "make connections among pieces of literature." For teachers and supervisors in this state, such guidance would be difficult to translate into a daily reading program or assessment selections that will indicate children's attainment of high reading levels. Although the guidelines for composition mechanics are prescriptive, the guidelines for comprehension and interpretation are sufficiently ambiguous to provide little guidance.

In contrast, the benchmarks for State E are written at a level of detail that provides guidance, but does not dictate local practices with regard to curriculum, instruction, and assessment. For example, the benchmark "Use picture details and known words in context to determine the meanings of unknown words" clearly states a goal (determining the meaning of unknown words) and an instructional emphasis (meaning-based word recognition strategies) but it does not dictate the means of achieving the goal or prescribe the instructional emphasis or method. This benchmark leaves room for districts

Table 3: Level of Detail in Two States at the First-Grade Level

STATE N	STATE E
<p>Composition and Language</p> <ul style="list-style-type: none"> • Identify and form all letters. • Understand alphabetic principle and concept of audience when writing. • Know standard spelling of commonly used words; still use some invented spelling. • With teacher help, begin to use basic mechanics such as end marks and capitalization. <p>Reading and Language</p> <ul style="list-style-type: none"> • Know most letter/sound correspondences and use them to decode/use words in context. • Know common word endings (e.g., plurals, -ing, -ed) and use them to decode/use words in context. • With teacher help, use relevant text features (e.g., bold print) to predict new information. • With teacher help, reread to improve understanding. <p>Literature and Interpretation</p> <ul style="list-style-type: none"> • Recognize story elements such as events, characters, setting, moral. • Understand difference between fiction and nonfiction. • Follow more complex, abstract, oral directions. • With teacher help, make connections among pieces of literature and between literature and life experiences. • After brainstorming ideas and key vocabulary, write stories, letters, reports. • With teacher help recognize and create literary devices such as rhythm, rhyme, alliteration, figurative language. 	<p>Language Arts — Reading</p> <p>1. The student will exhibit positive reading habits and view reading as important. The student will:</p> <ul style="list-style-type: none"> • Participate in shared book experiences by listening and responding to print materials read aloud (e.g., stories, poems, songs, informational texts). • Read independently for increasingly sustained periods of time. • Discuss books, authors, and illustrators. • Read for the purpose of communication (e.g., messages, letters, invitations, journals). • Use functional print (e.g., schedules, directions, lists, morning messages) to accomplish tasks. • Read to learn new information from various sources (e.g., reference books, dictionaries, magazines, informational texts). • Develop an awareness of the parts of a book (e.g., title page, table of contents). <p>2. The student will read with fluency in order to understand what is read. The student will:</p> <ul style="list-style-type: none"> • Demonstrate an understanding of concepts of print (understanding directionality of print, the function of letters, words, and spaces, and that print is talk written down). • Use picture details and known words in context to determine meanings of unknown words. • Use a variety of strategies, including phonics, prediction, context, structural analysis, and references to identify unknown words. • Develop a sight vocabulary through reading. • Use prediction strategies in order to read pattern books (stories with a repetitive element). <p>3. The student will use prior knowledge to become actively engaged with the reading material and use a range of comprehension skills (literal, inferential, and evaluative). The student will:</p> <ul style="list-style-type: none"> • Preview the material and use prior experiences and background knowledge to gain understanding of the reading passage. • Retell and draw pictures of beginnings, middles, and endings of stories. • Demonstrate awareness of characters, settings, and events through retelling stories. • Respond to literature and other print material in various ways, including discussion, dramatization, art, writing, and reading other books. <p>4. The student will know the goal of reading is constructing meaning and will use effective strategies to aid comprehension. The student will:</p> <ul style="list-style-type: none"> • Expect the reading material to make sense and use correction strategies when the meaning is not clear (e.g., question generation, rereading, vocabulary strategies). • Predict what will happen next based on context clues. • Participate in directed reading-thinking activities and directed listening-thinking activities. • Use K-W-L charts (what the student knows, what the student wants to know, and what the student has learned).

and teachers to make instructional decisions that best meet the needs of their students. Perhaps one teacher will choose to reach this goal by working with a small group of children, each holding his or her own copy of the same tradebook. Another teacher may achieve the same goal through a shared reading of a big book with the entire class.

