Reading First
Overview and Guidance

COMMONWEALTH *OF* VIRGINIA
Virginia Department of Education
Office of Elementary Instructional Services

A.   PURPOSE OF THE PROGRAM

A-1. What is the purpose of the Reading First Program?

The purpose of Reading First is to ensure that all children in America learn to read well by the end of third grade.

Teaching young children to read is the most critical educational priority facing this country. Encouragingly, this is an area where some of the best and most rigorous scientifically based research is available. The Reading First program will help States and districts apply this research - and the proven instructional and assessment tools consistent with the research - to teach all children to read. By teaching all children to read well by the end of third grade, we will ensure that all students advance to later grades well prepared to achieve their full academic potential.

The Reading First program will provide the necessary assistance to States and districts to establish research-based reading programs for students in kindergarten through third grade (See Question C-1 for more information on instructional programs).   Reading First funds will also focus on providing significantly increased teacher professional development to ensure that all teachers, including special education teachers, have the skills they need to teach these programs effectively. Additionally, the program provides assistance to States and districts in preparing classroom teachers to effectively screen, identify and overcome reading barriers facing their students.

Quite simply, Reading First focuses on what works, and will support proven methods of early reading instruction in classrooms. The program provides assistance to States and districts in selecting or developing effective instructional materials, programs, learning systems and strategies to implement methods that have been proven to teach reading. Reading First also provides assistance for the selection and administration of screening, diagnostic and classroom-based instructional reading assessments with proven validity and reliability, in order to measure where students are and monitor their progress.

Taken together, the complementary research-based programs, practices and tools required by Reading First will give teachers across the nation the skills and support they need to teach all children to read fluently by the end of third grade.

A-2. What is the difference between Reading First and previous Federal reading initiatives?

Reading First is the largest – and yet most focused – early reading initiative this country has ever undertaken. Reading First provides an opportunity for every State to implement reading programs that help all students achieve reading mastery by the end of third grade. The Reading First program, by design, specifically supports States as they work with their districts to ensure that teachers learn about instruction and other activities based on scientifically based reading research, implement programs that are based on this research,

and use rigorous assessments with proven validity and reliability that effectively screen, diagnose and monitor the progress of all students.

In addition to the much larger scope and level of ongoing support provided by Reading First, this program focuses directly on ensuring that every child can read at grade level or above by the end of third grade. Reading First will provide support to all K-3 students and their teachers in the schools that are served, and it is the Department's view that the classroom provides the most important teaching venue for reaching these early readers. It is in the classroom where the program will build and support the scientifically based reading foundation. Reading First seeks to embed the essential components of reading instruction into all elements of the primary, mainstream K-3 teaching structures of each State.

Scientifically based reading research has identified five essential components of reading instruction (See Question B-1). This research demonstrates that children need to master skills in these five interrelated areas in order to become proficient, successful readers. Reading First focuses instructional methods and materials, assessments and professional development on these key areas. Programs funded under Reading First will have to demonstrate their ability to address these components in a comprehensive and effective manner.

A-3. Which part of the No Child Left Behind legislation authorizes Reading First?

Title I, Part B, Subpart 1 of the Elementary and Secondary Education Act, as amended by the No Child Left Behind Act of 2001 authorizes Reading First. Reading First is the academic cornerstone of No Child Left Behind, which recognizes the importance of both improving student reading achievement and implementing programs and strategies scientifically proven to be effective. Reading First, along with the programs authorized under Title I, focuses on improving student achievement for all students, especially children in the nation's most disadvantaged schools and communities.

Title I, Part B, Subpart 1 delineates how the program will operate. The Department may issue regulations for this program and will inform States of any proposed regulations.

B.   COMPONENTS OF EFFECTIVE READING PROGRAMS

B-1. What are the essential components of reading instruction?

Scientifically based reading research has identified five essential components of effective reading instruction. To ensure that children learn to read well, explicit and systematic instruction must be provided in these five areas:

1. **Phonemic Awareness** – The ability to hear, identify and manipulate the individual sounds – phonemes – in spoken words. Phonemic awareness is the understanding that the sounds of spoken language work together to make words.

2. **Phonics –** The understanding that there is a predictable relationship between phonemes – the sounds of spoken language – and graphemes – the letters and spellings that represent those sounds in written language. Readers use these relationships to recognize familiar words accurately and automatically and to decode unfamiliar words.

