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RESEARCH-BASED PHONICS INSTRUCTION
FOR BEGINNING READERS

A Project
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
in
Education

by
Laura Lyn Diamond


June 2000


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ABSTRACT

This project begins by examining the need for curricular reform in teaching beginning readers. A review of the literature on effective reading instruction sheds light on exactly what shape such reform should take. Specifically, the literature suggests that beginning readers need a thorough understanding of letters, sounds, and their relationship to one another in order to emerge as skilled, fluent readers. Much research indicates that the effective familiarity and use of phonics concepts is a key element in the development of strong, flexible readers. In response to the research, a handbook for explicitly teaching phonics is included in the project. Written for the first grade teacher, it includes a comprehensive phonics program which works to familiarize students with letter/sound relationships and set a strong foundation for acquiring the phonics knowledge needed to become a full-fledged reader.

ACKNOWLEDGEMENTS

Teaching reading is truly an investment in human capital. This project is dedicated to the children who come through my classroom door, day in and day out. It is they who have been my guide. From them I have learned that there are many paths that lead to literacy. So to my students, whose bright eyes and eager minds have so willingly taken to the daunting task of learning to read, I thank you for lighting the way for me. It is my privilege to have been your teacher.

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CHAPTER 1: STATEMENT OF THE PROBLEM

The United States is one of the most affluent and most technologically advanced countries in the world. We have one of the most comprehensive school systems anywhere. There are rigid credentialing requirements in place for teachers, "free" education for all school age children, and a wealth of state standards for each grade level. The United States also pours enormous amounts of money and resources into its education system. Yet it is a country in crisis. The education system is not producing a nation of readers. Increasingly, U. S. citizens are on the verge of illiteracy (Anderson, Heibert, Scott, & Wilkinson, 1985).

Rather than looking outward for the answers, the education community needs to look inward for effective solutions to this crisis. When Rudolph Flesch wrote Why Johnny Can't Read in 1955, there was tremendous debate over effective reading instruction. Although American education has gone through substantial changes since then, the debate is hardly over. There continues to be disagreement in Washington DC, among educational researchers, and in the classroom about effective reading programs, especially for beginning readers (Chall, 1989).

But the process of "looking inward" is certainly a painful one. As an educator, I lay awake many nights pondering the methodology I use in the classroom. Did I do this right? Why did Alex do so poorly on his assessment? Why is it that Sarah is moving so slowly through the reading levels? Can I do something more, something different, something better? These are the questions that plague reading teachers everywhere.

Indeed, the teaching of reading is the most lofty and most important task we have as teachers. After all, reading is key to education. Most every academic endeavor hinges on one's ability to read. Teaching reading is truly an investment in human capital. This is why effective reading instruction is so important. In thinking about effective reading instruction, phonics is undoubtedly the most ferociously debated topic. Both the California English Language Arts Framework and the new California Language Arts Content Standards (1998) indicate that students should use phonics, and phonemic concepts such as syllabication and word chunking, to become fluent readers. The framework and standards discuss the broad concepts that should be taught, but they do not suggest a specific system. Nor do they

indicate how much phonics to teach or when to teach it. And, in general, school district curriculums do not address this either. District curriculums do advocate the use of phonics. But, again, there is not usually a suggestion of exactly how to deliver instruction or when that instruction should occur.

Moreover, many popular publishers do not have adequate phonics components to their programs. For example, the materials currently in use in first grade classrooms in my district do explore phonics. But much of that exploration is intermittent, as issues come up in the reading texts. Also, since research suggests students need to "overlearn" phonics rules, our current program does not have a sufficient amount of practice necessary for mastery of phonics concepts (Adams and Osborn, 1990). In fact, it falls far short of the recommendations of Anderson (1985), Chall (1983), and Adams (1990) who advocate a more explicit, systematic approach to teaching phonics. So where are teachers to turn in their efforts to provide a sound reading program that includes phonics?

In *Modern Phonics Instruction*, Groff (1989) discusses the various methods of teaching phonics.

Phonics instruction can be generally placed into three categories:

1) Implicit phonics. This type of instruction is often characterized by teaching phonics from the whole to the part. As an example, Groff (1989) explains implicit phonics as instruction where the letter-sound correspondences of a word, like bat, are taught only within the whole word, and not as isolated items. In this method, students who need to learn the b = /b/ rule would listen to bit, bat, but, and then infer that they all begin with /b/.

2) Explicit phonics. On the continuum, both the decoding and skills models would support this. Groff (1989) describes explicit phonics as a method of instruction where "the information that children are taught is referred to directly and in isolation" (p. 9). Here phonics is taught from part to whole, from individual letter sounds to words. For example, at its simplest, explicit phonics would look at the word bat. Bat starts with the speech sound /b/, followed by short /a/ and /t/. In explicit phonics, children are taught to apply phonics generalizations to the word bat by blending

these three speech sounds together to get an approximate pronunciation of the word (Groff, 1989).

3) Intrinsic Phonics. This approach, supported by the socio-psycholinguistic model, relies heavily on the "teachable moment" to introduce phonetic concepts. In other words, intrinsic phonics gives instruction incidentally, when a phonetic issue appears in the literature being used. For example, if a text being read by a class has a lot of CVCe words, the teacher would use that as an opportunity to explore the phonetic concept of CVCe (Goodman & Goodman, 1979).