To further illustrate the differences in level of detail, we examined the benchmarks for first-grade decoding—surely one of the most contentious areas of the elementary school curriculum. States have made very different choices in the level of guidance that they provide first-grade teachers. The range of variation is illustrated in the cases of the content for first-grade decoding of three states—States J, G, and M (see Table 4).

The decoding benchmarks in State J's document are so detailed that it is easy to lose sight of how the parts should cohere into reading/language arts. When standards and benchmarks/objectives are highly specified, they do not allow for much local flexibility in the development of district curricula, instruction, and assessment practices and policies. Marzano and Kendall (1996) draw a distinction between *content* standards, which should describe the goals for individual student achievement, and *curriculum* standards, which should provide supplemental information that contributes to helping students reach these goals. They feel that content standards and curriculum standards should be distinct and not even presented in the same document. When content standards are highly specific, as in State J's document, they tend to look more like curriculum guidelines than learning goals.

Table 4: Differences in Level of Detail—First-Grade Decoding Benchmarks

STATE J	STATE G	STATE M
Decoding and word recognition.	Develop an ability to read with increasing fluency and understanding by using writing and a variety of other reading strategies.	Decoding and word recognition.
<ul style="list-style-type: none"> • Generate the sounds from all the letters and letter patterns, including consonant blends and long- and short-vowel patterns (phonograms), and combine those sounds into recognizable words. • Read common, irregular sight words (e.g., the, have, said, come, give, of). • Use knowledge of vowel digraphs and r-controlled letter-sound associations to read words. • Read compound words and contractions. • Read inflectional forms (e.g., -s, -ed, -ing) and root words (e.g., look, looked, looking). • Read common word families (e.g., -ite, -ill, -ate). • Read aloud with fluency in a manner that sounds like natural speech. 	<ul style="list-style-type: none"> • Demonstrate appropriate handling of a book (right-way up, front to back, sequential page-turning). • Use familiar words, picture clues, context clues, and personal experiences to read and write meaningful messages. • Predict meaning using pictures or context clues. • Participate as favorite stories are re-read aloud by filling in familiar words and phrases. • Recognize the phonetic principle that letters are associated with sounds heard in words. • Apply beginning knowledge of phonics and other word attack skills in reading a variety of literature (trade books, experience stories, basal readers, etc.). • Develop a sight word vocabulary. • Read for information, communication, and entertainment. 	<ul style="list-style-type: none"> • Uses phonics knowledge of sound-letter relationships to decode regular one-syllable words when reading words and text. • Recognizes many high frequency and/or common irregularly spelled words in text (e.g., have, said, where, two). • Reads aloud with fluency and comprehension any text that is appropriately designed for the first half of grade one. • Uses pronunciation, sentence meaning, story meaning, and syntax to confirm accurate decoding or to self-correct errors.

In contrast to State J, the decoding benchmarks in the State G document are overly general. It is easy to get a sense of the larger goals of reading/language arts from these benchmarks, but there is insufficient guidance for districts to develop local curriculum, instruction, and assessment materials and guidelines. Although little has been written about the optimum level of specificity for state and local standards, Spillane and Jennings (1997) report that the extent to which teachers' practices reflect a district's literacy initiative depends on how well the reforms are elaborated by that district. In their study, the observed teachers responded to their district's explicit policies about the materials they were to use and not use by using trade materials rather than basals to teach reading and by not using practice books. District policy also indicated that learners should "evaluate different texts" and "establish and justify personal opinions of various literary forms," but teachers were offered no explicit guidelines about helping students articulate ideas about text. As a result, there was considerable variability among classrooms in how teachers interpreted these goals. This suggests that benchmarks that are too general may result in too much local variability.

