

EVERY CHILD READING: A PROFESSIONAL DEVELOPMENT GUIDE

A Companion to
Every Child Reading:
An Action Plan

Learning First Alliance

November 2000

The Learning First Alliance is composed of the following organizations:

American Association of Colleges for Teacher Education
American Association of School Administrators
American Federation of Teachers
Association for Supervision and Curriculum Development
Council of Chief State School Officers
Education Commission of the States
National Association of Elementary School Principals
National Association of Secondary School Principals
National Association of State Boards of Education
National Education Association
National PTA
National School Boards Association

Development and production of *Every Child Reading: A Professional Development Guide* were supported by a generous grant from the Ewing Marion Kauffman Foundation.

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Printed in the United States of America

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ASCD Stock No. 300303

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Every Child Reading: An Action Plan

This paper expresses the consensus view of principals, teachers, superintendents, PTAs, school boards, teachers colleges, state education commissioners, and other members of the Learning First Alliance regarding some basic principles about how to teach reading. The report calls for an end to the reading wars and a sensible balance between literature and phonics. It outlines eight steps necessary to ensure the reading success of every child as well as a detailed action plan for making these things happen.

Every Child Mathematically Proficient: An Action Plan

The Learning First Alliance's paper on mathematics puts forth research-based strategies "to bring American students to world class levels in mathematics." The paper addresses the growing need for American students to become more proficient in increasingly complex mathematics subjects at earlier ages. To accomplish the report's goal of virtually all students mastering the content now included in Algebra I and Geometry by the end of ninth grade, the Alliance proposes several action steps to strengthen professional practice. They include initiating incentive programs to attract more qualified teachers of mathematics, equipping teachers with skills and support to help children of all backgrounds complete mathematics courses, and ensuring that all mathematics teaching is done by licensed, qualified teachers.

Every Child Reading: An Action Plan (Stock No. 300342) and *Every Child Mathematically Proficient: An Action Plan* (Stock No. 300343) are also available from ASCD for \$3 per copy. All discounts above apply. All three papers can be downloaded free of charge from the Learning First Alliance's web site: www.learningfirst.org.

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Foreword

This guide to professional development has been adopted by the Learning First Alliance, an organization of 12 leading national education associations. It has been informed by many distinguished experts in the fields of reading and professional development. We are pleased to acknowledge the assistance of Louisa C. Moats, Project Director, National Institute of Child Health and Human Development, Early Interventions Project, Washington, as well as the advice provided by Marilyn Jager Adams, Research Associate, Graduate School of Education, Harvard University; Julie Anderson, English Specialist, Oregon Department of Education; Isabel Beck, Professor of Education and Senior Scientist, School of Education, Learning Research and Development Center, University of Pittsburgh; Joseph Conaty, Office of Elementary and Secondary Education, Director, Special Initiatives Unit, U.S. Department of Education; Alice R. Furry, Director, Reading Lions Center, Sacramento County Office of Education; Sally Hampton, Noyce Fellow, Carnegie Foundation for the Advancement of Teaching; Phyllis C. Hunter, Consultant for Texas Statewide Reading Initiatives, Texas Education Agency; Michael L. Kamil, Professor, Psychological Studies in Education, School of Education, Stanford University; Diane Levin, Education Policy Advisor to the Chief Deputy Superintendent, Accountability and Administration, California Department of Education; Renee Murray, Special Project Branch Manager, Kentucky Department of Education; Jean Osborn, Educational Consultant, Center for the Study of Reading, University of Illinois, Urbana-Champaign; Cathy M. Roller, Director of Research and Policy, International Reading Association; and Robert E. Slavin, Codirector, Center for Research on the Education of Students Placed at Risk, Johns Hopkins University.

Although many individuals have offered suggestions that have been incorporated herein, this guide does not necessarily represent the views of any individual who assisted in the writing or provided advice and comment.

Preface

In 1998, the Learning First Alliance published *Every Child Reading: An Action Plan*, which set as a goal that virtually every healthy child born in the 21st century be reading well by age 9. Noting that the task of reforming reading instruction is enormous, the action plan called on educators and policymakers to take the following steps:

- Base educational decisions on evidence, not ideology.
- Promote adoption of texts based on the evidence of what works.
- Provide adequate professional development.
- Promote whole-school adoption of effective methods.
- Involve parents in support of their children's reading.
- Provide early childhood experiences that promote literacy.
- Improve preservice education and instruction.
- Provide additional staff for tutoring and class-size reduction.
- Improve early identification and intervention.
- Introduce accountability measures for the early grades.
- Intensify reading research.

Although each of these elements is crucial, none is more central to reading success for all children than ensuring that all students are taught to read by teachers who have been well prepared to understand and apply the research base. Recognizing that the members of the Learning First Alliance are uniquely able to recommend and put into practice research-based guidance on professional development for elementary school teachers, the Action Plan called on Alliance members to recommend suggested criteria for high quality inservice professional development. This guide responds to that call by providing professional development guidelines on reading for teachers of the early elementary years.

Purpose

National, state, and local interest in the quality of our schools and the achievement of all students is as high as it has ever been. Educational leaders all over the United States have embraced higher standards for students, accountability for schools, and improvement of teacher quality. Central in the discussion of school improvement is the belief, supported by research, that almost all students can learn to read and that much reading failure is preventable. The Learning First Alliance's 1998 action plan on early reading instruction, *Every Child Reading: An Action Plan*, aligns with several other reviews that rest on decades of reading research.¹ *Every Child Reading: An Action Plan*, the authoritative 1998 research synthesis *Preventing Reading Difficulties in Young Children* from the National Academy of Sciences, and, more recently, the *Report of the National Reading Panel*, identify scientifically validated practices that enable all but 2 percent to 5 percent of children to read, even in populations where the incidence of failure is often far higher.

Nevertheless, the new understandings of how children learn to read, why some fail, and how best to teach have yet to be applied on a widespread, consistent basis. Teachers may be educated, licensed, and employed without knowledge of the most important tools for fighting illiteracy. They may be asked to instruct all students in early reading without the essential information, program resources, or contextual supports necessary to achieve such a goal. As *Every Child Reading: An Action Plan* concluded, substantial changes in the preparation and professional development of all those who are responsible for student outcomes—teachers, administrators, and specialists—is necessary.

For the teaching of literacy to succeed for almost all students, even those who are challenging to teach, educators must apply our best understanding of effective professional development, such as the principles and practices recommended by the National Staff Development Council and the National Partnership for Excellence and Accountability in Teaching.² Single workshops unconnected to an overall plan of schoolwide improvement are ineffective. Likewise, the superficial treatment of complex information should be replaced by study, practice, implementation, and evaluation of instruction supported by research. Sustained and continuous professional growth toward effective literacy instruction is every educator's and every school's responsibility.

The purpose of this document is to assist planners of professional development for reading and language arts education to set goals, select or design viable programs, and allocate resources wisely. The components of effective reading instruction are clearly stated in a series of consensus reports, in addition to *Every Child Reading: An Action Plan*.³ Much is also known about adult learning and teacher education in general.⁴ Although research documenting the best ways to build teacher expertise is limited, there is significant evidence that professional development in reading can have positive effects on teaching and produce significantly higher student achievement.⁵ While more information is needed on the optimal design of professional development in reading, there is sufficient basis for putting forward guidelines for the content, context, and methodology of professional development in reading instruction, even as we call for research on what works best.

There is particular need for additional research to identify the most effective approaches for teaching reading to English language learners. With that caution in mind, however, the teacher knowledge and skills outlined in these guidelines are a necessary—although not sufficient—foundation for reading teachers of children who speak languages other than English. Reading teachers of English language learners also need additional professional development in the process and strategies of second language acquisition as well as in reading comprehension instruction and vocabulary and syntactic development. These teachers should also be given training in specific instructional strategies that are most beneficial for

different populations of students, including very young English language learners who have not yet learned to read, older children with limited formal schooling who struggle to read in any language, and older students who read proficiently in their native language. But, while these issues are very important and merit significant attention, they are beyond the scope of this guide.

Although this guide is only a starting point for professional development, we envision school, district, and state personnel using these guidelines to commit the time and resources necessary to build lasting expertise. Under the Reading Excellence Act, for example, quality professional development is a top priority. Programs will be evaluated according to whether or not they produce changes in student performance. Pressed by many states' new achievement standards, teachers must know how to accomplish genuine and lasting student gains. For universities and institutes that provide teachers with professional development in reading, clear expectations that include demonstrable gains in student achievement must be the focus.*

The following sections contain recommendations agreed to by the members of the Learning First Alliance that incorporate their experience, the research evidence on professional development, and the consensus on instructional practices most likely to improve reading achievement in the earliest school years.

