

SUMMARY OF RESEARCH

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INTRODUCTION

A reading intervention program is designed to prevent reading failures or correct the problem areas as quickly as possible. Early intervention is particularly critical because children who start off experiencing reading failure can go on to have failure in all content areas throughout their school years. Early intervention is particularly important because the sooner children are successful in reading, the happier and more confident they are in all content learning. (Hiebert & Taylor, 1994); Pikulski (1994)

SOAR TO SUCCESS-Levels 3-6 has been widely used in classrooms for more than five years and has been most successful in giving students the support they need to become on-level readers. The SOAR TO SUCCESS program is based on a National Study conducted in 1996 and 1997 using fourth-grade students at 13 sites throughout the country. The 38 teachers in the study were given two days of training on how to use the program instructional model. (Cooper, J. D., Boschken, I., McWilliams, J., & Pistoichini, L. (2000), *A Study of the Effectiveness of an Intervention Program Designed to Accelerate Reading for Struggling Readers in the Upper Grades*). Since those studies, the program continues to be highly effective in getting students to read on level.

The Project SUCCESS research study showed the following results:

- Motivation among students was high throughout the study.
- Students showed significant gains in oral reading based on their successful application of phonics/decoding skills and the reading strategies and the many opportunities for oral reading.
- A greater proportion of project SUCCESS students were reading on level as compared to the control group in this study.
- Intervention was equally effective whether it was an in-class program or a pullout program.
- Intervention works better when it is an addition to classroom reading instruction.
- The literature, repetition of vocabulary and skills instruction, and fast-paced lessons kept students excited about reading and contributed to their growth in reading.
- Teachers benefited from training and coaching as SOAR TO SUCCESS teachers.

The SOAR TO SUCCESS program 3-6 is the model on which the K-2 program has been developed. The goals are the same:

- Children learn how to read with confidence and success.
- Children need strong intervention instruction, practice, and application to be successful readers
- Children master the skills, fluency and strategies that they can use to read grade-level materials.

INTERVENTION FOR BEGINNING READERS

The following list presents a list of the areas that challenge struggling readers at the primary levels. (National Institute for Literacy, 2003; Chall & Curtis, 2003):

- Background experiences
- Oral language development
- Letter Naming
- Decoding-Phonemic Awareness and Phonics
- Oral Reading and Writing Vocabulary
- Fluency
- Comprehension
- Maintaining Attention
- Motivation

Young children who show signs of becoming struggling readers cannot keep up the pace of the core-reading program because of their deficiencies. They need success-building instruction and support in addition to the regular class program to become confident readers. The goal of schools and teachers is to build a strong reading foundation so children enjoy reading for pleasure and reading to learn. Reading is the key to all content areas and a critical life skill.

SOAR TO SUCCESS K-2

SOAR TO SUCCESS K-2 is an early intervention program targeting the following skill areas: Letter Naming (Learning A, B, C's), Phonemic Awareness, Phonics, Fluency, and Reading Comprehension Strategies. There has been extensive research on these problem areas that need intervention so that children can become successful readers. Children who do not have a successful start in learning to read are not likely to catch up with their peers. (Frances, Shaywitz, Stuebing, and Fletcher, 1996) The following research paper describes current research to support the SOAR TO SUCCESS Reading Intervention Program at Levels K-2.

LETTER NAMING

Letters are the building blocks of print. Learning to read begins with knowledge of letter names. There has been extensive research to support this conclusion. (Adams, 1990; National Research Council, 1998)

Knowing the names of the alphabet letters supports reading acquisition. Letter naming measures have been shown to be predictors of reading development, especially when letter naming is taught in conjunction with other beginning-to read skills.

PHONEMIC AWARENESS

There is widespread agreement that reading demands are greater than at any time in history. Reading depends on the ability to translate print into meaning. The first vitally important step in reading is being able to decode or recognize print. This process of translating printed words into their spoken language equivalent has been called word identification or decoding. It has been estimated that approximately 90% of children identified as having reading/learning disabilities lack phonemic awareness. (Stanovich, 1986)

While letter recognition and concepts of print deal with the visual dimensions of language, phonemic awareness deals with the sounds of language. Phonemic Awareness is the ability to hear individual sounds in words. Very young children love to use language for rhymes, for their needs, and to describe what they see and hear. Initially when asked what sounds they hear in a word, children may say the whole word. Hearing individual sounds in words takes time to learn and to experience. These experiences are critical in learning to read.