The decoding benchmarks in the State M document appear to offer a reasonable compromise. They provide the big reading/language arts picture and sufficient guidance for developing local curriculum, instruction, and assessment without unduly constraining local flexibility. Our experience using state standards to help districts develop local curricula and assessments suggests that a certain level of detail is necessary if district practices are to achieve the goals intended by the state. At the same time, we must be careful not to turn benchmarks into curriculum standards or instructional activities. There is a fine line, here, and even the best documents can err on one side or the other at times.

Content Analysis

The content analysis addressed the other two criteria of the CCSSO document—i.e., support for all students achieving at high levels and attention to the strengths of the academic discipline. Again, those who were in the classroom in the 1970s either as teacher or student will remember the frustration with the lack of knowledge about which set of skills in which sequence would lead to reading achievement for all. The truth is that we still don't know, although many today talk as if we do. We know more about how the processes of reading and writing emerge and develop over time, but that is not the same as knowing what the scope and sequence should be for systems of curriculum, instruction, and assessment. If this were evident from the extant literature, there would be no debate and standards documents would all look the same. Needless to say, they do not. Our examination of both the content coverage represented in state standards documents and the appropriateness of their content serves to demonstrate this variability and to explore some of the potential consequences of that variation, both positive and negative, for children's early reading achievement.

Content Coverage

As we discussed in the methods section, the coverage analyses were conducted at two levels: (a) the extent to which the benchmarks/objectives reflect a developmental progression or "curricular path" from kindergarten

through grade 3, and (b) the number of state standards documents attending to each area of the subject matter criteria presented in Table 2.

Curricular path. The extent to which the benchmarks/objectives reflect a developmental progression or curricular path from kindergarten through grade 3 is important for the continuity and coherence of local systems of curriculum, instruction, and assessment. Instruction in the lower grades needs to lay the foundation for upper grade level work. As in other areas, our analysis revealed a great deal of variability among the 14 early reading/language arts documents. Some states arrange their documents so that benchmarks reflecting similar knowledge and skills are side-by-side from one grade level to the next. In contrast, other documents often have disparate content under headings that are common to each grade level.

Table 5: Example of Clear Curricular Path

KINDERGARTEN	FIRST	SECOND	THIRD
Identify and sort common words from basic categories (e.g., colors, shapes, foods).	Classify grade-appropriate categories of words (e.g., concrete collections like animals and foods).	Understand and explain common antonyms and synonyms.	Use knowledge of antonyms, synonyms, homographs to determine meaning of words.
Describe common objects and events in both general and specific language.		Use knowledge of individual words in unknown compound words to predict their meaning.	Demonstrate knowledge of super-, sub-, and coordinate relations among grade-appropriate words and explain the importance of these relations (e.g., dog/mammal/animal/living things).
		Know the meaning of simple prefixes and suffixes (e.g., over-, un-, -ing, -ly).	Monitor texts for unknown words using sentence and word context to find meaning.
			Use the dictionary to learn the meaning and other features of unknown words.
		Use knowledge of prefixes (e.g., un-, re-, pre-, bi-, mis-, dis-) and suffixes (e.g., -er, -est, -ful, -ly, -ness, -less, -ous, -y) to determine the meaning of words.	

Differences in the extent to which there is a visible curricular path can be seen by comparing Table 5 and Table 6. Table 5 presents benchmarks for grades K–3 under Vocabulary and Concept Development for State J, and Table 6 presents the benchmarks for grades K–3 under Reading Vocabulary for State A. It is not difficult to imagine the word knowledge curriculum for State J building from identifying, sorting, and describing common words, objects, and events in kindergarten, to classifying grade-appropriate categories of words in grade 1, to demonstrating understanding of super-, sub-, and coordinate relations among grade-appropriate words at grade 3.

In contrast, there is far less comparability in the content of the benchmarks from one grade level to the next in the State A document. Even when the

benchmarks are comparable across grade levels, the content sometimes moves from more to less difficult, as in the case of working with synonyms, antonyms, etc. In other instances, the content stays at the same level of difficulty across two or more grades, as with recognizing multiple-meaning words, rather than moving from lower to higher levels of difficulty as needed.