Clearly, each reading theory model has merit. But when it comes to teaching reading, teachers cannot afford to make mistakes. The statistics are grim. Nearly a quarter of the American work force lacks basic reading skills (Anderson et al., 1985). So where exactly does one begin when thinking about beginning reading instruction? The U.S. Department of Education's 1985 report, "Becoming a Nation of Readers", suggests that research has the answers. The report indicates that "children who are taught phonics directly get off to a better start in learning to read" (p. 37-38). And this is why many education researchers like Marilyn Adams

(1990), Jeanne Chall (1989), Carla Heymsfeld (1989), and S. Jay Samuels (1988) advocate an intensive, systematic approach to teaching phonics. Chall's advice to educators is to base beginning reading instruction on scientific research rather than on the latest fad in reading education (Chall, 1983).

Attempting to understand the role of phonics in learning to read is indeed a seemingly complex one. Looking at research helps to demystify the phonics issue. In a three-volume collection of papers by leading education researchers titled Theory and Practice of Early Reading, 90% of the researchers were in favor of explicit, systematic phonics. The findings of these researchers indicate that overwhelming empirical research exists to support systematic, code-oriented instruction in the primary grades (Resnick & Weaver, 1979). In her 1989 article, "Filling in the Hole in Whole Language," Heymsfeld notes that research to date tells us that students learn to read more fluently when their reading skills are taught directly and lessons are structured in a systematic way. She also cautions educators that "we cannot depend on haphazard, amorphous lessons to teach something as critical as knowledge of the alphabetic

code....phonics is certainly not sufficient unto itself" (p. 68). Heymsfeld (1989) tells us to use common sense to combine direct skill instruction with opportunities for children to explore on their own.

Like many, I am an eclectic teacher. I pull what I deem best from each model on the continuum. However, I am most grounded in the skills model. I view learning to read as "the active process of reconstructing meaning from language represented by graphic symbols (letters)" (Smith, Goodman, & Meredith, 1970, p. 247). From this definition, I value the explicit teaching of phonics as an essential element in beginning reading instruction. The key word here is *element*. While I choose to teach explicit phonics in my reading program, I do not discount the use of authentic literature, writer's workshops, and the like. Let me say up front that phonics is certainly not the end all, be all of beginning reading instruction. It is only one element in a balanced reading program. However, phonics really does seem to be a crucial element, an element that has long been misunderstood. As a teacher of beginning readers, I see a great need for explicit, systematic phonics guidelines in our current curriculum.

The purpose of this project is to create a research-based handbook for teaching phonics explicitly and systematically. The handbook will be designed to teach phonics in a specific order, based on a hierarchy of skills. It will teach phonics skills in isolation. It will also work to support the "whole-part-whole" methodology. That is, the phonics concepts taught will also be explored in whole, meaningful texts. The goal of the handbook is to teach phonics concepts thoroughly enough for children to be able to quickly and accurately apply that knowledge to both familiar and unfamiliar text. The handbook will be specifically designed for first grade teachers, although it will be able to be used at other levels for the purpose of remediation. As I will discuss at length in the literature review, a substantial amount of education research finds that a well-grounded foundation in decoding produces better readers. With this in mind, the handbook will be created to support explicit phonics instruction in the first grade classroom. It shall suggest an order in which to teach phonics concepts and provide ideas to help students master many phonics generalizations. The handbook will be designed in an effort to enhance a balanced program of

good literature, opportunities for written expression, rich oral language experiences, and sound decoding skills.

CHAPTER TWO: LITERATURE REVIEW

This section will take a brief look at the history of reading instruction. Because understanding what good readers do is essential when considering effective instruction, this chapter will also examine the stages of reading development as well as the characteristics of skillful readers. Additionally, I will review the literature to find support for the most effective methods of teaching phonics to beginning readers. Lastly, this chapter will serve as a springboard for my project, infusing it with research-based evidence about the role of systematic, explicit phonics instruction in the early grades.

Our earliest ancestors used pictures as a means to communicate. This method, as man discovered, was only somewhat effective. The pictures that were drawn did not have an exact meaning. That is, the reader could easily misinterpret the pictures because pictures can often have more than one meaning depending on what the author intended. In ancient Mesopotamia, the Sumerians solved this problem by creating a logographic system. Each picture was assigned an exact meaning. The system worked well and spread to other cultures quickly. Logograms are

still used in some cultures today, Chinese and Korean for example (Adams, 1990; Balmuth, 1982).

The problem with the logographic system is that it was restrictive. After all, some words are just not picturable. So languages began to evolve into syllabic systems where words that could not be pictured were given specific syllabic logograms. With the advent of syllabic systems, people had to exhaustively memorize symbols. This was definitely a draw back (Adams, 1990; Balmuth, 1982).

As the systems evolved from one to another, the symbols became less and less pictorial. Eventually, the Phoenicians and the Greeks developed written languages that had one symbol for each sound and the first alphabet was born. Later, the Romans jumped on the alphabet bandwagon and passed it along to those they conquered during the Roman Empire (Adams, 1990; Balmuth, 1982).

In The Roots of Phonics, Miriam Balmuth discusses the advantage of an alphabetic system. Unlike the logographic and syllabic systems that came before, the alphabetic system did not require the memorization of thousands of symbols. In contrast, it requires knowing relatively few symbols. Although the alphabetic system

is far superior to others in its ability to allow ideas to be symbolically represented through letters, the English alphabet has its flaws (Adams, 1990; Balmuth 1982).