Measures of phonemic awareness are one of the best predictors of success in learning to read. (Adams, 1990; Learning First Alliance, 1998; National Reading Panel, 2000) Blending and segmenting phonemes are the most critical of the phonemic awareness skills. Small-group instruction may be far more effective with small groups than individually or whole-group instruction. (National Institute for Literacy, 2003)

Children must be able to hear individual sounds in order to understand that letters make different sounds. Learning to read involves mastering a code of letter sounds and an awareness that words are made up of letter sounds; and words make up sentences and stories, and together they must make sense.

Phonemic Awareness develops as children learn that there are separate letters in words and separate words in a sentence. The learning sequence has multiple steps learned through oral language experiences.

1. Segment sentences into words: blend words into sentences
2. Segment compound words: blend words into a compound word.
3. Segment words into syllables: blend syllables to form words
4. Segment words into onsets and rhymes (C-at): blend onsets and rhymes into words
5. Segment words into individual phonemes: blend phonemes into words.

Once children understand phonemic awareness with a reasonable sample, they will not need specific experiences with every letter sound. As children acquire knowledge of letter names and phonemic awareness, they are ready for instruction in associating letters and sounds. Phonics lessons teach children to associate the sounds they have heard with letters they know.

PHONICS

“The goal of phonics instruction is to help children use the alphabetic principle—the knowledge that there are systematic and predictable relationships between written letters and spoken sounds.” (National Institute for Literacy, 2003 p.12)

Systematic and explicit phonics instruction is more effective than non-systematic or no phonics instruction. Systematic phonics instruction follows a carefully planned sequence; however, there is no “correct” sequence for phonics instruction. Logical principles suggest moving from easier to more difficult instructional activities, *m* and *s* versus *b* and *p*.

Letter sounds for consonants and vowels should be taught in a sequence that allows children to read some words. Practice in using recently taught letter sounds in reading materials is critical.

SOAR TO SUCCESS has the same sequence of letter sounds developed in Houghton Mifflin’s core programs. Extensive field testing and follow-up studies support the success of the reading programs and the strengths of helping children to decode with confidence and success.

Explicit or Implicit Phonics Instruction Phonics instruction is usually categorized as explicit or implicit. The National Reading Panel analysis (2000) indicated that “Explicit, systematic instruction is an essential part of a successful reading program,”(p. 10) In explicit phonics instruction, letter sounds are identified in isolation and then blended together to form words. About four decades ago, Jeanne Chall concluded that explicit phonics instruction is the most effective teaching strategy based on her extensive research review. (1967).

Phonics instruction must be adjusted to meet the varying needs of children. Teacher modeling is a key ingredient in helping children become flexible and strategic decoders. Well over a decade ago, Keith Stanovich, 1986 (see also Cunningham and Stanovich, 1998) published a classic article in the field of reading. He pointed out that children who receive excellent decoding instruction are off to a fast start in reading and are motivated to read widely. (p. 66)

Systematic and explicit phonics instruction is most beneficial for children who are having trouble learning to read and who are at risk for future reading problems. Systematic phonics instruction is significantly more effective in helping children overcome reading difficulties.

(Research Building Blocks for Teaching Children to Read, 2003)

Intervention programs that provide phonics instruction must allot enough instructional time to model and support children in putting phonics knowledge into reading practice. Children must have opportunities to use what they have learned in stories using the same letter sounds they are learning. (Reading Building Blocks for Teaching Children to Read, 2003)

FLUENCY

The National Reading Panel Report (2000) defines reading fluency as “the ability to read text quickly, accurately, and with proper expression.” *The Literacy Dictionary, The Vocabulary of Reading and Writing* defines fluency as “freedom from word identification problems that might hinder comprehension.” (Harris and Hodges, 1995, p. 85) Samuels, a pioneer in research and theory in reading fluency, cites the enlargement of the construct of fluency to include reading comprehension as a major force in reading comprehension. (Samuels, 2002, p. 167)

The following chart shows five research-based steps to improving reading fluency.