Table 6: Example of Inconsistent Curricular Path

KINDERGARTEN	FIRST	SECOND	THIRD
Participate in discussions about learning to include appropriate voice level, phrasing, sentence structure, and intonation.	Recognize and use synonyms, antonyms, homonyms, and homophones.	Recognize synonyms, antonyms, homonyms, and homophones for identified vocabulary words.	Recognize synonyms, antonyms, homonyms, and homophones for identified vocabulary words presented in isolation or within a group of words.
Recognize colors and color names, positional words, and rhyming words.	Use context clues to gain meaning of unfamiliar words.	Recognize the correct meaning of a multiple-meaning word when presented in text.	Recognize the correct meaning of a multiple-meaning word when presented in text.
	Identify and use multiple meaning words.	Apply context clues to determine the meaning of an unknown word.	Apply structural analysis and context clues to decode and encode words.
		Given a variety of reading material, increase the number of recognized words in presented text.	Identify and use content-area vocabulary. Given a variety of reading material, increase the number of recognized words in presented text.

Areas covered. We began this area of our analysis with a comparison between the 26 reading/language documents that include benchmarks only at grade cluster levels (e.g., K-4) and the 14 documents that provide information by grade level for grades K-3. For this analysis, we examined the grade cluster information for the lowest grade cluster provided (e.g., K-2, 1-3, K-4). We were interested in whether there was a noticeable difference in coverage between those documents that did not break out standards and benchmarks/objectives at grades K-3 and those that did.

An examination of Table 7 reveals that there are relatively large differences between these two sets of documents in the content areas covered, especially in the Foundations of Literacy area. For example, 71-86% of the K-3 documents address Phonemic Awareness and Concepts About Print in kindergarten, whereas only 35-38% of the grade cluster documents include these areas. Not surprisingly, it appears that documents which break out benchmarks at grades K-3 are more likely to address the foundational knowledge and skills related to reading acquisition than are those that provide only grade cluster information.

Further analysis of the 14 early reading/language arts documents revealed several areas that virtually all documents cover, as well as several areas that only about two-thirds of the documents cover (See Table 7). Over 90% of the documents cover Meaning-based and Spelling-sound Word Recognition Strategies, Comprehension Strategies, and Experience with Literature at grades 1 and 2. Alternatively, 57% or fewer of the documents address Reading for Enjoyment at the K-3 levels. The kindergarten level appears to differ more

Table 7: Number of States Covering Each Content Area by K-3 Grade Level

Category	STATE BY INDIVIDUAL GRADE LEVEL				STATES BY CLUSTERS*
	K N=14	First N=14	Second N=14	Third N=14	Clusters N=26
Foundations of Literacy					
Phonemic Awareness	12 (.86)	8 (.57)	0	0	9 (.35)
Concepts about Print	10 (.71)	6 (.43)	0	0	10 (.38)
Experience with Text	11 (.79)	13 (.93)	13 (.93)	11 (.79)	23 (.88)
Word Identification and Fluency					
Letter Knowledge	10 (.71)	4 (.29)	0	0	2 (.09)
Meaning-based Word Recognition Strategies	2 (.14)	13 (.93)	14 (1.0)	13 (.93)	23 (.88)
Spelling-sound Word Recognition Strategies	4 (.29)	14 (1.0)	14 (1.0)	10 (.71)	24 (.92)
Sight Words	6 (.43)	11 (.79)	8 (.57)	4 (.29)	4 (.15)
Fluency	1 (.07)	9 (.64)	10 (.71)	5 (.36)	16 (.62)
Comprehension					
Prior Knowledge	5 (.36)	9 (.64)	10 (.71)	9 (.64)	21 (.81)
Comprehension Strategies	11 (.79)	13 (.93)	14 (1.0)	13 (.93)	26 (1.0)
Vocabulary	7 (.50)	11 (.79)	10 (.71)	11 (.79)	
Literature					
Experience with Literature	8 (.57)	13 (.93)	13 (.93)	13 (.93)	21 (.81)
Genre	8 (.57)	12 (.86)	11 (.79)	13 (.93)	20 (.77)
Habits and Attitudes					
Read for Enjoyment	4 (.29)	7 (.50)	7 (.50)	8 (.57)	13 (.50)