The English alphabet's main drawback is that it is not completely phonetic. But that is a problem that can be overcome because all words have some phonetic clues (Flesch, 1981). Indeed, "the earliest methods of reading instruction followed a straightforward, two-step process: Teach the code, then have them read" (Adams, 1990, p. 21). From the beginning, reading instruction was based on the principles of phonics (Adams, 1990; Balmuth, 1982).

In America, the first law mandating basic education for children came in 1642, mostly out of a desire to have its citizens well versed in the Bible. In fact, the people of colonial America were so eager to have their citizens be educated that the "Old Deluder Satan Law" was enacted in 1647. This law required towns to establish both elementary and secondary schools where children could be educated, especially in religious matters (Balmuth, 1982).

According to Adams (1990), up until the middle of the nineteenth century, books used to teach reading were designed to help students break the alphabetic code. But the mid-1800's marked a philosophical change in American schooling. Many were speculating about the nature and purpose of learning to read. Reading was no longer strictly limited to religious purposes. And educators began questioning the exclusive use of phonics to teach reading (Adams, 1990; Balmuth, 1982).

In 1837, Horace Mann, Secretary of the Massachusetts Board of Education, suggested that children be taught to read whole words first, rather than learning phonics to decode words. He and his wife Mary developed this reading program based on the work of Thomas A. Gallaudet. Gallaudet devised the "whole word" method to teach deaf children how to read because they could not sound out words. And although this "new method" was not embraced initially, it did begin to take hold as the years went by (Adams 1990; Balmuth, 1982).

By the mid-1900's, the whole-word method was used full force in American classrooms. Phonics was now considered a subskill to be sparingly taught and only in connection to the meaning of text. This gave way to the

"basal reader," which contained very controlled vocabularies and placed an emphasis on memorizing whole words (Adams, 1990; Balmuth, 1982).

This method of teaching came under much scrutiny in the 1950's with the publication of Flesch's (1955) Why Johnny Can't Read. Flesch's book stayed on the best-seller list for more than thirty weeks (Adams, 1990). His book reminded us that "English is alphabetic and thus phonetic by definition. [sic] He continued that for English, as for any other alphabetic language phonic instruction is the only natural system of learning how to read: Teach the children the identities of the letters, teach them the sounds that each represents, and teach them by having them write" (Adams, p. 23-24). Flesch presented his ideas in a fiery condemnation of whole word methodology.

Flesch believed there was a connection between phonics and democracy--a fundamental connection. Equal opportunity for all is one of the unalienable rights, and the word method interferes with that right....The word method is gradually destroying democracy in this country; it returns to the upper middle class the privileges that public education was supposed to distribute evenly among

the people. Essentially, the American Dream is equal opportunity through free education for all. The dream is beginning to vanish in a country where the public schools are falling down on the job (Flesch, pp. 130-132).

Because of the politicized presentation of Flesch's book, it caused uproar over reading instruction. In the 1960's, after Flesch's book was published, many research studies were done to once again look at the role of phonics in beginning reading instruction (Adams, 1990). Bond & Dykstra (1967) coordinated some 27 studies of beginning reading methods and Chall (1967) reviewed the existing research. All three researchers concluded that the evidence supported code-oriented instruction over the whole-word method (Bond & Dykstra, 1967; Adams, 1967). This research spurred a sharp increase in the use of phonics instruction in beginning reading programs in the 1970's. But the return to code-emphasis was short lived. The 1980's saw a return to the sight, or socio-psycholinguistic methods (Adams 1990; Balmuth 1982). And since then, there seems to be little consensus among educators about the most effective method of reading instruction.

Before one even considers what is effective with regards to reading instruction, it is important to understand how reading develops. In Jean Chall's (1983) book, The Stages of Reading, she iterates a scheme of stages that readers go through, from prereading to mature, skilled reading. She sets up these stages in a hierarchical manner. That is, she suggests that readers must master the skills in one stage in order to effectively progress through the other stages to become a fluent reader. The six stages of reading development are:

Stage 0, Prereading, from birth to about age six, is characterized by growing control over language. Current estimates are that average six-year olds can speak or understand about 5,000 words. During the prereading stage, most children living in a literate society acquire some knowledge and insight into print, and learn to recognize letters, common signs, and common words. Many can write their names and pretend they can read a story that has been read to them several times.

Stage 1, Initial Reading or Decoding, (Grades 1-2), involves the alphabetic principles--developing skills and insight into letter-sound relations and into the decoding

of words not recognized immediately. Children learn to recognize the words in their books, and to "understand" the material they read. But what they can read at this stage is considerably below what they can understand in speech. Their ability to decode and recognize printed words is limited but growing rapidly.

Stage 2, Confirmation, Fluency, and Ungluing from Print (Grades 2-3), consolidates what students have learned earlier in the recognition of words and in the use of decoding skills to help them gain further insight into reading and comprehending of familiar texts. By the end of this stage, they have developed fluency and ease in recognizing words, in "sounding" others they do not recognize immediately, and in "predicting" still others from context. The material that they can read fluently is basically within their knowledge linguistically and cognitively.

Stage 3, Learning the New (Grades 4-8), marks the beginning of reading as a tool for acquiring knowledge, feelings, values, insights, and attitudes. It is at this stage that the books students read go beyond their background knowledge, and beyond simple narrative presentation.