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<heading> Steps to Improve Reading Fluency

1. Modeled reading
2. Repeated reading of familiar texts
3. Wide independent reading
4. Coached reading of appropriately selected reading materials
5. Word reading practice

Fluency serves as a bridge between accurate decoding and understanding the text (Pikulski and Chard, 2003). A strong relationship between reading fluency and comprehension has been clearly established. (Pinnell, 1995) Fluency is critical because fluent readers are more likely to read than non-fluent readers (Cooper, Chard, and Kiger, 2006)

Modeled Reading One way to improve fluency is for teachers to model fluent reading by reading aloud to children. (Dowhower, 1987; Hoffman, 1987; Smith, 1979). Reading aloud provides a model of how to pace reading and how to infuse expression.

Repeated Reading of Familiar Texts Rereading is perhaps the most frequently documented approach to improving fluency. (National Reading Panel, 2000; Rashotti and Torgenson, 1985) When children practice oral reading and rereading of text, fluency improves dramatically according to a wide body of research. (Cooper, Chard, and Kiger, 2006).

Wide Independent Reading Adams in her critical review of beginning reading research stated: “If we want children to read well, we must find a way to make them read lots.” (1990, p. 5) Obviously struggling readers are not reading widely. Struggling readers need the most support to read with increased fluency, understanding, and enjoyment. *Becoming a Nation of Readers* (Anderson et al, 1985) concludes: “Research suggests that the amount of silent reading that children do in school is significantly related to gains in reading achievement.”

Coached or Assisted Reading Researchers agree that accuracy alone is insufficient and children also need to read fluently if they are going to understand the connection between

ideas in print. (Nathan and Stanovich, 1991) Controlling the difficulty of texts and providing feedback for words missed are related to improved rate and accuracy.

Word Reading Studies in which teachers had children practice reading lists of words they would encounter in their reading consistently resulted in increased fluency. (Fleisher, Jenkins, and pany,1979-1980; Levy Abello, and Lysynchuk,1997)

COMPREHENSION

Reading comprehension is a complex, cognitive activity that relies on decoding and fluency, prior knowledge, and vocabulary. (National Reading panel. 2000)
Comprehension is the process of constructing meaning by interacting with text (Anderson and Pearson, 1984) It is the primary reason we read-to understand what has been read, and not just call out words. (Cooper, Chard, and Kriger, 2006)

There are several key instructional areas that affect comprehension: Word Recognition and/or Fluency, Oral Language and Meaning Vocabulary, Prior Knowledge, Text Factors, and Strategies. According to Pearson, Dole, and their colleagues (1991-1992), “strategies are conscious and flexible plans that readers adapt and apply to a variety of texts and tasks.”

Children need extensive experiences in using these strategies in their reading. Because these strategies can be complex, teacher modeling is critical. Children also need guided reading experiences leading to independence.

Reading ability-both comprehension and word recognition-is facilitated when children use reading strategies. It is important that these strategies are introduced and used by young children and must be mastered in Grades 4-8 where reading materials become more complex.

As Dole and others have stated, children need too develop a set of strategies they can adapt to any reading situation. (Dole et al, p.242) The most useful strategies are: making predictions, Summarizing, questioning, clarifying or monitoring, and clarifying/phonics. Effective comprehenders often use several strategies simultaneously.

The National Reading Panel (2000) concluded that there are varied types of instruction that are especially effective in teaching children to comprehend. They are:

- Reading Opportunities
- Instructional Support-Pre-reading Activities, Guided Reading, Questioning Strategies, and Fluency
- Explicit Instruction in Reading Strategies-predicting, summarizing, clarifying, questioning, and clarify/phonics-essential for reading success (Paris, Wixon, and Lipson,1983;Paris, Wasik, and Turner,1991)
- Discussion including cooperative learning

Successful comprehension instruction requires a literacy program that includes diverse reading materials, -fiction and non-fiction, many opportunities for supported application and practice, comprehensive instruction in skills, strategies, vocabulary, and cooperative discussions of text.

SOAR TO SUCCESS-LEVELS K-2 is based on extensive research in learning to read cited in this report. Each of the key areas leading to reading success for all children is developed through carefully scaffolded skills and vocabulary teaching. SOAR TO SUCCESS builds reading expertise using both fiction and non-fiction selections where children can use the skills and vocabulary they have learned.

Children learn the decoding skills-Phonemic Awareness, and Phonics- and the Reading Strategies that lead to fluency and reading success. The lively selections and success-building instructional model give children the motivation and the joy of being a good reader.