3. **Vocabulary Development** – Development of stored information about the meanings and pronunciation of words necessary for communication. There are four types of vocabulary:

   - Listening vocabulary – the words needed to understand what is heard
   - Speaking vocabulary – the words used when speaking
   - Reading vocabulary – the words needed to understand what is read
   - Writing vocabulary – the words used in writing

4. **Reading fluency, including oral reading skills** – Fluency is the ability to read text accurately and quickly. It provides a bridge between word recognition and comprehension. Fluent readers recognize words and comprehend at the same time.

5. **Reading comprehension strategies** – Strategies for understanding, remembering, and communicating with others about what has been read. Comprehension strategies are sets of steps that purposeful, active readers use to make sense of text.

B-2. What is scientifically based reading research?

Scientifically based reading research is research that applies rigorous, systematic and objective procedures to obtain valid knowledge relevant to reading development, reading instruction, and reading difficulties. This includes research that:

1. Employs systematic, empirical methods that draw on observation or experiment;

2. Involves rigorous data analyses that are adequate to test the stated hypotheses and justify the general conclusions drawn;

3. Relies on measurements or observational methods that provide valid data across evaluators and observers and across multiple measurements and observations; and

4. Has been accepted by a peer-reviewed journal or approved by a panel of independent experts through a comparably rigorous, objective and scientific review.

B-3. What evidence is critical in evaluating scientifically based reading research?

When reviewing research findings to determine whether they meet the criteria for scientifically based reading research, State educational agencies, local educational agencies, and schools should consider the extent to which the research meets each of the criteria. Questions for consideration about each criterion include:

1. **Use of rigorous, systematic and empirical methods** – Does the work have a solid theoretical or research foundation? Was it carefully designed to avoid biased findings and unwarranted claims of effectiveness? Does the research clearly delineate how it was conducted, by whom it was conducted, and on whom it was conducted?

2. **Adequacy of the data analyses to test the stated hypotheses and justify the general conclusions drawn** – Was the research designed to minimize alternative explanations for observed effects? Are the observed effects consistent with the overall conclusions and claims of effectiveness? Does the research present convincing documentation that the observed results were the result of the intervention? Does the research make clear what populations were studied (i.e., does it describe the participants' ages, as well as their demographic, cognitive, academic and behavioral characteristics) and does it describe to whom the findings can be generalized? Does the study provide a full description of the outcome measures?

3. **Reliance on measurements or observational methods that provided valid data across evaluators and observers and across multiple measurements and observations** – Are the data based on a single-investigator, single-classroom study, or were similar data collected by multiple investigators in numerous locations? What procedures were in place to minimize researcher biases? Do observed results "hold up" over time? Are the study interventions described in sufficient detail to allow for replicability? Does the research explain how instructional fidelity was ensured and assessed?

4. **Acceptance by a peer-reviewed journal or approved by a panel of independent experts through a comparably rigorous, objective and scientific review -** Has the research been carefully reviewed by unbiased individuals who were not part of the research study? Have the findings been subjected to external scrutiny and verification?

B-4. Must research related to instructional programs, methods and strategies meet all of the characteristics of scientifically based reading research?

Yes. The statute specifically requires these characteristics. For additional guidance, one may wish to consult references on reading research, such as the National Academy of Sciences' National Research Council report *Preventing Reading Difficulties in Young*

Children (1998). The National Research Council, when conducting a review of reading research, followed basic guidelines for scientific method. The NRC wrote:

> Our review and summary of the literature are framed by some very basic principles of evidence evaluation. These principles derive from our commitment to the scientific method, which we view not as a strict set of rules but instead as a broad framework defined by some general guidelines. Some of the most important are that (1) science aims for knowledge that is publicly verifiable, (2) science seeks testable theories – not unquestioned edicts, and (3) science employs methods of systematic empiricism. Science renders knowledge public by such procedures as peer review and such mechanisms as systematic replication. (p.34)

B-5. Is the State educational agency (SEA) responsible for ensuring that only programs based on scientifically based reading research are funded through Reading First?

Yes. In its application to the Department for Reading First funding, each State educational agency must demonstrate how it will assist local educational agencies in identifying instructional materials, programs, strategies and approaches based on scientifically based reading research, and how it will ensure that professional development activities related to reading instruction are based on scientifically based reading research. In determining which LEAs to support, it is the SEA's responsibility to ensure that all programs, strategies and activities proposed and implemented meet the criteria for scientifically based reading research outlined in Question B-2.

C.   DEVELOPING AN EFFECTIVE READING FIRST PROGRAM

C-1. What are the key elements of an effective reading program based on scientifically based reading research?