*These are the states that did not provide grade level breakdowns for K-3.

from the 1–3 levels than the 1–3 levels differ among themselves. For example, 57% or fewer of the kindergarten levels include Meaning-based Word Recognition Strategies, Experience with Literature, and Genre, whereas 79–100% of documents address these areas at the 1–3 levels. Although there is more consistency across grade levels in the Foundations of Literacy area, it is still notable that one-third to one-half of the documents do not address Concepts about Print and Phonemic Awareness at both the kindergarten and first-grade levels.

Our analysis of the extent to which the content of these documents addresses the needs of Limited English Proficient (LEP) and bilingual students indicates that this is an area which goes virtually unaddressed. State D provides a notable exception. This state, which serves a large population of LEP students, organized its entire document in three columns—one each for English language arts, Spanish language arts, and English as a Second Language (ESL). The standards in each column address the same curricular goals, but the means to achieving the goals are specific to the needs of children who are learning English as a second language and who are continuing to hone their literacy skills in their home language.

State D's approach incorporates research findings and recommendations about how schools can best support the reading development of bilingual and ESL children. The new volume from the National Research Council, *Preventing Reading Difficulties in Young Children* (1998), and the Center for Research on Education, Diversity and Excellence (CREDE) both make the following research-based suggestions for improving the reading achievement of bilingual and ESL children: All students benefit from grade-level instruction in their first language as they are becoming fluent in English. Children will not benefit from formal reading instruction in English until they have achieved oral fluency in English. Therefore, reading instruction/materials should be provided in a child's first language until that child has achieved oral fluency in English, whereupon he or she can apply those reading skills to text in English (CREDE, 1998; National Research Council, 1998, p. 321).

In contrast to state D, State J—with a student population of at least 25% ESL students—does not address the specific needs of its bilingual and ESL students anywhere in the standards and benchmarks. The introduction to the document briefly addresses this issue, simply stating that it would be unfair to all students if the standards were altered in any way to specifically address ESL students. This document leaves it to the “local education authorities” to address the needs of second language learners, but provides no guidance as to how this might best be accomplished and nowhere supports the research-based recommendations cited above. As written, this state's document would support a local decision to forego any accommodations for ESL or bilingual students. Though this is clearly a safe political choice, particularly in a state in which bilingual education is a highly politicized issue, it is a choice that leaves local districts without adequate guidance to make the curricular decisions that will best serve the needs of all students.

Most of the other states in our sample fall between states D and J regarding the issue of cultural and linguistic diversity. Although just one other document includes elaborated or additional benchmarks (and it is not one of the states that breaks down benchmarks at the K–3 levels), a few provide more detailed information regarding ESL students in introductions or appendices. Linguistic diversity is an area in which some of the states clearly do not “expect and support *all* students achieving to high levels”—one of the criteria guiding our analysis. Without additional information and support within standards documents for teachers and curriculum/assessment developers who must meet the needs of linguistically diverse populations, some of our most vulnerable children will be left behind.

Appropriateness of Content

When we assess how standards impact systems of curriculum, instruction, assessment, and ultimately student achievement, it is crucial that we take issues of content-appropriateness into consideration. For example, a standards document that includes word-level skills at the kindergarten level that are developmentally too sophisticated could result in wasted instructional time, inappropriate expectations and assessments, and student frustration and failure. Conversely, if a state's standards exclude a fundamental foundational skill at the kindergarten level, such as letter knowledge or concepts about print, students may be ill prepared for more advanced instruction.