Endnotes

- 1 Adams, M. (1990). *Beginning to read: Thinking and learning about print*. Cambridge, MA: MIT Press.
Center for the Improvement of Early Reading Achievement (CIERA). (1999). *Improving the reading achievement of America's children: 10 research-based principles*. Ann Arbor, MI: Author. (Flyer available from CIERA, University of Michigan School of Education, 610 E. University Ave., Room 1600 SEB, Ann Arbor, MI, 48109-1259 and also at www.ciera.org/ciera/information/principles/index.html)
Fletcher, J. M., & Lyon, G. R. (1998). Reading: A research-based approach. In W. Evers (Ed.), *What's gone wrong in America's classrooms* (pp. 49–90). Stanford, CA: Hoover Institution Press.
National Reading Panel. (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*. Washington, DC: National Institute of Child Health and Human Development, National Institutes of Health.
Pressley, M. (1998). *Reading instruction that works: The case for balanced teaching*. New York: Guilford Press.
Snow, C., Burns, S., & Griffin, P. (1998). *Preventing reading difficulties in young children*. Washington, DC: National Academy Press.
- 2 National Partnership for Excellence and Accountability in Teaching. (1999). *Improving professional development: Research-based principles*. Washington, DC: Author. (Available at <http://www.npeat.org/strand2/pdprin.pdf>)
National Staff Development Council. (1995). *Standards for staff development: Elementary school level*. Oxford, OH, and Alexandria, VA: Author.
- 3 Adams, M. *Beginning to read*.

Center for the Improvement of Early Reading Achievement. *Improving the reading achievement.*

Fletcher, J. M., & Lyon, G. R. Reading: A research-based approach.

International Reading Association (2000). *Making a difference means making it different.* Newark, DE: International Reading Association.

National Reading Panel. *Report of the National Reading Panel.*

Pressley, M. (1998). *Reading instruction that works: The case for balanced teaching.* New York: Guilford Press.

Snow, C., Burns, S., & Griffin, P. *Preventing reading difficulties.*

4 Anders, P., Hoffmann, J., & Duffy, G. (2000). Teaching teachers to teach reading: Paradigm shifts, persistent problems, and challenges. In M. Kamil, P. Mosenthal, P. D. Pearson, & R. Barr (Eds.), *Handbook of reading research: Vol. 3* (pp. 721–744). Mahwah, NJ: Lawrence Erlbaum.

Hoffman, J., & Pearson, P. D. (2000). Reading teacher education in the next millennium: What your grandmother's teacher didn't know that your granddaughter's teacher should. *Reading Research Quarterly, 35*, 28–44.

5 National Reading Panel. (2000). *Report of the National Reading Panel.*

McCutcheon, D., & Berninger, V. W. (1999). Those who know, teach well: Helping teachers master literacy-related subject matter knowledge. *Learning Disabilities Research and Practice, 14*(4), 215–226.

* A similar call for the application of these principles has been made by the National Joint Committee on Learning Disabilities in a position paper on professional development of teachers.

† In addition to evidence cited in the National Reading Panel report, see the promising study by McCutcheon and Berninger, "Those Who Know, Teach Well: Helping Teachers Master Literacy-Related Subject Matter Knowledge," which documented significant gains in teacher knowledge and gains in kindergarten student achievement in phonological awareness, word reading, comprehension, spelling, and compositional fluency after a two-week summer seminar for teachers accompanied by follow-up and consultation.

* Gains in student achievement should be assessed by more than one valid, reliable measure.

The Context for Professional Development

Teachers are more likely to improve student achievement in reading when these conditions prevail:

Everyone who affects student learning is involved.

It is largely ineffective to educate classroom teachers about early reading instruction unless their administrators, policymakers, specialists, teaching assistants, tutors, and parents operate with similar concepts and practices. If leaders agree about essential program elements, teachers can identify goals for their own learning and communicate these to their administrators. Teachers need to know how they will be evaluated, what resources and instructional materials will be available, what kind of assistance will be offered, and whether the practices taught this year will be valued the next. By setting goals and establishing priorities, administrators commit support to teachers for learning the essentials of research-based instruction.

Student standards, curricular frameworks, textbooks, instructional programs, and assessments are closely aligned with one another.

When academic standards, curricular frameworks, textbooks, instructional programs, and assessments are aligned, teachers can more readily commit effort and resources to implementing them. Reading components, principles, or practices are most likely to be used when they are embedded in the core program adopted by the district. If everyone is committed to an effective approach, results are usually better.

Professional development is given adequate time and takes place in school as part of the work day.

Teaching children how to read and write is a complex activity that is learned with knowledge, coaching, and experience. Because teachers are professionals who do more than manage a room full of students, they need time to reflect on the success of their lessons with others who are working toward similar goals. Professional development could easily include an average of three hours per week or 80 to 100 hours per year in study, collaboration, observation of master teachers, and research. School-based professional development should focus on the evidence for student learning and remedies for insufficient progress.

The expertise of colleagues, mentors, and outside experts is accessible and engaged as often as necessary in professional development programs.

Regular (weekly to bimonthly) collaborations with grade level teams, specialists, and facilitators can be seminars in curriculum development, interpretation of student assessments, or acquisition of teaching skill. Such collaboration will challenge the tradition of teaching as a solitary, private endeavor. Positive schoolwide change requires collaboration of faculty, administration, and community toward a commonly held vision. That vision is most often achieved when teachers learn from each other as well as from experts. Observation is an important element of this type of learning. It can include: peers observing each other; teachers observing expert teachers and discussing what they have seen; and observations of teachers by experts who provide them with feedback. Off-site courses, institutes, and seminars that feature credible experts are critical for enriching teacher knowledge, but support and follow-up is necessary if new practices are to take root.

Strong instructional leadership is present.

Vocal and visible commitment from district and building administrators is necessary to support improvement of reading instruction districtwide. The superintendent and other district leaders can set and hold to the agenda for a reading initiative and provide firm guidance on fundamental issues of instruction. They can promote understanding among all educators of documents such as *Every Child Reading: An Action Plan*,¹ the *Report of the National Reading Panel*,² and *Preventing Reading Difficulties in Young Children*.³ Appeal to such authoritative documents may represent an important shift in how decisions are made. In the past, teachers have often been left to discover or invent good practices without such guidance. Leaders must also cultivate school board and community support for specific goals and practices in literacy instruction.

There is commitment to a long-range plan with adequate funding.

Preparation for change, change itself, and institutionalization of change in teaching practices may take three to five years. Short-term solutions to long-range challenges will not work. The process of committing to long-term funding is essential in sustaining focus and effort, because other priorities will compete and undermine commitment to this type of improvement effort. Adequate funding must be linked directly to the expected results of better instruction.

Endnotes

¹ Learning First Alliance. (1998). *Every child reading: An action plan*. Washington, DC: Author.

² National Reading Panel. (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*. Washington, DC: National Institute of Child Health and Human Development, National Institutes of Health.

³ Snow, C., Burns, S., & Griffin, P. (1998). *Preventing reading difficulties in young children*. Washington, DC: National Academy Press.

The Process of Professional Development

Adult learners, like children, need to inquire, reflect, and respond to new ideas if they are to embrace them. Making sense of experience and transforming professional knowledge into daily teaching habits takes time.¹ Teachers need to implement practices they understand and that help them attain goals; otherwise, what is learned will be forgotten when a new trend comes along.

For a teacher to learn a new behavior and effectively transfer it to the classroom, several steps are involved:

1. Understanding the theory and rationale for the new content and instruction.
2. Observing a model in action.
3. Practicing the new behavior in a safe context.
4. Trying out the behavior with peer support in the classroom.

Many successful attempts may be needed before the new behavior feels comfortable and well learned.² Moreover, an individual teacher's efforts to improve practice are much more likely to succeed and persist if they are part of a schoolwide and, ideally, districtwide effort.

At present, teachers often expect that change will be mandated from an administration that is distant from their needs and problems. Departure from this norm would be a great step forward. To engage teachers more fully in their own professional development, the following conditions of change, growth, and learning should be respected:

Change occurs in definable stages.³

Ideas need to be incubated before people are ready to act on them. In the case of reading instruction, foundation knowledge concerning reading development, the structure of English, and the research on instruction are essential.*

Such foundation knowledge and research should be studied and discussed before a major change in behavior is expected of teachers. For example, spring seminars might precede a new program implementation in the fall. Summer coursework could involve intensive learning of content, leading into gradual introduction of reading instruction changes as the school year progresses.

A variety of professional development activities will meet individual needs better than a “one-size-fits-all” approach.

Professional development programs should consider the fact that teachers' needs vary. Options could include study groups, collaborative teams, individual projects, peer observations, demonstrations, apprenticeships, classroom research projects, observations and feedback from those who are more expert, and pilot programs. These activities should be grounded in clear statements about the goals, content, and practices of evidence-based reading instruction. The content and practices that are most likely to result in better student outcomes do not need to be reinvented, but teachers will prefer some choice as to how, and in what order, that knowledge and skill is acquired.

Self-evaluation is part of an individual professional development plan.

Teachers' previous education, experience, interests, and aptitudes will vary. In a culture of collaborative learning it should become the norm for teachers to identify the ways in which they need to improve. The starting point for teachers' self-evaluation should be objective assessment of students for the purpose of improving student performance. If teachers identify an important aspect of student learning

that is not being well taught, they can work together to design their own professional development activity.