A high-quality reading program that is based on scientifically based research must include instructional content based on the five essential components of reading instruction (See Question B-1) integrated into a coherent instructional design. A coherent design includes explicit instructional strategies that address students' specific strengths and weaknesses, coordinated instructional sequences, ample practice opportunities and aligned student materials, and may include the use of targeted, scientifically based instructional strategies as appropriate. The design should also consider the allocation of time, including a protected, uninterrupted block of time for reading instruction of more than 90 minutes per day.

A high-quality reading program also includes assessment strategies for diagnosing student needs and measuring progress, as well as a professional development plan that ensures teachers have the skills and support necessary to implement the program effectively and to meet the reading needs of individual students.

C-2. What practices and strategies for classroom instruction should be evident in implementing a high-quality reading program based on scientifically based reading research?

Certain elements should be visible in any Reading First classroom in the country, regardless of which specific program is in use. Standards and accountability are the foundation of the Reading First classroom. Expectations are clear, as are strategies for monitoring progress toward meeting them. A comprehensive reading program provides the basis for instruction, and connects meaningfully to supplemental materials. In-class grouping strategies are in use, including small group instruction as appropriate to meet student needs. Student placement in groups is flexible, with placement and movement based on ongoing assessment, and different curricula may be in use to instruct different groups. There is active student engagement in a variety of reading-based activities, which connect to the five essential components of reading and to overall, clearly articulated academic goals. Effective classroom management and high levels of time on task are also evident.

C-3. What practices and strategies for professional development should be evident in an effective reading program?

Professional development related to a high-quality, effective reading program should aim to increase student achievement by enabling and ensuring the implementation of the particular program(s). Research has shown that teachers who participate in well-designed professional development activities get better results from their students. Well-designed professional development aligns clearly with the instructional program, including its research base, as well as with State academic and performance standards. Adequate time must be available for teachers to learn new concepts and to practice what they have learned. Coaches, mentors, peers and outside experts provide feedback as new concepts are put into practice. Professional development must prepare all teachers to teach all of the essential components of reading instruction (See Question B-1), and to know how they are related, the progression in which they should be taught, and the underlying structure of the English language. Teachers also must understand why some children have difficulty learning to read well and learn how to administer and interpret assessments of student progress. Professional development should also prepare teachers to effectively manage their classrooms and to maximize time on task.

C-4. What practices and strategies for assessment should be evident in an effective reading program?

A high-quality, effective reading program must include rigorous assessments with proven validity and reliability. These assessments must measure progress in the five essential components of reading instruction (See Question B-1) and identify students who may be at risk for reading failure or who are already experiencing reading difficulty. A reading program must include screening assessments, diagnostic assessments and classroom-based instructional assessments of progress. The administration of screening assessments determines which children are at risk for reading difficulty and need additional support. Diagnostic assessments provide more in-depth information on students' skills and instructional needs that forms the basis of the ideal instructional plan. Classroom-based instructional assessments determine whether students are making adequate progress or need more support to achieve grade-level reading outcomes.

An eligible local educational agency must submit an application to the State educational agency in order to be considered for Reading First funding. In addition to any information required by the State, applications must demonstrate how the LEA will carry out the following required activities:

1. **Instructional reading assessments** -- Selection and administration of rigorous screening, diagnostic, and classroom-based instructional reading assessments with proven validity and reliability, and how information from these assessments will be used to make instructional decisions.

2. **Reading program** -- Selection and implementation of a program of reading instruction that is based on scientifically based reading research and that includes the essential components of reading instruction and provides such instruction to children in kindergarten through grade 3. LEAs must demonstrate how this reading program will be implemented, and that it will not be layered on top of non-research based programs already in use. The scientifically based reading program must also align to State academic and performance standards to ensure that students will be able to reach the proficiency level on State assessments.

3. **Instructional materials** – Selection and implementation of instructional materials, including education technology such as software and other digital curricula, that are based on scientifically based reading research.

4. **Professional development** -- Professional development for teachers of kindergarten through grade 3 and special education teachers of kindergarten through grade 12, that will prepare these teachers in all the essential components of reading instruction and to use the selected instructional materials. Professional development must clearly align with the instructional program, including its research base, as well as with State academic and performance standards, and include adequate time for teachers to learn new concepts and to practice what they have learned. Professional development must be an ongoing, continuous activity, and not consist of 'one-shot' workshops or lectures. Delivery mechanisms should include the use of coaches and other teachers of reading who provide feedback as instructional strategies are put into practice.

5. **Evaluation strategies** – Collection and summary of data relating to the program. Evaluation strategies must include the use of valid and reliable measures to assess the effectiveness of local Reading First activities for individual schools and the district as a whole.