Inclusion of inappropriate content. A close examination of the content of our 14 core documents revealed that some of the states place inappropriate emphases at the kindergarten level. It is important to remember that

standards are guides for what *all children ought to know and be able to do* at the designated grade level. As the research emphasizes, *some* kindergarten children will arrive in the fall already reading or ready for systematic reading instruction. These children's needs—more knowledge and skill in using decoding skills and comprehension strategies, etc.—ought to be met. However, many, if not most, kindergarten children will not arrive in the fall, nor leave the following spring, with those skills in place. One of the goals of kindergarten is to have children ready to begin systematic instruction in word-level skills and comprehension strategies when they enter first grade.

A benchmark such as the following is an inappropriate expectation for *all* kindergarten children: "Recognize sound-letter correspondence including beginning consonants, two-letter consonant blends, and two-letter consonant digraphs—all in the initial word positions." Research suggests that even at the beginning of first grade the emphasis should be on the most regular and important letter-sound relationships (Adams, 1990; Anderson et al., 1985). Consonant blends and digraphs are usually learned as a result of instruction in beginning consonant sounds and from systematic instruction in how to blend sounds. Based on our reading of the research, it seems that a more appropriate benchmark at this level would have limited the goal to letter-sound correspondence for beginning consonants.

Similarly, some of the documents require that all kindergarten children should know and be able to segment words by their sounds. One kindergarten benchmark reads: "Segment one-syllable spoken words into individual phonemes" (this benchmark also appears, more appropriately, at the first-grade level). Another expects kindergartners to: "Count number of syllables in a word and sounds in syllables." In discussing segmentation tasks, Adams (1990) states that they are "generally unattainable by children who have received no formal reading instruction, which forces us to wonder whether the skills they assess are truly causes or merely effects of beginning reading instruction" (Adams, 1990, p. 81). Adams (1990) also cites extensive literature verifying that performance on a segmentation task increases dramatically across the first grade.

Adams reviews various phonemic awareness tasks, arranging them from "most primitive" to most sophisticated as follows: knowledge of nursery rhymes, oddity tasks, blending and syllable-splitting, phonemic segmentation, and phoneme manipulation. Of phonemic segmentation, she writes: "These tasks require not only that the child have a thorough understanding that words can be completely analyzed into a series of phonemes, but further that she or he be able to so analyze them, completely and on demand" (Adams, p. 80). Although Adams doesn't talk explicitly about developmental levels when discussing phonemic segmentation, she does when discussing phoneme manipulation; she says that phoneme manipulation tasks have generally been found to be beyond the reach of children before the very end of first grade (p. 72). So, it seems arguable that segmentation tasks might be beyond the reach of most kindergartners. At the very least, segmentation should only be introduced after children show awareness of the more "primitive" levels of sound symbol correlations. Segmentation instruction appears to be effective only when its results are measured in the context of an entire early reading program, not as an isolated skill introduced before and apart from early reading instruction.

The point is not whether some kindergartners could achieve these goals; the point is whether *all* kindergartners should be expected to achieve them, since these are fairly sophisticated phonemic awareness tasks. Children's performance on these tasks may indicate nothing more than that they have participated in formal reading instruction. The appropriateness of these expectations for children with culturally and linguistically diverse backgrounds needs to be addressed, as well.

As one of the primary purposes of standards documents is to provide guidance for state and local assessment and curriculum development, the inclusion of inappropriate content has implications for student achievement and classroom practice. Assessments designed to include the above skills at the kindergarten level will result in the failure of many children to achieve competency, particularly children who do not enter kindergarten with phonemic awareness and understandings of print. Additionally, if kindergarten language arts curriculum and assessment are designed around these benchmarks, districts will be compelled to focus classroom time and attention on these skills rather than on developmentally appropriate literacy skills and activities.

Exclusion of important content. Another critical content issue we discovered is the tendency to ignore or gloss over crucial knowledge and skills in reading at the early levels. Some state documents pay little or no attention to components of important areas such as phonemic awareness, decoding, concepts about print, letter knowledge, and response to text.