Stage 4, Multiple Viewpoint (High School), requires more complex language and cognitive abilities, since the reading tasks involve more complex texts in many more advanced content areas. Students are also required to comprehend varying viewpoints at even greater depth.

Stage 5, Construction and Reconstruction (College Level), the maturest stage, is characterized by a worldview. Students read books and articles in detail and depth that they need for their own purposes. Readers in Stage Five know what not to read as well as what to read. Reading here is basically constructive. From reading what others say, students construct knowledge for their own use (Chall, 1987, p. 7).

This sort of developmental stage theory is similar to theories of other cognitive psychologists. Like their theories, Chall's stages are born of a "behaviorist" model. To behaviorists, a skill is learned when simpler tasks are practiced until they became automatic so they can be combined to support attempts at more complex tasks (Chall, 1983). Reviewing Chall's stages, especially the first three in which children are in the beginning stages of learning to read, it is clear that reading instruction needs to ascend in a hierarchy of skills. Students must

master the skills of decoding in order to move on into the higher stages. While some children do learn to read at very early ages, they do so either with extensive support and guidance from caretakers or from a propensity toward reading. And early readers still progress through the same stages as other children who learn to read at a more "normal" pace (Adams, 1990; Chall, 1983).

Using Chall's (1983) stages of reading, the role of phonics in beginning reading instruction becomes increasingly clear. Most researchers agree that the ultimate goal of reading is to gain meaning. Good readers know that print contains meaning. Good readers know that there are strong cues they can use to decode to meaning. They use all the cueing systems: semantic, which are based on what makes sense; syntactic, which are based on what fits grammatically; and graphophonic, which focus on what the letters represent. Skillful readers use all three cueing systems. But does one cueing system take precedence over the others? Many researchers, like Adams (1990), Chall (1983), and Groff (1989), tell us yes, especially in the early stages of learning to read. They emphasize the power of the graphophonic cueing system for beginning readers. They characterize the

understanding of phonics as a real necessity, as the "building blocks" of fluency.

According to Marilyn Adams and Jean Osborn (1990), "a hallmark of skillful readers is the speed and relative effortlessness with which they proceed through text" (p. 4). They go on to cite laboratory research which shows that good readers visually process practically each and every letter of text they read (Adams and Osborn, 1990). For many years, it was thought that good readers sampled text. That is, readers were thought to make predictions and then look at words and letters only long enough to see if their predictions were correct. But recent eye-movement research conducted with computerized tracking showed that sophisticated readers actually look at every word and almost every single letter when reading (Rayner & Pollatsek, 1989). The amount of time spent processing the letters is incredibly small, only a few hundredths of a second. This amazing speed comes from the familiarization of spelling patterns and the fact that the brain expects certain letters to appear with other letters. The brain is a pattern seeker, looking for similarities between words (McConkie, Kerr, Reddix, and Zola, 1987). The mind of a good reader quickly and

automatically translates the spellings of words into pronunciations (Adams and Osborn, 1990, p.4).

It is also prudent to look at what sort of clues good readers' use. Adams and Osborn (1990) note that most of the print in our reading materials consists of a few, often repeated words. But those words only account for about 5% of the words we come into contact with. Here is where a good reader's habit of applying phonics knowledge to words is so important. For a skilled reader, even unfamiliar words can be decoded and translated into speech because their letter/sound knowledge is so "overlearned." Adams and Osborn (1990) also note that the meaning of language is most dependent on infrequent words, not the words that appear over and over. Some believe that good readers rely mostly on context to figure out unfamiliar words. To the contrary, research tells us that while good readers do occasionally use context to figure out words, most of the time words are figured out based on familiar spelling patterns. Context comes into the picture after, not before, the word is processed letter-by-letter. Poor readers tend to rely on context more than good readers (Perfetti, 1985; Samuels, 1988). Since good readers process words letter-

by-letter, it makes sense for beginning reading programs to include explicit instruction in alphabetic principles.

There is no doubt that good readers are those who comprehend written material well. So what about the connection between phonics and comprehension? According to Michael Brunner (1993), "one does not comprehend written material well without being able to decode well" (p. 32). On the subject of comprehension, Charles Perfetti (1985), who has long studied reading as a cognitive process, notes that accurate word recognition is the foundation of comprehension. And accurate word recognition is attained with extensive practice in decoding skills. Good readers use phonics to confirm predictions they make based on meaning (Perfetti, 1985). The purpose of phonics instruction then, is not that children merely learn to sound out words. The purpose is that they learn to recognize words quickly so that they can turn their attention to the meaning of text.

Adams and Osborn (1990) take up the issue of comprehension with regard to skillful readers as well. Here, they comment on what skillful readers do:

Skillful reader's speed or fluency enables them to think about whole phrases and sentences worth of words at

once. This is critically important...the effortlessness of the word recognition process allows skillful readers to focus their active attention on the process of comprehension--on monitoring and assessing the message of the passage...the speed and effortlessness with which skillful readers are able to recognize the words of a written passage derive from their deep and overlearned knowledge about English spellings and their corresponding pronunciations (Adams and Osborn, 1990, p. 4-5).