6. **Reporting** – LEAs must report data for all students and categories of students described in the State's adequate yearly progress definition.

7. **Access to reading material** – Promotion of reading and library programs that provide access to engaging reading material.

Each LEA application must also include the following assurances:

1. A description of the steps the LEA proposes to take to overcome barriers to equitable program participation, as required under section 427 of the General Education Provisions Act

2. The general assurances in section 9306 of the ESEA

3. The lower-tier certification covering lobbying and debarment/suspension under 34 CFR Parts 82 and 85.

After the initial subgrant period, LEAs that have shown strong reading gains and significantly increased student achievement would be eligible for renewal of their subgrants.

In making continuation awards to local educational agencies, State educational agencies must assess the progress each local educational agency has made in improving student reading achievement and implementing the program outlined in its subgrant application.

A State educational agency may discontinue funding to any local educational agency that is not making substantial progress in improving student reading achievement and implementing the program outlined in its subgrant application.

Definitions

1. **Eligible Local Educational Agency** – A local educational agency that is:

   a. Among the local educational agencies in the State with the highest numbers or percentages of students in kindergarten through grade 3 reading below grade level, based on the most currently available data; and

   b. The LEA has jurisdiction over at least one of the following:

      1) A geographic area that includes an area designated as an empowerment zone or an enterprise community under part I of subchapter U of chapter 1 of the Internal Revenue Code of 1986;

      2) A significant number or percentage of schools that are identified for school improvement under section 1116(b); or

      3) The highest numbers or percentages of children who are counted under section 1124(c), in comparison to other local educational agencies in the State.

2. **Eligible Professional Development Provider** – A provider of professional development in reading instruction to teachers, including special education teachers, that is based on scientifically based reading research.

3. **Essential Components of Reading Instruction** – Explicit and systematic instruction in:
   a. Phonemic awareness

   b. Phonics

   c. Vocabulary development

   d. Reading fluency, including oral reading skills

   e. Reading comprehension strategies

4. **Instructional Staff** – Individuals who have responsibility for teaching children to read. This includes principals, teachers, library school media specialists, teachers of academic subjects other than reading, and other individuals who have responsibility for assisting children to learn to read.

5. **Reading** – A complex system of deriving meaning from print that requires all of the following:

a. The skills and knowledge to understand how phonemes, or speech sounds, are connected to print

b. The ability to decode unfamiliar words

c. The ability to read fluently

d. Sufficient background information and vocabulary to foster reading comprehension

e. The development of appropriate active strategies to construct meaning from print

f. The development and maintenance of a motivation to read

6. **Scientifically Based Reading Research** – Research that applies rigorous, systematic and objective procedures to obtain valid knowledge relevant to reading development, reading instruction, and reading difficulties. This includes research that:

a. Employs systematic, empirical methods that draw on observation or experiment;

b. Involves rigorous data analyses that are adequate to test the stated hypotheses and justify the general conclusions drawn;

c. Relies on measurements or observational methods that provide valid data across evaluators and observers and across multiple measurements and observations;

d. Has been accepted by a peer-reviewed journal or approved by a panel of independent experts through a comparably rigorous, objective and scientific review.

Using Scientifically Based Reading Research
to Evaluate Reading Program Effectiveness

Criteria	Meets Rigorous Standard
1. Use of rigorous, systematic and empirical evidence	• The program has a solid theoretical or research foundation that is grounded in the scientific literature. • Program effectiveness has been shown through an experimental design that includes experimental and control groups created through random assignment or carefully matched comparison groups. • Program effectiveness has been demonstrated through research that clearly describes how, by whom, and on whom the research was conducted.
2. Adequacy of the data analyses to test the stated hypotheses and justify the conclusions drawn	• Research that demonstrates program effectiveness was designed to minimize alternative explanations, such as through a series of experiments that consistently support a given theory while collectively eliminating the most important competing explanations. • The overall conclusions of program effectiveness are consistent with research observations. • Research that demonstrates program effectiveness presents convincing documentation that the observed results were the result of the intervention. • Research that demonstrates program effectiveness clearly defines the population studied (student demographics such as age and poverty level, as well as cognitive, academic and behavioral characteristics; school attributes such as grade levels, size and racial, ethnic and language minority composition). • Research that demonstrates program effectiveness clearly describes to whom the findings can be generalized. • Research that demonstrates program effectiveness provides a full description of outcome measures.
3. Reliance on measurements or	• Gains in student reading achievement have been

Criteria	Meets Rigorous Standard
observational methods that provide valid data across evaluators and observers and across multiple measurements and observations	sustained over time. • Gains in student reading achievement have been confirmed through independent, third-party evaluation. • Program effectiveness has been demonstrated through multiple investigators in numerous locations. • Research that demonstrates program effectiveness describes the program in sufficient detail to allow for replicability. • Research that demonstrates program effectiveness explain how instructional fidelity was ensured.
4. Acceptance by a peer-reviewed journal or approved by a panel of independent experts through a comparably rigorous, objective and scientific review	• Unbiased individuals who were not part of the study have carefully reviewed the research that demonstrates program effectiveness. • Program effectiveness findings have been subjected to external scrutiny and verification.