After initial concentrated work, follow-up consultation and classes are offered.

Learning to teach involves learning a large repertoire of skills and exercising judgment about when to use what, with whom, and why. New teaching skills must be practiced and refined with support and coaching. Coaching—which may be provided by peers, content experts, or supervisors—is an important aspect of professional development. Sustained contact with teachers who are learning new skills and when to apply them should be part of the long-range plan.

Sufficient time is allowed before the outcomes of a professional development program are determined.

Again, a long-range vision for school change and instructional improvement may include three to five years of work toward a common goal, although measurable progress should be expected every year. That goal should reasonably assume that fewer than 5 percent of the student body will experience reading difficulties that require long-term special services. Student achievement tests and portfolios, classroom observations, curriculum-based measures, individual case studies, and teacher surveys will all have a role in determining if the professional development program is effective.

Endnotes

¹ Bransford, J., Brown, A., & Cocking, R. (Eds.). (1999). *How people learn: Brain, mind, and experience in school*. Washington, DC: National Academy Press.

² Joyce, B., & Showers, B. (1995). *Student achievement through staff development*. New York: Longman Press.

³ Fullan, M. G. (1991). *The new meaning of educational change*. New York: Teachers College Press.

* See Appendix A for a listing of valuable professional development research sources.

The Content of Professional Development

Agreement by experts in recent, comprehensive reviews of reading research is substantial: A successful teacher of beginning reading enables children to comprehend and produce written language, exposes them to a wide variety of texts to build their background knowledge and whet their appetite for more, generates enthusiasm and appreciation for reading and writing, and expertly teaches children how to decode, interpret, and spell new words from a foundation of linguistic awareness. The successful teacher adapts the pacing, content, and emphasis of instruction for individuals and groups, using valid and reliable assessments. The teacher's choices are guided by knowledge of the critical skills and attitudes needed by students at each stage of reading development. Beginning reading skills are taught explicitly and systematically to children within an overall program of purposeful, engaging reading and writing.

A "balanced" approach in the primary classroom does not mean that each component of reading instruction receives equal emphasis at every stage of reading development. Likewise, a balanced approach for teachers may not mean that they spend equal time learning every aspect of reading instruction simultaneously.

Teachers must never lose sight of the fact that all students need a steady diet of worthwhile and varied reading experiences shared with other people. Teachers also need the more technical skills required for teaching children how to read and write the academic language of books. Because so many textbooks and instructional programs have de-emphasized some challenging aspects of beginning reading, including the explicit teaching of alphabetic skills, word attack, spelling, grammar, and vocabulary, gaps in teacher knowledge and skill may need to be remedied in these areas especially. They are pivotal for reading success and may deserve special emphasis.

Teachers ideally would have the tools to teach the essentials of reading and language as their children's needs were determined. Each dimension of reading acquisition is worthy of intensive focus in a long-range professional development plan. In addition, the study of any domain of reading and literacy development would be supported with readings that explain the psychological, linguistic, and educational reasons for the recommended practices.*

Components of Effective, Research-Supported Reading Instruction for the Primary Grades[†]

- Phonemic awareness, letter knowledge, and concepts of print
- The alphabetic code: Phonics and decoding
- Fluent, automatic reading of text
- Vocabulary
- Text comprehension
- Written expression
- Spelling and handwriting
- Screening and continuous assessment to inform instruction
- Motivating children to read and developing their literacy horizons

Phonemic Awareness, Letter Knowledge, and Concepts of Print

Phoneme awareness and letter-sound knowledge account for more of the variation in early reading and spelling success than general intelligence, overall maturity level, or listening comprehension.¹ They are the basis for learning an alphabetic writing system. Children who have poorly developed phonemic

awareness at the end of kindergarten are likely to become poor readers. Explicit instruction in sound identification, matching, segmentation, and blending, when linked appropriately to sound-symbol association, reduces the risk of reading failure and accelerates early reading and spelling acquisition for all children.

Teaching these skills well, however, is not as easy as it might seem. Teachers must themselves be aware of speech sounds and how they differ from letters in order to help students acquire awareness of phonemes and the symbols that represent them. There is growing evidence that many adults need explicit instruction about language before they themselves demonstrate the level of sound and spelling awareness needed to teach it well.² In addition, teachers need to understand the developmental progression from spoken word and syllable identification to blending and segmenting all the phonemes in simple words.³ Finally, instruction in this domain begins with *auditory-verbal* exercises to direct children’s attention to sound, but phonemes should be linked with letters once children understand that letters represent segments of their own speech. At that point, phoneme awareness becomes part of a well-designed reading or spelling lesson.

Table 1 outlines concepts (teacher knowledge) and practices (teacher skills) that contribute to reading success. The third column on the right suggests professional development experiences that can help teachers acquire knowledge and skill in this domain. The concepts and practices included in the teacher knowledge and teacher skills columns reflect consensus in research-based statements of the components of effective reading instruction. However, the specific professional development experiences suggested in the third column reflect our view, based on our collective experience and the limited research available, of the types of activities that are likely to lead to improved instruction and student achievement. The professional development experiences listed are neither all-inclusive nor necessarily superior to all other approaches. But, while dramatically more research is needed in this area, these listed experiences are the type that are likely to be found in an effective professional development program.

**Table 1:
Phonemic Awareness, Letter Knowledge, and Concepts of Print**

Teacher Knowledge	Teacher Skills	Possible Professional Development Experiences
Know the speech sounds in English (consonants and vowels) and the pronunciation of phonemes for instruction.	Select and use a range of activities representing a developmental progression of phonological skill (rhyming; word identification; syllable counting; onset-rime segmentation and blending; phoneme identification, segmentation, and blending).	Practice phoneme matching, identification, segmentation, blending, substitution and deletion.
Know the progression of development of phonological skill.		Order phonological awareness activities by difficulty level and developmental sequence.
Understand the difference	Use techniques for teaching letter	Practice and analyze letter-sound

between speech sounds and the letters that represent them.	naming, matching, and formation.	matching activities (identifying how letters and letter groups are used for representing speech sounds).
Understand the causal links between early decoding, spelling, word knowledge, and phoneme awareness.	Plan lessons in which phoneme awareness, letter knowledge, and invented spelling activities are complementary.	Observe and critique live or videotaped student-teacher interactions during phonological awareness and alphabet instruction.
Understand the print concepts young children must develop.	Teach concepts of print during shared reading of big books.	Role-play the teaching of print concepts during interactive reading aloud.
Understand how critical the foundation skills are for later reading success.	Have ability to monitor every child's progress and identify those who are falling behind.	Discuss children's progress, using informal assessments, to obtain early help for those in need of it.

The Alphabetic Code: Phonics and Decoding

In addition to phoneme awareness and letter knowledge, knowledge of sound-symbol associations is vital for success in 1st grade and beyond. Accurate and fluent word recognition depends on phonics knowledge. The ability to read words accounts for a substantial proportion of overall reading success even in older readers. Good readers do not depend primarily on context to identify new words. When good readers encounter an unknown word, they decode the word, name it, and then attach meaning. The context of the passage helps a reader get the meaning of a word once a word has been deciphered.

The Report of the National Reading Panel provides solid support for the conclusion that systematic phonics makes a more significant contribution to children's reading growth than do alternative programs providing unsystematic or no phonics. Moreover, the superiority of systematic phonics instruction over unsystematic and no phonics instruction is even more evident for low-achieving students, students with learning disabilities, and especially for kindergarten and first-grade students from low-income families.

The ability to spell is generally improved with systematic phonics instruction even in children who read relatively well. Instruction in word recognition, moreover, should include not only sound-letter correspondences, but also sight words, syllabication (breaking words into syllables), and morphology (breaking words into meaningful parts). By the end of 2nd grade, students should be able to decode almost any unfamiliar word so that they can attend to uncovering the meaning. The extent to which students will depend on explicit, systematic teaching will vary, but teachers need to be prepared to teach everyone, including those who do not learn to decode with ease.

Teachers cannot teach the relationships between speech and print systematically, explicitly, and skillfully unless they themselves understand how spelling represents sounds, syllables, and meaningful parts of words. English is a predictable, albeit complex language that children can approach with confidence if their teachers present the system itself as one with logic and structure. Teachers need knowledge, guidance, and practice, however, if they are to teach in a way that improves on the ineffective drills and worksheets that may have been misused in the past.

Knowledge, skills, and possible learning experiences for teachers in the domain of decoding, phonics, and word attack are outlined in Table 2.