Decoding is an area that receives inadequate attention in some documents, particularly at the first-grade level. The closest that one document comes to addressing decoding skills in first grade is this benchmark: "Recognize that written language can represent spoken language." Benchmarks such as this do not reflect our best knowledge of what children should know and be able to do to become skilled readers. As a result, the benchmarks fail to provide enough guidance for districts designing systems of curriculum, instruction, and assessment.

Benchmarks at the early levels should provide districts and teachers with specific information about the word identification skills that we know are beneficial at the first-grade level. The research concurs that systematic instruction in the blending of sounds is crucial in aiding beginning readers in the decoding process (Adams, 1990; Anderson et al., 1985; CIERA, 1998; National Research Council, 1998). A benchmark including this skill need not be prescriptive, however. For example, one benchmark at the first-grade level reads, "Can blend the phonemes of one-syllable words." This benchmark addresses a specific, research-based skill that all first-graders need to know and be able to do if they are to master conventional reading. As we stated earlier, there is a fine line between appropriate flexibility and appropriate guidance. However, it seems crucial that content around which there is consensus in research needs to be addressed at the early levels to ensure that all children are receiving the skills they need to become competent readers.

One of the most important areas of knowledge that developing readers can develop at preschool and kindergarten levels involves learning the various forms and functions of written language (concepts about print). Many of the state standards documents reflect this important area of knowledge, but

some do not address this essential knowledge category at all, and instead move directly to word-level skills and comprehension strategies at the kindergarten level. Given the consensus in research about the importance of knowledge about concepts of print, it is significant that 4 of 14 documents do not address it.

The lack of attention to concepts about print is significant in two ways. First, children's knowledge about the forms and functions of print is the basis upon which more sophisticated skills and processes are built. Failure to address these issues at the earliest levels will leave children underprepared to learn the decoding and comprehension strategies they will encounter as they progress through the primary grades. Second, the children who will be hurt most by this omission are those who arrive at school with the smallest number of encounters with conventional literacy activities, which is more often true of children from poor or working-class backgrounds, or students whose home language is other than standard English.

Research has shown that middle-class children often enter school having had rich, varied experiences with the kinds of literacy activities valued in schools (such as storybook reading, letter knowledge, and rhymes). Other children arrive at school from communities where literacy activities do not conform to those fostered in schools and, therefore, must learn those conventions upon entering kindergarten (e.g., Heath, 1983). These children need and deserve a solid base upon which to build their reading skills. We can ensure that they gain such a foundation only by making it an explicit goal at the earliest levels.

Judging appropriate content for standards documents is complicated. However, if research consensus exists around certain content in early reading, then that content needs to be reflected in state standards. Only by gleaning and synthesizing the content criteria from research across perspectives can we begin to have substantive conversations about the impact of standards on children's early success in reading.

Conclusions and Recommendations

Conclusion 1. The majority of states do not break out standards and/or benchmarks/objectives at early grade levels; approximately one-third do so. When documents do not provide detailed information for grades K–3, they often miss important content that is unique to these levels, especially in the Foundations of Literacy areas.

Recommendation 1. It is helpful to provide additional information at K–3 grade levels because of the relatively large differences between and among these grade levels as compared to upper grade levels.

Conclusion 2. Documents vary in the ways in which they conceptualize and organize the area of Reading. Some documents do very little parsing of the Reading area and others parse it in very complex ways. Still others provide organizers that integrate the language arts and do not identify Reading

apart from the other language arts. All of these arrangements pose challenges in developing local systems of curriculum, instruction, assessment, and in reporting student achievement to external audiences.

Recommendation 2. The organization of standards and benchmark documents should reflect a conceptualization of Reading that is simple enough to support manageable systems of curriculum, instruction, assessment, and reporting, but not so simple that important areas of emphasis can be overlooked.

Conclusion 3. Benchmarks/objectives vary along a continuum from overly specific to overly general. In general, the larger the number of benchmarks, the more specific they are. Conversely, the fewer the benchmarks, the more general they are.