Poor readers, on the other hand, "have not learned to recognize frequently spelling patterns or to translate spelling patterns to speech patterns" (Adams and Osborn, 1990, p. 5). In fact, poor readers commonly have "insufficient familiarity with the visual forms of letters and the ordered letter-by-letter composition of common English spelling patterns...And [sic] comprehension difficulties can be traced to unaffordable efforts, slowness, or incompleteness in word recognition processes" (Adams and Osborn, 1990, p. 5). In essence, poor readers lack sound phonics/decoding skills, which hinders their comprehension greatly. Samuels (1988) notes that if children spend too much time and energy sounding out words, they are not able to direct

themselves to the task of comprehension. This is why phonics is so important. Phonics instruction leads to quick and accurate word recognition. In turn, quick and accurate word recognition allows the reader to attend to meaning.

Understanding what makes both good and poor readers leads us to look at the effectiveness of the various types of phonics instruction. As mentioned earlier, phonics instruction can be generally placed into three different categories: Implicit phonics instruction, explicit phonics instruction, and socio-intrinsic phonics instruction. One or more models on the Reading Theories Continuum support each type of phonics instruction. Today's teachers seem to most vigorously embrace the skills model and the socio-psycholinguistic model. But these two models hold specific views about the nature of language learning and, in particular, the two models split greatly over phonics instruction. And while no one method is superior with all children, approaches that favor systematic code instruction along with meaningful, connected reading produce the best results with regards to reading ability (Bond and Dykstra, 1967).

Diametrically opposed to a systematic phonics approach sits the socio-psycholinguistic philosophy. Socio-psycholinguistic or language experience theorists, such as Kenneth & Yetta Goodman (1979), believe that learning to read is a natural process and that children learn to read in much the same way as they learn to speak. Socio-psycholinguistic methodology views the systems of language (graphophonic, syntactic, and semantic) as a "whole." Therefore, socio-psycholinguistic instruction in reading and writing discourages the teaching of what is viewed as "sub skills" explicitly. In other words, phonics skills are not to be taught directly and explicitly. Rather, phonics concepts are taught as they come up in texts and writing, relying on what has become termed the "teachable moment." In the socio-psycholinguistic model, students learn by observing and construct their own meanings about the nature of language. Kenneth Goodman (1976) terms reading as a psycholinguistic guessing game and de-emphasizes the role of phonics in beginning reading instruction. In fact, Goodman (1979) goes so far as to say that the graphophonic cueing system should be used only after the other cueing systems have been applied.

One of the greatest divisions between the socio-psycholinguistic model and the skills model is the notion of how children learn to read. Those who favor the socio-psycholinguistic model take the theoretical approach that reading is "natural," like learning to speak. However, according to Groff (1989), research does not support the idea that children learn to read in the same manner that they learned to listen and speak. Rather, learning to read requires careful attention to instruction and at times can amount to tiring work. In their 1998 position statement, the International Reading Association (IRA), along with the National Association for the Education of Young Children (NAEYC), state that "the ability to read and write does not develop naturally" (p. 198).

Also, socio-psycholinguistic proponents believe that instruction in the forms and sounds of words hinders reading progress since it takes the student away from the major task of reading for meaning. They hold the belief that phonetic concepts are best learned as a by-product of reading for meaning (Goodman & Goodman, 1979). Again, much research disputes this by indicating that children best learn to read by being directly taught, by acquiring

and applying the skills of word recognition (Groff, 1989; Perfetti, 1985). The IRA and NAEYC agree, stating that while "it may seem as though children acquire the alphabetic principle [sic] magically or on their own, studies suggest that they are the beneficiaries of considerable...adult guidance and instruction" (p. 198). While the socio-psycholinguistic model has many excellent aims--flexibility in materials and activities, student and teacher choice, a view of the child as a unique individual, encouragement of risk-taking, a focus on the multi-facets of literacy--it does not desire systematic, explicit instruction.

In another place on the continuum is the skills model. Through my research, I discovered an overwhelming amount of evidence to support the use of explicit, systematic phonics as the skills model advocates. Chall (1967) looked at dozens of studies regarding beginning reading instruction. The studies examined various methods of reading instruction. And the results were clear. There was definitely an advantage to code-oriented programs (systematic phonics instruction) compared to programs that contain little or no formal phonics instruction for beginning readers. Chall (1989)

explains that "strong phonics programs produce better results in both recognition and comprehension" (p. 524).

Here is yet another argument for explicit phonics instruction: One of the strongest indicators of a student's potential reading ability when they enter first grade is their ability to discriminate and manipulate letter sounds (Adams, 1990; Bond and Dykstra, 1967). That is, a student's understanding of letter/sound relationships is crucial to the task of learning to read. Because beginning readers do not see words instantly as "wholes," they need to be taught to put sounds together first. That is the first step toward automaticity. Since research has found that skillful reading depends on thorough familiarity with phonics, the question is not whether to teach phonics or not to teach phonics. The question becomes how and when to teach phonics.

I have briefly discussed the three methods of phonics instruction: implicit, explicit, and intrinsic. So which method does research most strongly support? Explicit, systematic phonics. The argument for systematic phonics instruction is compelling. According to Talbot (1997), the English language is mostly phonetic. In fact, she notes that 85% of words are

spelled and read as they sound when spoken. Because the vast majority of words are purely phonetic, a system, or plan for teaching phonics is in order. Since Chall's (1987) reading stages remind us of the hierarchical nature of reading skills, it is important that phonics instruction be systematic. By arranging phonics concepts into ascending levels of difficulty and constantly assessing mastery of those concepts, students are allowed consistent success. The "careful arrangement of phonics learning tasks prevents young children learning to read from facing overwhelmingly or frustratingly difficult word recognition challenges" (Groff, 1989, p. 7).