**Table 2:
Phonics and Decoding**

Teacher Knowledge	Teacher Skills	Possible Professional Development Experiences
Understand speech-to-print correspondence at the sound, syllable pattern, and morphological levels.	Choose examples of words that illustrate sound-symbol, syllable, and morpheme patterns.	Practice various active techniques including sound blending, structural word analysis, word building, and word sorting.
Identify and describe the developmental progression in which orthographic knowledge is generally acquired.	Select and deliver appropriate lessons according to students' levels of spelling, phonics, and word identification skills.	Identify, on the basis of student reading and writing, the appropriate level at which to instruct.
Understand and recognize how beginner texts are linguistically organized—by spelling pattern, word frequency, and language pattern.	Explicitly teach the sequential blending of individual sounds into a whole word.	Observe, demonstrate, and practice error correction strategies.
Recognize the differences among approaches to teaching word attack (implicit, explicit, analytic, synthetic, etc.).	Teach active exploration of word structure with a variety of techniques.	Search a text for examples of words that exemplify an orthographic concept; lead discussions about words.
Understand why instruction in word attack should be active and interactive.	Enable students to use word attack strategies as they read connected text.	Review beginner texts to discuss their varying uses in reading instruction.

Fluent, Automatic Reading of Text

Beginning readers must apply their decoding skills to fluent, automatic reading of text. Children who are reading with adequate fluency are much more likely to comprehend what they are reading. Thus the concept of independent reading level is important: it is that level at which the child recognizes more than 95 percent of the words and can read without laboring over decoding. Poor readers often read too slowly. Some poor readers have a specific problem with fluent, automatic text reading even though they have learned basic phonics.

Recent research has highlighted the value of specific classroom activities to build reading fluency in slow readers.⁴ Some useful techniques include several readings of easy material to a tape recorder or partner, guided oral reading with teacher or partner feedback, and choral reading or simultaneous oral

reading. The idea of silent reading across a series of books at about the same difficulty level is thought to be helpful but is not so well supported by research. Repeated reading techniques, however, are only effective if children can read the individual words in the selections with acceptable speed.⁵ Word-by-word readers or those who sound out words with difficulty may need more basic instruction in fluent application of phonics to single words. Teachers need to know how to match instruction to individual needs.

A professional development program for teachers focused on issues of reading fluency could include knowledge, skills, and experiences listed in Table 3.

Table 3:
Fluent, Automatic Reading of Text

Teacher Knowledge	Teacher Skills	Possible Professional Development Experiences
Understand how word recognition, reading fluency, and comprehension are related to one another.	Determine reasonable expectations for reading fluency at various stages of reading development, using research-based guidelines and appropriate state and local standards and benchmarks.	Practice assessing and recording text-reading fluency of students in class.
Understand text features that are related to text difficulty.	Help children select appropriate texts, of sufficiently easy levels, to promote ample independent as well as oral reading.	Organize classroom library and other support materials by topic and text difficulty; code for easy access by students, and track how much children are reading.
Understand who in the class should receive extra practice with fluency development and why.	Use techniques for increasing speed of word recognition.	Use informal assessment results to identify who needs to work on fluency. Devise a system for recording student progress toward reasonable goals.
	Use techniques for repeated readings of passages such as alternate oral reading with a partner, reading with a tape, or rereading the same passage up to three times.	Conduct fluency-building activities with a mentor teacher.

Vocabulary

Knowledge of word meanings is critical to reading comprehension. Knowledge of words supports comprehension, and wide reading enables the acquisition of word knowledge. At school age, children are expected to learn the meanings of new words at the rate of several thousand per year. Most of these words are acquired by reading them in books or hearing them read aloud from books. Networks of words, tied conceptually, are the foundation of productive vocabulary. Key in developing this foundation is *active processing* of word meanings, which develops understanding of words and their uses, and connections among word concepts.⁶

Word meanings are not learned from a single context or single encounter. More typically, they are learned from repeated encounters and incorporated into a working vocabulary as they are used.⁷ Teachers must learn a rationale for word selection, techniques for vocabulary instruction, and the theoretical knowledge to interpret students' word learning efforts.

For comprehension of a text, words that are central to passage meaning should be directly introduced before students read a selection. Additionally, words most useful to teach are those that are high frequency in a mature language user's vocabulary and are found in varying contexts and content areas.⁸ To be effective word learners and word users, students need a variety of strategies such as those that help them get meanings from context and strategies that help them make connections between words they already know. Table 4 lists the knowledge, skill, and professional development experiences that may be relevant in improving vocabulary instruction.

**Table 4:
Vocabulary**

Teacher Knowledge	Teacher Skills	Possible Professional Development Experiences
Understand the role of vocabulary development and vocabulary knowledge in comprehension.	Select material for reading aloud that will expand students' vocabulary.	Collaborate with team to select best read-aloud books and share rationales.
Have a rationale for selecting words for direct teaching before, during, and after reading.	Select words for instruction before a passage is read.	Select words from text for direct teaching and give rationale for the choice.
Understand the role and characteristics of direct and contextual methods of vocabulary instruction.	Teach word meanings directly through explanation of meanings and example uses, associations to known words, and word relationships.	Devise exercises to involve students in constructing meanings of words, in developing example uses of words, in understanding relationships among words, and in using and noticing uses of words beyond the classroom.
Know reasonable goals and expectations for learners at	Provide for repeated encounters with new words and multiple	

various stages of reading development; appreciate the wide differences in students' vocabularies.	opportunities to use new words.	
Understand why books themselves are a good source for word learning.	Explicitly teach how and when to use context to figure out word meanings.	Devise activities to help children understand the various ways that context can give clues to meaning, including that often clues are very sparse and sometimes even misleading.
	Help children understand how word meanings apply to various contexts by talking about words they encounter in reading.	Use a series of contexts to show how clues can accumulate.

Text Comprehension

The undisputed purpose of learning to read is to comprehend. Although children are initially limited in what they can read independently, comprehension instruction can occur as soon as they enter school. Comprehension depends, firstly, on a large, working vocabulary and substantial background knowledge. Even before children can read for themselves, teachers can build this vital background knowledge by reading interactively and frequently to children from a variety of narrative and expository texts, chosen in part for their ability to expand what children know about the world around them. Further, comprehension is enhanced when teachers make sure students understand what they are reading by asking questions and encouraging student questions and discussions.⁹ Effective instruction will help the reader actively relate his or her own knowledge or experience to the ideas written in the text, and then remember the ideas that he or she has come to understand. As *Preventing Reading Difficulties in Young Children* points out, "Every opportunity should be taken to extend and enrich the children's background knowledge and understanding in every way possible, for the ultimate significance and memorability of any word or text depends on whether children possess the background knowledge and conceptual sophistication to understand its meaning."¹⁰

Engaging children in text comprehension may occur before, during, and after reading a text. From kindergarten onward, specific comprehension strategies can be taught explicitly. Techniques that have been shown to enhance text comprehension include self-monitoring for understanding, using graphic and semantic organizers, answering questions and obtaining immediate feedback, asking questions about the text, becoming aware of story structure, and periodically summarizing key points.¹¹ Although these strategies can sometimes be effective if taught alone, they are generally more effective if taught in clusters and used with flexibility. The teacher can explicitly model ways to raise questions, think about the text, and deepen comprehension as reading proceeds. However, these modeling skills require educators to practice, learn from coaching, and observe mentor teachers.¹²

Previewing, especially for expository texts, should help children become aware of what they already know about the topic and what they would like to know. During reading, children should learn to monitor whether they understand and to apply strategies such as rereading to "fix up" comprehension problems.

They also should be able to ask themselves clarifying questions about the author’s message. After reading, they need to summarize what they have learned and extend their comprehension beyond the text itself. Connecting new information to known information, evaluating the author’s intent, retelling or summarizing, or constructing a graphic representation of the information may be appropriate at different times. Again, a combination of techniques is likely to be most effective.

It cannot be assumed that teachers need less practice in this domain than in others. Teaching comprehension is complex, and prior research suggests that it _is seldom taught well.¹³ Teachers often spend too much time on literal questions that test literal comprehension, in place of queries that encourage deeper engagement of the text with higher levels of thinking. Even though much more research is needed to discover how best to help teachers improve comprehension instruction, professional development may include the knowledge, skill, and activities listed in Table 5.

**Table 5:
Text Comprehension**

Teacher Knowledge	Teacher Skills	Possible Professional Development Experiences
Know the cognitive processes involved in comprehension; know the techniques and strategies that are most effective, for what types of students, with what content.	Help children engage texts and consider ideas deeply.	Role-play and rehearse key research-supported strategies, such as questioning, summarizing, clarifying, and using graphic organizers.
Identify the typical structure of common narrative and expository text genres.	Choose and implement instruction appropriate for specific students and texts.	Discuss and plan to teach characteristics of both narrative and expository texts.
Recognize the characteristics of “reader friendly” text.	Facilitate comprehension of academic language such as connecting words, figures of speech, idioms, humor, and embedded sentences.	Consider student work and reading behavior (written responses, oral summaries, retellings, cloze tasks, recorded discussions) to determine where miscomprehension occurred and plan how to repair it.
Identify phrase, sentence, paragraph, and text characteristics of “book language” that students may misinterpret.		
Appreciate that reading strategies vary for specific purposes.	Communicate directly to children the value of reading for various purposes.	Interpret the effectiveness of instruction with video and examples of student work.