Key Findings from Scientifically Based Research on the Essential Components of Reading Instruction

Component of Reading Instruction	Definition	Key Findings
1. Phonemic Awareness	The ability to hear, identify and manipulate the individual sounds, or phonemes, in spoken words.	• Phonemic awareness can be taught and learned. • Phonemic awareness instruction helps children learn to read. • Phonemic awareness instruction helps children learn to spell. • Phonemic awareness instruction is most effective when children are taught to manipulate phonemes by using the letters of the alphabet. • Phonemic awareness instruction is most effective when it focuses on only on or two types of phoneme manipulation, rather than several types.
2. Phonics	The understanding that there is a predictable relationship between phonemes, the sounds of spoken language, and graphemes, the letters and spelling that represent those sounds in written language.	• Systematic and explicit phonics instruction is more effective than non-systematic or no phonics instruction. • Systematic and explicit phonics instruction significantly improves kindergarten and first-grade children's word recognition and spelling. • Systematic and explicit phonics instruction significantly improves children's reading comprehension. • Systematic and explicit phonics

Component of Reading Instruction	Definition	Key Findings
		instruction is effective for children from various social and economic levels.
		• Systematic and explicit phonics instruction is particularly beneficial for children who are having difficulty learning to read and who are at risk for developing future reading problems.
		• Systematic and explicit phonics instruction is most effective when introduced early.
		• Phonics instruction is not an entire reading program for beginning readers.
3. Vocabulary Development	Development of stored information about the meanings and pronunciation of words necessary for communication. There are four types of vocabulary: a. listening vocabulary – the words needed to understand what is heard b. speaking vocabulary – the words used when speaking c. reading vocabulary – the words needed to understand what is read d. writing vocabulary – the words used in writing	• Children learn the meanings of most words indirectly, through everyday experiences with oral and written language. • Some vocabulary must be taught directly.
4. Reading fluency	The ability to read text accurately and	• Repeated and monitored oral reading

Component of Reading Instruction	Definition	Key Findings
quickly		improves reading fluency and overall reading achievement. • No research evidence is available currently to confirm that instructional time spent on silent, independent reading with minimal guidance and feedback improves reading fluency and overall reading achievement.
5. Reading Comprehension Strategies	Strategies for understanding, remembering and communicating with others about what has been read	• Text comprehension can be improved by instruction that helps readers use specific comprehension strategies. • Students can be taught to use comprehension strategies.

References

Information on obtaining these resources is provided below. Electronic links are available at: http://www.ed.gov/offices/OESE/reading_resources.html.

- *Put Reading First: The Research Building Blocks for Teaching Children to Read, Kindergarten through Grade 3*
  September 2001

  This publication was developed by the Center for the Improvement of Early Reading Achievement (CIERA) and was funded by the National Institute for Literacy through the Educational Research and Development Center Program. To order this publication, call 1-877-4-ED-PUBS.

- *Report of the National Reading Panel: Teaching Children to Read*
  April 2000

  The National Reading Panel Report outlines the most effective approaches to teaching children to read, the status of the research on reading, and reading instructional practices that are ready to be used by teachers in classrooms. Both the report and the congressional testimony are available on line and in hard copy.

- *Preventing Reading Difficulties in Young Children*
  December 1998

  This landmark 1998 report of the National Research Council synthesizes the wealth of research on early reading development. It provides an integrated picture of how reading develops and how reading instruction should proceed. This book includes recommendations for practice and further research. Hardcover copies are available from the National Academy Press by calling 1-800-624-6242. Each book costs $35.95 plus shipping and handling.

- *Starting Out Right: A Guide to Promoting Children's Reading Success*
  1998

  This guide, developed by the National Research Council, explains how children learn to read and how adults can help them. It provides ideas for the prevention of reading difficulties in early childhood and the primary grades. Copies are available from the National Academy Press by calling 1-800-624-6242. Each book costs $14.95 plus shipping and handling.