Phonics instruction also needs to be direct (Chall, 1983). A teacher's role, in many ways, is to unveil the system of reading. And by presenting the generalizations and principles to the system, through direct instruction in phonics, the teacher helps to unlock its mysteries. Gersten (1990) recalls direct instruction as "an image of students learning in a highly interactive situation, one where they experience consistent success, where they are provided with immediate feedback when they experience problems" (p. 23). The best evidence that phonics skills should be taught in a direct and systematic way comes

from the reports of success of reading programs that organize their instruction in that fashion. If students master the skills of decoding in the lower reading stages, they will be more competent readers. Along with good literature, meaningful opportunities to write, and experience with oral language, students need to be taught the phonics generalizations of the English language (Brunner, 1983). In Chall's Learning to Read: The Great Debate, she noted that research indicated that programs with explicit phonics were more successful than those without.

One of the most common complaints in the dialogue about phonics instruction deals with the fact that English is a tricky language filled with constant exceptions. The question of irregularities is of major concern to those who don't understand the utility of phonics generalizations. In spite of the fact that there are many inconsistencies in the English language, every single word has at least some phonetic clues for the reader to grab a hold of. And, in spite of its irregularities, Groff (1983) concluded that the student who learns phonics rules is not doomed to confusion because of phonetic inconsistencies. Rather, the student

who attempts to decode a word using phonics, even an irregularly spelled word, will get an approximate pronunciation. Then, the student can infer the true pronunciation using the other cueing systems.

With regards to phonics generalizations, Adams (1990) suggests that teachers of beginning readers teach only a few generalizations, the ones with the most utility. The classic study on utility was done in 1963 (Clymer). Clymer discovered that some generalizations have little utility, while others are very powerful and can be counted on with great regularity. Since "effective decoders see words not in terms of phonics rules, but in terms of patterns of letters that are used to aid in identification," it is best not to make generalizations the emphasis of phonics instruction (Stahl, Osborn, and Pearson, 1992). Rather, phonics instruction should focus attention on each letter in a word; it should highlight common spelling patterns and teach blending strategies. This way, children will begin to internalize phonics generalizations and apply them automatically to text.

As far as when to begin formal phonics instruction, research confirms that the earlier, the better. In her

1983 update of Learning to Read: The Great Debate, Chall explained that children who are taught phonics early seem to be better readers sooner. Therefore, phonics instruction should commence as soon as possible. By kindergarten, most children have the visual and auditory perceptual abilities needed to learn phonics. Not only should phonics instruction begin early, it should be constantly reinforced (Groff, 1989). Phonics instruction needs to provide a substantial number of opportunities for practice and mastery. He stresses the need for students to "overlearn" phonics concepts in order to commit them to the learner's long-term memory (Groff 1983).

Much of the more recent research conducted in the late 1980's also supports code-emphasis instruction for beginning readers. In the Department of Education inquiry What Works: Research About Teaching and Learning, explicit phonics instruction was cited as perhaps the most important ingredient in facilitating accurate word identification. And accurate word identification is a solid stepping stone to becoming a good reader. Children get a better start in reading if they are taught phonics. Learning phonics helps them to understand the

relationship between letters and sounds and to "break the code" that links the words they hear with the words they see in print (p. 21).

A 1989 study commissioned by the Reading Research and Education Center at the University of Illinois looked at the effectiveness of various types of reading programs. Again, it was deemed that explicit, systematic phonics instruction in the early grades was the most effective method of teaching beginning reading skills. But research also reminds us that explicit and systematic does not mean intensive. Adams (1990) suggests that the actual amount of time spent on explicit teaching of phonics be small in the big picture of literacy teaching. It is very important that what is taught directly be applied to real reading and writing situations. Hours of endless paper-pencil drill are not what is called for. Rather, opportunities to learn, apply, and transfer phonics skills to literacy activities is the significant instructional goal.

Reading Research Quarterly also comments on the phonics question stating, "regarding the teaching of reading, the message is clear: If you want to improve word identification ability, teach phonics" (Johnson &

Baumann, 1984, p. 595). Code-emphasis reading programs will not solve all the problems of illiteracy in our country. But, overall, research evidence supports code-emphasis approaches for beginning readers. And a move in that direction is bound to make some positive changes. Johnson and Baumann (1984) indicate that reading instruction should not merely reflect whatever the teacher is comfortable with. Reading instruction should reflect what we have learned from scientific investigations about the processes of learning to read.

With such impressive research, one wonders why socio-psycholinguistic phonics instruction for beginning readers has such a tight hold on America's teachers. Why are so many teachers not teaching phonics in a direct, systematic way? Clearly, there is a certain attractiveness to a socio-psycholinguistic approach. It exudes warmth and hope and promise. But, as Lauren B. Resnick (1977) notes, we have very little research to show that language-oriented programs advocated by the socio-psycholinguistic model are successful in teaching quick, accurate decoding skills. It seems that many teachers have been led to believe in these instructional practices by "their professors of reading pedagogy who

are more committed to theoretical speculation than the empirical evidence of research" (Brunner, 1993, p. 33). Universities have indoctrinated their students with their ideas about learning to read and the English spelling system. Unfortunately, those views tend to ignore the empirical evidence of research and rely heavily on unproven theories (Chall 1991).