Understand the similarities and differences between written composition and text comprehension.	Help students use written responses and discussion to process meaning more fully.	Practice leading, scaffolding, and observing discussions in which students collaborate to form joint interpretations of text.
Understand the role of background knowledge in text comprehension.	Preview text and identify the background experiences and concepts that are important for comprehension of that text and that help students call on or acquire that knowledge.	Discuss and plan to teach ways of helping students call on or acquire relevant knowledge through defining concepts, presenting examples, and eliciting students' reactions to the concepts in ways that assess their understanding.

Written Expression

Reading and writing are two sides of the same coin. Both depend on fluent understanding and use of language at many levels. Each enhances the other. From 1st grade onward, children benefit from almost daily opportunities to organize, transcribe, and edit their thoughts in writing. A variety of writing assignments appropriate to their abilities is desirable, including production of narratives and exposition. While they are building the skills of letter formation, spelling, and sentence generation, children also should be taught to compose in stages: generating and organizing ideas, initially with a group or partner; producing a draft; sharing ideas with others for the purpose of gaining feedback; and revising, editing, proofreading, and publishing.

To teach writing well, teachers themselves should model writing and the writing process for their students. Professional development in this area often combines instruction in the organization and management of a writing program with opportunities for teachers themselves to write.

Research-supported practices in writing instruction that can be fostered in professional development programs include those in Table 6.

**Table 6:
Written Expression**

Teacher Knowledge	Teacher Skills	Possible Professional Development Experiences
Understand that composition is a recursive process of planning, drafting, and revising.	Organize writing program to support planning, drafting, and revising stages before publication.	Examine student work at various stages of the writing process and identify strengths and weaknesses.
Know the value and purpose of teacher-directed and student-directed assignments.	Include writing daily as part of the classroom routine, employing a variety of tasks and modes.	Participate in shared writing and personal writing in response to various assignments.

Understand the role of grammar, sentence composition, and paragraphing in building composition skill.	Teach sentence and paragraph awareness, construction, and manipulation as a tool for fluent communication of ideas.	Practice several approaches for building sentence- and paragraph-level mastery, such as sentence combining, analysis, and elaboration, and coherent linking of sentences in paragraphs.
Know benchmarks and standards for students at various stages of growth.	Generate and use rubrics to guide and evaluate student work.	Work with a team to achieve reliability in evaluating student work.
Understand that different kinds of writing require different organizational approaches.	Teach several genres through the year, such as personal narratives, fictional narratives, descriptions, explanations, reports, and poetry.	As a team, teach each genre and evaluate the results with peers.
Understand the value of meaningful writing for a specific audience and purpose.	Promote student sharing and publication of student writing for a suitable audience.	Host an author’s conference.

Spelling and Handwriting

Recent research supports the premise that written composition is enhanced by mastery of the component skills of spelling and writing just as reading comprehension is supported by mastery of fluent word recognition. Fluent, accurate letter formation and spelling are associated with students’ production of longer and better-organized compositions.¹⁴ Word usage, handwriting, punctuation, capitalization, and spelling are the necessary conventions of written expression that must be taught alongside strategies for composing. Students learn spelling and handwriting more readily if those skills are taught explicitly from 1st grade onward and if they are applied in the context of frequent, purposeful writing assignments.

Spelling knowledge is acquired in well-researched progression.¹⁵ Children first string letters together randomly. Then, with insight into the purpose of the alphabet, they begin to spell by sounding out words; then they progress to one-syllable spelling patterns, syllable combinations, and the spelling of meaningful parts of words (morphemes). Systematic instruction in sound segmentation, sound-symbol association, and awareness of spelling patterns leads to better spelling achievement. Children who are taught directly and systematically—including through exercises in transcription—and who are asked to apply their skills often in purposeful writing, learn to spell more readily than children who are taught random lists of words to memorize.

Teachers need to be reassured that they can and should teach these basic skills in an organized, explicit manner. Professional development should emphasize techniques for teaching spelling, handwriting, and punctuation that generalize to written composition, as suggested in Table 7.

**Table 7:
Spelling and Handwriting**

Teacher Knowledge	Teacher Skills	Possible Professional Development Experiences
Describe and identify the progression in which spelling knowledge is gained.	Tailor instruction to students' developmental levels in spelling.	Give and analyze the results of a developmental spelling inventory.
Understand the similarities and differences between learning to read and learning to spell.	Coordinate the timing and sequence of spelling lessons to complement instruction in word recognition.	Develop time line, scope, and sequence for teaching spelling in relation to the reading program.
Understand the organizing principles of the English spelling system at the sound, syllable, and morpheme levels.	In instruction, emphasize concepts and principles of the spelling system.	Practice explaining, illustrating, and providing meaningful practice with spelling concepts.
Understand the relationship between transcription skills and spelling and writing fluency.	Use techniques to build fluency, accuracy, and automaticity in transcription to support composition.	Practice teaching self-correction, dictation, think aloud, proofreading, and other strategies.

Screening and Continuous Assessment to Inform Instruction

Frequent assessment of developing readers, and the use of that information for planning instruction, is the most reliable way of preventing children from falling behind and staying behind. A clear message from longitudinal studies of reading development is that most children who become poor readers in 3rd grade and beyond were having difficulty right from the start with phonologically-based reading skills.¹⁶ In addition, instruction that targets the specific weaknesses most likely to cause reading difficulty often prevents later reading failure and facilitates the reading development of most children.

Several kinds of informal (nonstandardized) assessments are the responsibility of the classroom teacher. Children can be screened by mid-kindergarten with a high rate of accuracy to find those at risk for reading difficulty. Curriculum-based assessments, generally given every 6–10 weeks in the 1st grade, are helpful in determining what students have learned and what they need to learn within the classroom program. Ideally, ongoing assessment, based on observations of children's reading behavior and writing products, is an integral part of daily instruction. Finally, because group and individual assessments are used to compare children with normative standards, teachers should know how to interpret standardized test results.

Professional development in reading assessment should emphasize valid, reliable, and feasible practices for the classroom teacher and avoid those that have little theoretical or empirical support. For example, a kindergarten assessment designed to predict reading success in 1st grade would most likely include measures of phoneme segmentation and blending, letter knowledge, and sound-symbol correspondence.* However, by 2nd grade, phoneme awareness adds little power to a screening measure that already includes word recognition, spelling, phonic decoding, and paragraph reading for

comprehension and fluency. Learning to use assessments purposefully should include supervised practice in their administration, opportunities to view and respond to expert modeling, and team discussion of assessment results in relation to goals and standards. Professional development programs that teach theoretically sound, reliable, and manageable reading and writing assessments might emphasize the activities in Table 8.

**Table 8:
Assessment to Inform Instruction**

Teacher Knowledge	Teacher Skills	Possible Professional Development Experiences
Understand that assessments are used for various purposes, including determining strengths and needs of students in order to plan for instruction and flexible grouping; monitoring of progress in relation to stages of reading, spelling, and writing; assessing curriculum-specific learning; and using norm-referenced or diagnostic tests appropriately for program placement.	Use efficient, informal, validated strategies for assessing phoneme awareness, letter knowledge, sound-symbol knowledge, application of skills to fluent reading, passage reading accuracy and fluency, passage comprehension, level of spelling development, and written composition.	Participate in role-play of assessment after modeling and demonstration with surrogate subjects. Receive feedback in role-play until skills of administration and scoring are reliable.
Select a program of assessment that includes validated tools for measuring important components of reading and writing.	Screen all children briefly; assess children with reading and language weaknesses at regular intervals.	Administer assessments and review results with team for purpose of instructional grouping.
Know the benchmarks and standards for performance.	Interpret results for the purpose of helping children achieve the standards.	Evaluate the outcomes of instruction and present to team.
Understand importance of student self-assessment.	Communicate assessment results to parents and students.	Develop or select record-keeping tools for parents and students.

Motivating Children to Read and Developing Their Literacy Horizons

As we have emphasized earlier, a successful teacher of beginning reading generates enthusiasm and appreciation for reading. Research reviews have repeatedly stated that children who are read to often, who are led to enjoy books, and who are encouraged to read widely are more likely to become good readers than children who lack these experiences. Teachers who are juggling the technical challenges of program organization and delivery may lose sight of the fact that purposeful reading and writing is the goal of instruction. Information on the importance of daily reading aloud, the selection of varied reading material,

the use of the library, and the integration of topics across the curriculum will bolster literacy instruction, even as teachers focus on teaching specific reading and writing skills. Team and school initiatives to promote a love of books and wide reading should be ever-present.

Appreciation of the language found only in books can be fostered by teachers who read to students from challenging material and who encourage students to read widely from worthwhile texts. Classrooms and libraries must have a sufficient selection of reading material, especially for students with limited reading ability, and adults need resources and strategies to match students with reading material in their areas of interest and at a level they can read.* If text is too easy, students do not develop their vocabulary or comprehension; if text is too difficult, students may become frustrated and revert to ineffective reading strategies, such as skipping important content vocabulary. Professional development that would help teachers foster independent reading of quality literature might focus on

- Methods to evaluate text for readability, quality, and purpose in reading instruction.
- Strategies for encouraging, recording, and celebrating students' independent reading, in cooperation with families when feasible.
- Selection of supplementary read-aloud material and sharing reviews of children's literature among teachers.