Overly specific benchmarks often read like lists of skills and instructional activities, rather than the goals we expect students to achieve. Furthermore, they do not appear to allow for much local flexibility in the development of district curricula, instruction, and assessment practices and policies. Overly general benchmarks are often broad goals rather than guidelines for what students should know and be able to do; they do not appear to offer sufficient guidance for the development of district level curriculum, instruction, and assessment.

Recommendation 3. The optimum level of detail provides sufficient guidance while allowing for flexibility in the development of local systems of curriculum, instruction, and assessment. The translation of state standards and benchmarks into local systems of curriculum, instruction, and assessment is at the heart of the professional development that is essential for successfully implementing state frameworks at the local level.

Conclusion 4. Many documents do not provide a viable curricular path for the development of knowledge and skills across grade levels.

Recommendation 4. It is important that standards and benchmarks provide a progression of knowledge and skills from kindergarten to grade 3, and from grade 3 through grade 12. It should be clear how the knowledge and skills developed in the primary grades lay the foundation for knowledge and skills in the upper grades, and how the standards and benchmarks provide the basis for a coherent K–12 curriculum.

Conclusion 5. Some documents include content inappropriate for certain grade levels, especially kindergarten, and/or ignore important content. Inappropriate content is likely to lead to inappropriate assessments, which, in turn, will lead to frustration and failure. Ignoring important content can result in children's inability to benefit from instruction.

Recommendation 5. The content of early reading/language arts standards and benchmarks should derive from a convergence of information from research conducted from a variety of perspectives, including research on reading acquisition among linguistically and culturally diverse children.

State level content standards can and should invite us to converse about what our students should know and be able to do. These conversations

should extend beyond the content of the curriculum to issues such as accountability and assessment, alignment and continuity, and preservice and inservice teacher education. State standards are so important that our evaluations of them need to be based on defensible criteria that are open to examination by the consumers of the evaluations. Although the CCSSO standards document provides a good beginning, we also need content criteria that reflect current research in each subject matter area. Many national standards documents provide the specificity needed to develop content criteria, but this is not true in the case of English language arts. The content criteria developed for this analysis can be used to evaluate and/or develop standards for early reading/language arts standards, and can also serve as a model for the development of content criteria for English language arts standards at other developmental levels.

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About CIERA

The Center for the Improvement of Early Reading Achievement (CIERA) is the national center for research on early reading and represents a consortium of educators in five universities (University of Michigan, University of Virginia, and Michigan State University with University of Southern California and University of Minnesota), teacher educators, teachers, publishers of texts, tests, and technology, professional organizations, and schools and school districts across the United States. CIERA is supported under the Educational Research and Development Centers Program, PR/Award Number R305R70004, as administered by the Office of Educational Research and Improvement, U.S. Department of Education.

Mission. CIERA's mission is to improve the reading achievement of America's children by generating and disseminating theoretical, empirical, and practical solutions to persistent problems in the learning and teaching of beginning reading.

CIERA Research Model

The model that underlies CIERA's efforts acknowledges many influences on children's reading acquisition. The multiple influences on children's early reading acquisition can be represented in three successive layers, each yielding an area of inquiry of the CIERA scope of work. These three areas of inquiry each present a set of persistent problems in the learning and teaching of beginning reading:

CIERA INQUIRY 1 Readers and Texts

Characteristics of readers and texts and their relationship to early reading achievement. What are the characteristics of readers and texts that have the greatest influence on early success in reading? How can children's existing knowledge and classroom environments enhance the factors that make for success?

CIERA INQUIRY 2 Home and School

Home and school effects on early reading achievement. How do the contexts of homes, communities, classrooms, and schools support high levels of reading achievement among primary-level children? How can these contexts be enhanced to ensure high levels of reading achievement for all children?

CIERA INQUIRY 3 Policy and Profession

Policy and professional effects on early reading achievement. How can new teachers be initiated into the profession and experienced teachers be provided with the knowledge and dispositions to teach young children to read well? How do policies at all levels support or detract from providing all children with access to high levels of reading instruction?



CIERA

Center for the Improvement of
Early Reading Achievement

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