The sum of the ideas concerning the socio-psycholinguistic model is very appealing and has many noteworthy instructional approaches. However, its approach to teaching skills, especially phonics, is not aligned with most research-based methods of teaching beginning readers. Regarding socio-psycholinguistic and other language experience approaches to reading, Michael Brunner (1993) states, "there is simply no evidence from experimental research to support them as an effective way for developing accurate and fluent decoding" which is necessary to become a skilled reader (p. 32). And since teaching reading is one of our most difficult tasks, primary grade teachers should strongly consider the research to find direction with regards to the most effective methods of instruction. "We can summarize sixty years of research dealing with beginning reading

instruction by stating that early, systematic instruction in phonics provides the child with the skills necessary to become an independent reader....As a consequence of...early success in 'learning to read,' the child can more quickly go about the job of 'reading to learn'" (Resnick & Weaver, 1979, p. 33).

The socio-psycholinguistic theory is indeed an engaging one. The "socio-psycholinguistic model [sic]...seems to say that a good heart goes a long way, and the less teaching, the better....these views attract many teachers....it is a romantic view of learning. It is imbued with love and hope" (Chall, 1992, p. 325-326). While the socio-psycholinguistic philosophy is attractive, it does not routinely rely on the facts of scientific research.

The basis for a balanced reading program needs to include the best of all possible models--rich, oral language experiences; real literature with meaningful text; multiple opportunities for written expression; and explicit skill-building instruction. Instead of the constant argument about which model on the reading continuum is superior, it is more prudent to pick and choose, based on research, which aspects of each model

should be applied to classroom practice. Adams (1990) states that "approaches in which systematic code instruction is included alongside...connected reading results [sic] in superior reading achievement overall" (p. 49). Reading requires a good deal of skill. And while our school materials are laden with good literature, there is a serious lack of skill-building resources among the adopted language arts materials. As research tells us, we have a need for systematic instruction, with a great deal of practice and constant feedback. Unfortunately, much of the published materials do not provide this.

With this in mind, I will attempt to create a handbook that fills a gap in the current curriculum. While children will naturally develop some of their own phonetic principles, research tells us that children learn to read more fluently when skills are taught directly and their learning tasks are structured (Heymsfeld, 1989). Therefore, the handbook will embrace research-based instruction by setting up a specific system from which to base classroom instruction. Also, it will suggest a time line of when to teach specific skills. Gersten (1990) notes that "effective teachers

are always concerned with mastery" (p. 13). He suggests that mastery of reading skills does not come from "brief encounters." Instead, mastery of reading skills comes when precise, systematic instruction is coupled by clear feedback and regular assessments (Gersten, 1990). To provide sufficient practice for students, the handbook will concern itself with setting up a yearlong phonics learning program so that the young reader will "overlearn" phonics skills to the point that decoding becomes practically automatic.

As I stated earlier, when trying to make decisions regarding reading instruction, instead of looking at what's new or different, classroom teachers should consider looking at what works. In spite of the mountain of research supporting code-oriented instruction, the debate between the skills model and socio-psycholinguistic model rages on. While I wholly support teaching phonics in a direct manner, I certainly do not dismiss the noteworthy aims of the socio-psycholinguistic model. I believe that bridges can be built between the socio-psycholinguistic model and more traditional approaches to literacy. But it would require compromises on both sides. Advocating a systematic approach to

teaching phonics for a few minutes each day does not mean that indirect instruction isn't worthwhile. As reading teachers, we need to be eclectic; we need to choose the best of all possible options for our beginning readers.

CHAPTER THREE: GOALS AND LIMITATIONS

The goal of this project is to create a research-based handbook for teaching phonics explicitly and systematically. The handbook will be designed to teach phonics in a specific order, based on a hierarchy of skills. It will teach phonics skills in isolation. It will also work to support the "whole-part-whole" methodology. That is, the phonics concepts taught will also be explored in whole, meaningful texts.

The handbook is designed to fill a gap in the current curriculum by providing a system to teach phonics concepts thoroughly enough for children to be able to quickly and accurately apply that knowledge to both familiar and unfamiliar texts. The handbook is aimed at the first grade teacher. However, it can serve as a resource for any teacher in the primary grades who needs to teach or reinforce phonics concepts. Because a substantial amount of education research finds that a well-grounded foundation in decoding produces better readers, the handbook will be created to support explicit phonics instruction in the first grade classroom.

The limitations of this project are three-fold. First, no single program can serve the needs of every

student. It is important to remember that students need a variety of approaches to acquiring literacy skills. Teachers should consider many sources in their effort to help young readers learn decoding skills. Additionally, teachers need to keep in mind that indeed there are some young readers who truly are sight readers and will always have difficulty with the phonological aspects of language.

Lastly, teachers must remember to maintain ongoing assessment of their students in order to determine what instruction is necessary. While the research indicates the need for systematic code instruction, it also points the need for balancing such instruction with the opportunity for authentic reading and writing experiences. Phonics should always be taught in concert with other literacy skills. It is important to remember that this, or any phonics program, should be used to enhance a balanced program of good literature, opportunities for written expression, and rich oral language experiences.