ENDNOTES

¹ National Reading Panel. (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*. Washington, DC: National Institute of Child Health and Human Development, National Institutes of Health.

Snow, C., Burns, S., & Griffin, P. (1998). *Preventing reading difficulties in young children*. Washington, DC: National Academy Press.

² Moats, L. C. (1995). The missing foundation in teacher education. *American Educator*, 19(2), 9, 43–51. National Reading Panel. *Report of the National Reading Panel*.

Scarborough, H., Ehri, L., Olson, R., & Fowler, A. (1998). The fate of phonemic awareness beyond the early school years. *Scientific Studies of Reading*, 2, 115–142.

³ Adams, M., Treiman, R., & Pressley, M. (1998). Reading, writing and literacy. In I. E. Siegal and K. A. Renniger (Eds.), *Handbook of child psychology: Child psychology in practice* (5th ed., Vol. 4, pp. 275–355). New York: Wiley.

⁴ National Reading Panel. (2000). Fluency. Chap. 3 in *Report of the National Reading Panel: Teaching children to read: Reports of the subgroups* (pp. 3-1–3-43). Washington, DC: National Institute of Child Health and Human Development, National Institutes of Health.

⁵ *Ibid.*

- ⁶ Beck, I. L., McCaslin, E. C., & McKeown, M. G. (1980). *The rationale and design of a program to teach vocabulary to fourth-grade students*. Pittsburgh, PA: University of Pittsburgh Learning Research and Development Center.
- National Reading Panel. (2000). Vocabulary instruction. Part 1 of Chap. 4 in *Report of the National Reading Panel: Teaching children to read: Reports of the subgroups* (pp. 4-15-4-38). Washington, DC: National Institute of Child Health and Human Development, National Institutes of Health.
- ⁷ Beck, I. L., & McKeown, M. G. (1991). Conditions of vocabulary acquisition. In P. D. Pearson (Ed.), *The Handbook of Reading Research* (Vol. 2, pp. 789-814). New York: Longman Press.
- ⁸ Beck, I. L., McKeown, M. G., & Omanson, R. C. (1984). *The fertility of some types of vocabulary instruction*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans.
- ⁹ Beck, I. L., McKeown, M. G., Hamilton, R. L., & Kucan, L. Getting at the meaning: How to help students unpack difficult text. *American Educator*, 22, 66-71, 85.
- Learning First Alliance (1998). *Every child reading: An action plan*. Washington, DC: Author.
- Pressley, M. (1998). *Reading instruction that works: The case for balanced teaching*. New York: Guilford Press.
- ¹⁰ Snow, C., Burns, S., & Griffin, P. (1998). *Preventing reading difficulties in young children* (pp. 80-83). Washington, DC: National Academy Press.
- ¹¹ National Reading Panel. (2000). Text comprehension. Part 2 of Chap. 4 in *Report of the National Reading Panel: Teaching children to read: Reports of the subgroups* (pp. 4-39-4-118). Washington, DC: National Institute of Child Health and Human Development, National Institutes of Health.
- ¹² Beck, I. L., McKeown, M. G., Hamilton, R. L., & Kucan, L. Getting at the meaning.
- ¹³ Durkin, D. (1993). *Teaching them to read* (6th ed.). Boston: Allyn & Bacon.
- ¹⁴ Berninger, V., Vaughan, K., Abbott, R., Abbott, S., Brooks, A., Rogan, L., Reed, E., & Graham, S. (1997). Treatment of handwriting fluency problems in beginning writing: Transfer from handwriting to composition. *Journal of Educational Psychology*, 89, 652-666.
- Berninger, V., Vaughan, K., Abbott, R., Brooks, A., Abbott, S., Reed, E., Rogan, L., & Graham, S. (1998). Early intervention for spelling problems: Teaching spelling units of varying size within a multiple connections framework. *Journal of Educational Psychology*, 90, 587-605.
- Graham, S., Berninger, V., Abbott, R., Abbott, S., & Whitaker, D. (1997). The role of mechanics in composing of elementary school students: A new methodological approach. *Journal of Educational Psychology*, 89, 170-182.

¹⁵Bear, D. Invernizzi, M., Templeton, S., & Johnston, F. (1996). *Words their way: Word study for phonics, vocabulary, and spelling*. Upper Saddle River, NJ: Merrill.

Ehri, L., & Soffer, A. (1999). Graphophonemic awareness: Development in elementary students. *Scientific Studies of Reading*, 3, 1–30.

Treiman, R. (1993). *Beginning to spell*. New York: Oxford University Press.

¹⁶Fletcher, J. M., & Lyon, G. R. (1998). Reading: A research-based approach. In W. Evers (Ed.), *What's gone wrong in America's classrooms* (pp. 49–90). Stanford, CA: Hoover Institution Press.

* See Appendix A for a listing of valuable professional development research sources.

† In addition to their mention in *Every Child Reading: An Action Plan*, these components are commonly delineated in documents such as research reviews, state standards on instruction, the Reading Excellence Act funding criteria, curriculum guidelines, and teacher instructional manuals.

* Of course, as the National Reading Panel notes, “phonics teaching is a means to an end. . . . In implementing systematic phonics instruction, educators must keep the end in mind and ensure that children understand the purpose of learning letter sounds and that they are able to apply these skills accurately and fluently in their daily reading and writing activities” (Washington, DC: National Institute of Child Health and Human Development, National Institute of Health, 2000, p. 10). The panel’s report also states that, notwithstanding the fact that explicit, systematic, synthetic phonics is the most effective approach, there remain unanswered questions on how to make this instruction as effective as possible. For example, the panel notes that more research is needed on questions such as how long single instruction sessions should last, how many letter-sound relations should be taught, and how many months or years a phonics program should continue. Moreover, some children will learn and appropriately apply phonics skills quickly and effortlessly, while others must be taught slowly, step by step. The individual variation in any group remains a continual challenge to teacher judgment, resourcefulness, and program management skill.

* In the standardization of the Texas Primary Reading Inventory, these subtests combined predict the likelihood of success or failure with about 90 percent accuracy.

* The readability of text, as reflected in sentence complexity and frequency of vocabulary, can now be assessed with software. Readability formulas tend to have more validity for children who have attained a reading level above 2nd grade than they do for those who are just beginning to read, and readability does not reflect the extent to which a text is decodable on the basis of what a child has been taught.

Conclusion

The type of professional development the Learning First Alliance calls for is a radical departure from the one-session, publisher-funded workshops that were typical of the past. This document, *Every Child Reading: A Professional Development Guide*, envisions schoolwide responses to the message of *Every Child Reading: An Action Plan* and other comprehensive consensus papers on reading development, reading success and failure, and reading instruction. This guide presumes that the end goal of learning to read is to comprehend and that continuous improvement in the practical skills of each component of reading instruction is the goal of every competent teacher. It assumes that improvement in teaching is a lifelong enterprise that requires mentoring, observation, follow-up evaluation, and problem solving with peers. Improved teaching is most likely to occur within a supportive, collaborative context that allows sufficient time for understanding of new ideas and approaches.

The most effective staff development programs are embedded in the culture of the school. They take time, resources, money, commitment, and expertise. The intellectual growth of teachers should be continuous and promoted in interaction with students, peers, and mentors. Vehicles for promoting best practice may include professional workshops, grade-level planning groups, professional development plans generated by individual teachers in relation to designated competencies, guided peer observation and feedback, monthly meetings for discussion of professional readings, teacher research groups, and scheduling of demonstration lessons by master teachers. Activities such as these may be used to best advantage if the goals and content of professional development in early literacy are clearly articulated to and by the entire educational community.

The design of optimal learning experiences for teachers is in many ways analogous to designing optimal learning experiences for students. Not everything can be learned at once. Of necessity, some components of instruction may be more difficult to learn than others and may take proportionately more time to understand or practice than others. To be effective, professional development experiences must provide enough information and enough practice in any given component to allow teachers to develop genuine expertise. An expert teacher possesses a broad set of techniques for addressing the learning needs of each student in a class, the ability to determine rapidly which technique is needed at a given time for each particular student, and the ability to integrate these techniques effectively while teaching a diverse classroom. Therefore, a novice teacher may require extended focus on selected aspects of reading or writing before the fluent integration of practices characteristic of proficient teachers* can be expected. Many components of reading and writing instruction require more than a few hours of cursory overview before they are understood well.

A worthwhile program of professional development will encourage expertise in the components of instruction while maintaining a clear sense of the complex whole to which those components belong. Pacing guidelines, models for lesson planning, time management strategies, and daily schedules for the classroom will all be helpful in this regard. In a comprehensive reading program, skills are taught explicitly and sequentially in support of their purposeful application. Learning to integrate and manage all of the components of language arts instruction is a significant challenge for many teachers, a challenge that can be met over several years of opportunity.

Finally, the suggestions in this guide are offered with the understanding that the education of teachers, both preservice and inservice, deserves a concerted, well-funded program of research. Although we have made progress understanding adult learning, and we have reached consensus around some long-standing issues in early reading instruction, we do not yet know with any degree of certainty the best way to create expert teachers of reading. There can be no more urgent agenda at this point in our quest to

become a society that educates everyone. Well-prepared teachers who are confident of their instruction are indispensable for children's reading success.

* See *Reading Instruction That Works: The Case for Balanced Teaching*, by M. Pressley (New York: Guilford Press, 1998).

Glossary

Accuracy The ability to recognize words correctly.

Automaticity Fluent performance without the conscious deployment of attention.

Blend A consonant sequence before or after a vowel within a syllable, such as *cl*, *br*, or *st*; the written language equivalent of *consonant cluster*.

Decoding Ability to translate a word from print to speech, usually by employing knowledge of sound-symbol correspondences; also, the act of deciphering a new word by sounding it out.

Fluency Achieving speed and accuracy in recognizing words and comprehending connected text, and coordinating the two.

Grapheme A letter or letter combination that spells a single phoneme; in English, a grapheme may be one, two, three, or four letters, such as *e*, *ei*, *igh*, or *eigh*.

Literacy This includes reading, writing, and the creative and analytical acts involved in producing and comprehending texts.

Morpheme The smallest meaningful unit of language.

Morphology The aspects of language structure related to the ways words are formed from prefixes, roots, and suffixes (e.g., “mis-spell-ing”), and are related to each other.

Onset-Rime Segmentation Separating a word into the onset, the consonant(s) at the start of a syllable, and the rime, the remainder of the syllable. For example, in “swift,” “sw” is the onset and “ift” is the rime.

Orthographic Knowledge Knowing that letters and diacritics represent the spoken language; attending to predictable and frequent spelling patterns. (A diacritic is a mark, such as the cedilla in façade or the acute accents of résumé, added to a letter to indicate a special phonetic value or to distinguish words that are otherwise graphically identical.)

Phoneme Awareness The conscious awareness that words are made up of segments of our own speech that are represented with letters in an alphabetic orthography; also called *phonemic awareness*.

Phonemes The speech phonological units that make a difference to meaning. Thus, the spoken word *rope* consists of three phonemes: /r/, /o/, and /p/. It differs by only one phoneme from each of the spoken words, *soap*, *rode*, and *rip*.

Phonics The study of the relationships between letters and the sounds they represent; also used to describe reading instruction that teaches sound-symbol correspondences, such as “the phonics approach” or “phonic reading.”

Phonics instruction can vary with respect to the explicitness by which the phonic elements are taught and practiced in the reading of text. Synthetic and systematic phonics instruction includes the planned isolation, pronunciation, and blending of individual speech sounds (phonemes) represented by letters and letter groups (graphemes), and usually provides opportunities for children to practice using known sound-symbol associations while reading decodable text. Conversely, embedded and incidental phonics are characterized by an implicit approach in which teachers do use phonics

elements in a planned sequence to guide instruction but instead find opportunities to highlight particular phonics elements when they appear in text.

Embedded Phonics Teaching students phonics skills by embedding phonics instruction in text reading. This is a more implicit approach that relies to some extent on incidental learning.

Incidental Phonics Capitalizing on opportunities to highlight particular elements of phonics as they appear in text.

Synthetic Phonics Teaching students explicitly to convert letters into sounds (phonemes) and then blend the sounds to form recognizable words.

Systematic Phonics Sequential set of phonics elements delineated and taught along a dimension of explicitness, depending on the type of phonics method employed.

Phonological Awareness A more inclusive term than phonemic awareness—it refers to the general ability to attend to the sounds of language as distinct from its meaning. Phonemic awareness generally develops through other, less subtle levels of phonological awareness. Noticing similarities between words in their sounds, enjoying rhymes, counting syllables, and so forth are indications of such “metaphonological” skill.

Reading Comprehension The ability to understand written language. Comprehension includes both getting the gist of the meaning and interpreting the meaning by relating it to other ideas, drawing inferences, making comparisons and asking questions about it.

Self-Monitoring The mental act of knowing when one does and does not understand what one is reading.

Syllabication Breaking words into syllables.

Word Attack An aspect of reading instruction that includes intentional strategies for learning to decode, sight read, and recognize written words.

GLOSSARY SOURCES

Burns, S., Griffin, P., & Snow, C. (1999). *Starting out right: A guide to promoting children's reading success*. Washington, DC: National Academy Press.

Moats, L. C. (2000). *Speech to print: Language essentials for teachers*. Baltimore: Paul Brookes.

National Reading Panel. (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*. Washington, DC: National Institute of Child Health and Human Development, National Institutes of Health.

Snow, C., Burns, S., & Griffin, P. (1998). *Preventing reading difficulties in young children*. Washington, DC: National Academy Press.

Appendix A

Professional Development Research Sources

Research sources that teachers may find valuable as part of an ongoing program of reading professional development include the following:

- American Federation of Teachers. (1995, Summer). *American Educator*, 19(2).
- American Federation of Teachers. (1998, Spring/Summer). *American Educator*, 22(1).
- Center for the Improvement of Early Reading Achievement (1999). *Ready reference for reading excellence: A research collection*. Ann Arbor, MI: Author.
- International Reading Association and the National Association for the Education of Young Children. (1998). *Learning to read and write: Developmentally appropriate practices for young children*. Newark, DE and Washington, DC: Authors.
- Kamil, M., Mosenthal, P., Pearson, P. D. & Barr, R. (Eds.) (2000). *Handbook of reading research: Vol. 3*. Mahwah, NJ: Lawrence Erlbaum.
- Learning First Alliance (1998). *Every child reading: An action plan*. Washington, DC: Author.
- National Reading Panel. (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*. Washington, DC: National Institute of Child Health and Human Development, National Institutes of Health.
- Reading Initiative Center of the Sacramento County Office of Education. (1999). *Read all about it: Readings to inform the profession*. Sacramento, CA: California State Board of Education.
- Snow, C., Burns, S., & Griffin, P. (1998). *Preventing reading difficulties in young children*. Washington, DC: National Academy Press.

Appendix B

Accomplishments in Reading During the _Early School Years

This list of reading accomplishments was developed by the National Research Council of the National Academy of Sciences for their 1998 publication, Preventing Reading Difficulties in Young Children. As such, they represent the current consensus among leading research scientists on the normal course of literacy development in young children. Although the timing of these accomplishments will vary depending on the individual child, understanding these benchmarks and how to help children achieve them is central to designing an effective program of professional development for the teaching of early reading.

Kindergarten Accomplishments

- Knows the parts of a book and their functions.
- Begins to track print when listening to a familiar text being read or when rereading own writing.
- “Reads” familiar texts emergently, i.e., not necessarily verbatim from the print alone.
- Recognizes and can name all uppercase and lowercase letters.
- Understands that the sequence of letters in a written word represents the sequence of sounds (phonemes) in a spoken word (alphabetic principle).
- Learns many, though not all, one-to-one letter-sound correspondences.
- Recognizes some words by sight, including a few very common ones (“a,” “the,” “I,” “my,” “you,” “is,” “are”).
- Uses new vocabulary and grammatical constructions in own speech.
- Makes appropriate switches from oral to written language styles.
- Notices when simple sentences fail to make sense.
- Connects information and events in texts to life and life experiences to text.
- Retells, re-enacts, or dramatizes stories or parts of stories.
- Listens attentively to books teacher reads to class.
- Can name some book titles and authors.
- Demonstrates familiarity with a number of types or genres of text _(e.g., storybooks, expository texts, poems, newspapers, and everyday _print such as signs, notices, labels).
- Correctly answers questions about stories read aloud.
- Makes predictions based on illustrations or portions of stories.
- Demonstrates understanding that spoken words consist of sequences _of phonemes.
- Given spoken sets like “dan, dan, den,” can identify the first two as being the same and the third as different.
- Given spoken sets like “dak, pat, zen,” can identify the first two as sharing a same sound.
- Given spoken segments, can merge them into a meaningful target word.
- Given a spoken word, can produce another word that rhymes with it.
- Independently writes many uppercase and lowercase letters.

- Uses phonemic awareness and letter knowledge to spell independently (invented or creative spelling).
- Writes (unconventionally) to express own meaning.
- Builds a repertoire of some conventionally spelled words.
- Shows awareness of distinction between “kid writing” and conventional orthography.
- Writes own name (first and last) and the first names of some friends or classmates.
- Can write most letters and some words when they are dictated.

1st Grade Accomplishments

- Makes a transition from emergent to “real” reading.
- Reads aloud with accuracy and comprehension any text that is appropriately designed for the first half of grade 1.
- Accurately decodes orthographically regular, one-syllable words and nonsense words (e.g., “sit,” “zot”), using print-sound mappings to sound out unknown words.
- Uses letter-sound correspondence knowledge to sound out unknown words when reading text.
- Recognizes common, irregularly spelled words by sight (“have,” “said,” “where,” “two”).
- Has a reading vocabulary of 300 to 500 sight words and easily sounded-out words.
- Monitors own reading and self-corrects when an incorrectly identified word does not fit with cues provided by the letters in the word or the context surrounding the word.
- Reads and comprehends both fiction and nonfiction that are appropriately designed for the grade level.
- Shows evidence of expanding language repertoire, including increasing appropriate use of standard, more formal language.
- Creates own written texts for others to read.
- Notices when difficulties are encountered in understanding text.
- Reads and understands simple written instructions.
- Predicts and justifies what will happen next in stories.
- Discusses prior knowledge of topics in expository texts.
- Uses how, why, and what-if questions to discuss nonfiction texts.
- Describes new information gained from texts in own words.
- Distinguishes whether simple sentences are incomplete or fail to make sense; notices when simple texts fail to make sense.
- Can answer simple written comprehension questions based on the material read.
- Can count the number of syllables in a word.
- Can blend or segment the phonemes of most one-syllable words.
- Spells correctly three- and four-letter short-vowel words.
- Composes fairly readable first drafts using appropriate parts of the writing process (some attention to planning, drafting, rereading for meaning, and some self-correction).
- Uses invented spelling or phonics-based knowledge to spell independently, when necessary.
- Shows spelling consciousness or sensitivity to conventional spelling.
- Uses basic punctuation and capitalization.
- Produces a variety of types of compositions (e.g., stories, descriptions, journal entries) showing appropriate relationships between printed text, illustrations, and other graphics.

- Engages in a variety of literary activities voluntarily (e.g., choosing books and stories to read, writing a note to a friend).

2nd Grade Accomplishments

- Reads and comprehends both fiction and nonfiction that are appropriately designed for grade level.
- Accurately decodes orthographically regular, multisyllable words and nonsense words (e.g., capital, Kalamazoo).
- Uses knowledge of print-sound mappings to sound out unknown words.
- Accurately reads many irregularly spelled words and such spelling patterns as diphthongs, special vowel spellings, and common word endings.
- Reads aloud with fluency and comprehension any text that is appropriately designed for grade level.
- Shows evidence of expanding language repertory, including increasing use of more formal language registers.
- Reads voluntarily for interest and own purposes.
- Rereads sentences when meaning is not clear.
- Interprets information from diagrams, charts, and graphs.
- Recalls facts and details of texts.
- Reads nonfiction materials for answers to specific questions or for specific purposes.
- Takes part in creative responses to texts such as dramatizations, oral presentations, fantasy play, etc.
- Discusses similarities in characters and events across stories.
- Connects and compares information across nonfiction selections.
- Poses possible answers to how, why, and what-if questions.
- Correctly spells previously studied words and spelling patterns in own writing.
- Represents the complete sound of a word when spelling independently.
- Shows sensitivity to using formal language patterns in place of oral language patterns at appropriate spots in own writing (e.g., de-contextualizing sentences, conventions for quoted speech, literary language forms, proper verb forms).
- Makes reasonable judgments about what to include in written products.
- Productively discusses ways to clarify and refine own writing and that of others.
- With assistance, adds use of conferencing, revision, and editing processes to clarify and refine own writing to the steps of the expected parts of the writing process.
- Given organizational help, writes informative, well-structured reports.
- Attends to spelling, mechanics, and presentation for final products.
- Produces a variety of types of compositions (e.g., stories, reports, correspondence).

3rd Grade Accomplishments

- Reads aloud with fluency and comprehension any text that is appropriately designed for grade level.

- Uses letter-sound correspondence knowledge and structural analysis _to decode words.
- Reads and comprehends both fiction and nonfiction that are appropriately designed for grade level.
- Reads longer fictional selections and chapter books independently.
- Takes part in creative responses to texts such as dramatizations, oral presentations, fantasy play, etc.
- Can point to or clearly identify specific words or wordings that are causing comprehension difficulties.
- Summarizes major points from fiction and nonfiction texts.
- In interpreting fiction, discusses underlying theme or message.
- Asks how, why, and what-if questions in interpreting nonfiction texts.
- In interpreting nonfiction, distinguishes cause and effect, fact and opinion, main idea, and supporting details.
- Uses information and reasoning to examine bases of hypotheses and opinions.
- Infers word meaning from taught roots, prefixes, and suffixes.
- Correctly spells previously studied words and spelling patterns in _own writing.
- Begins to incorporate literacy words and language patterns in own writing (e.g., elaborates descriptions; uses figurative wording).
- With some guidance, uses all aspects of the writing process in producing own compositions and reports.
- Combines information from multiple sources in writing reports.
- With assistance, suggests and implements editing and revision to clarify and refine own writing.
- Presents and discusses own writing with other students and responds helpfully to other students' compositions.
- Independently reviews work for spelling, mechanics, and presentation.
- Produces a variety of written works (e.g., literature responses, reports, “published” books, semantic maps) in a variety of formats, including multimedia forms.

The Learning First Alliance

The Learning First Alliance is a permanent partnership of 12 leading educational associations that have come together to improve student learning in America's public elementary and secondary schools. Members of the Alliance represent more than 10 million Americans engaged in providing, governing, and improving public education.

Our nation's public schools are the key to our future. They are an essential vehicle for ensuring that young people enter adulthood with the knowledge, skills, and moral character to be productive members of our diverse and democratic society.

The Alliance is an unprecedented, self-initiated commitment to develop and deliver a common message to all parts of the education system, align priorities, share and disseminate success stories, encourage collaboration at every level, and work toward the continual and long-term improvement of public education based on solid research.

The Learning First Alliance works with and through its member organizations to achieve the following three goals. We commit our 12 organizations to these interrelated goals, which are central to our mission of improving student learning in America's public elementary and secondary schools.

First, the Alliance works to ensure that high academic expectations are held for all students. States and school districts should have high academic standards for their core subjects. These standards should lay out clearly and specifically what students should know and be able to do by the end of each grade level, sequence of grade levels, or other specific checkpoints. This specificity will ensure that educators, students, parents, policymakers, school board members, and the public all share an understanding of, and commitment to, what is expected of students. The standards of local school districts should be consistent with those set by states, but need not be limited to them.

To provide all students the opportunity to achieve these standards, policies, curriculum, instruction, materials, facilities, technologies, educator preparation, continuing professional development, assessment, school structures, and delivery systems must be in alignment. Students who need extra help should receive timely and intensive interventions, and students should not be promoted to higher levels of schooling without meeting the standards. Student assessments should enhance learning and enable all stakeholders to know whether students are meeting the standards.

Educators must be prepared in the specific subjects they teach. In addition, teachers and other school personnel should be equipped to make judgments about the extent to which students are meeting the standards, diagnose student needs, and provide particular interventions so that all students may succeed.

Second, the Alliance works to ensure a safe and supportive place of learning for all students. Schools should be fair, caring, and effective learning communities that are free from intimidation or fear. All students should be able to attend schools in which they are known and valued, their overall progress is monitored and supported by at least one adult, they are provided clear and rigorous expectations of behavior and academic performance, and they feel connected to their school community. Individual schools and school districts should address the ways that students learn best and accommodate children with special needs. Moreover, appropriate and rigorous alternative placements should be available to address the needs of students whose behavior is disruptive to the education of other students.

All adults within schools should work together to create safe and supportive learning communities by modeling behaviors that demonstrate the highest levels of respect, responsibility, character, and civility. Further, school districts and individuals should adopt and enforce clear codes of conduct for all students so that school personnel, students, and parents will share an understanding of the behavior that is expected of students and the consequences for not meeting those expectations. Teachers and other school personnel should receive training in the knowledge and skills necessary to create safe and supportive learning environments, including effective classroom management practices.

In addition, teachers, principals, superintendents, school board members, and other school leaders should put in place policies that reflect the best research on creating safe and supportive learning environments. Finally, all those involved with the delivery of public education should become advocates on behalf of youth to promote safe, healthy, orderly, and supportive communities beyond the walls of the school.

Third, the Alliance works to engage parents and other community members in helping students achieve high academic expectations. States and local school districts should maximize the ways that parents and community members can participate in schools. For example, community members and parents should participate in the development of standards, programs, and assessments that affect students' academic performance. Families should be encouraged to participate in all facets of the child's education. Public schools should develop partnerships with businesses, civic organizations, and other community groups to promote adult participation in children's education and to maximize the resources available to support learning. Teachers and other school personnel should be trained in effective practices that support parenting and parent involvement.

The Alliance believes that communities should hold schools accountable for the achievement of these three goals. To achieve these goals, the Alliance is committed to working with local and state members to organize collaborative action at the state and local levels, providing concrete and useful tools for educators, and articulating to the education community and to policymakers important new developments in the improvement of the American education enterprise.