CHAPTER FOUR: REFERENCES

- Adams, M. J. (1989). Phonics and beginning reading instruction. Champaign, IL: Reading Research and Education Center, University of Illinois.
- Adams, M. J. (1990). Beginning to read: Thinking and learning about print. Cambridge, MA: Massachusetts Institute of Technology Press.
- Adams, M. J. & Osborn, J. (1990). Beginning reading instruction in the United States. Paper presented at the Meeting of the Educational Policy Group. Washington DC.
- Adams, M. J., R. Tremain, and M. Presley. (1996). Reading, writing, and literacy. In Handbook of Child Psychology, ed. I. Sigel and A. Renninger. Vol. 4. New York, NY: Wiley.
- Anderson, R. C., Heibert, E.H., Scott, J. A., & Wilkinson, I.A.G. (1985). Becoming a nation of readers: The report on the Commission on Reading. Washington DC: National Institute of Education.
- Balmuth, M. (1982). The roots of phonics. New York, NY: McGraw Hill.
- Bond, G., & Dykstra, R. (1967). The cooperative research program in first-grade-reading instruction. Reading Research Quarterly, 2, 1-142.
- Brunner, M. S. (1993). National survey of reading programs for incarcerated juvenile offenders. Washington DC: Office of Juvenile Justice and Delinquency Prevention.
- Chall, J. S. (1967). Learning to read: The great debate. New York, NY: McGraw-Hill.
- Chall, J. S. (1983). Stages of reading development. New York, NY: McGraw-Hill.
- Chall, J. S. (1987). Reading and early childhood education: The critical issues. Principal, 66(5), 6-9.

- Chall, J. S. (1989). Learning to read: The great debate 20 years later. Phi Delta Kappan, 71, 521-538.
- Chall, J. S. (1992). The new reading debates: Evidence from science, art, and ideology. Teacher College Record, 94(2), 315-328.
- Clymer, T. 1963. Utility of phonics generalizations. The Reading Teacher, 16.
- Cunningham, P. M. (1990). The names test: A quick assessment of decoding ability. The Reading Teacher, 44.
- Cunningham, P. M. (1985). Phonics they use: Words for reading and writing. New York, NY: Harper Collins.
- Cunningham, P. M. (1975). Investigating a synthesized theory of mediated word identification. Reading Research Quarterly, 11.
- Dechant, E. (1993). Whole-language reading. Lancaster, PA: Technomic.
- Ehri, L. C. (1992). Reconceptualizing the development of sight word reading and its relationship to recoding. In Reading Acquisition, ed. P. Gough, L. Ehri, and R. Tremain. Hillsdale, NJ: Erlbaum.
- Ehri, L. C. (1987). Learning to read and spell words. Journal of Reading Behavior, 19.
- English Language Arts Content Standards. (1998). [On line.] Available @ <http://www.cde.ca.gov/board/standards/html>.
- English Language Arts Framework for the State of California Public Schools. (1987). The California State Department of Education. Sacramento, California.
- Finn, C. E. (1986). What works: Research about teaching and learning. Washington, DC: U. S. Department of Education.

- Flesch, R. (1955). Why Johnny can't read. New York, NY: Harper & Row Publishers, Inc.
- Flesch, R. (1981). Why Johnny still can't read: A new look at the scandal of our schools. New York, NY: Harper & Row.
- Fox, D. (1986). The debate goes on: Systematic phonics vs. whole language. Journal of Reading, 29, 678-680.
- Gersten, R. (1990). Reading instruction for at-risk students: Implications of current research. Oregon School Study Council Bulletin, 33(5), 1-33.
- Goodman, K. S. (1976). Reading: A psycholinguistic guessing game. In: H. Singer and R. Ruddell (Eds.) Theoretical models and process of reading. 259-271. Newark, DW: International Reading Association.
- Goodman, K. S. & Goodman, Y. M. (1979). Learning to read is natural. In: L. B. Resnick & P. A. Weaver (Eds.), Theory and practice of early reading. 137-154. New York, NY: John Wiley.
- Gough, P. B., J. A. Alford, and P. Holley-Wilcox. (1981). Words in context. In Perceptions of Print, O. J. L. Tzeng and H. Singer, eds. Hillsdale, NJ: Erlbaum.
- Groff, P. (1989). Modern phonics instruction. Washington DC: Office of Educational Research and Improvement.
- Groff, P. (1983). A test in the utility of phonics rules. Reading Psychology, 4, 217-225.
- Heymsfeld, C. (1989). Filling in the hole in whole language. Educational Leadership, 46(6), 65-68.
- International Reading Association and the National Association for the Education of Young Children. (1998). IRA and NAEYC joint position statement: Learning to read and write: Developmentally appropriate practices for young children. The Reading Teacher, 52(2).

- Johns, J. L. (1980). First graders' concepts about print. Reading Research Quarterly, 15.
- Johnson, D. D., and Baumann, J. F. (1984). Word identification. 583-608. In: P. D. Pearson (Ed.), Handbook of reading research. New York, NY: Longman.
- Lesgold, A. M. and L. B. Resnick. (1982). How reading disabilities develop: perspectives from a longitudinal study. In Theory and Research in Learning Disability, ed. J. P. Das, R. Mulcahy, and A. E. Walls. New York, NY: Plenum.
- Lovett, M. W. (1987). A developmental approach to reading disability: Accuracy and speed criteria of normal and deficient reading skill. Child Development, 58.
- McKonkie, G., Kerr, P., Reddix, M., & Zola, D. (1987.) Eye movement control during reading: The location of eye fixations on words. Technical Report No. 406. Champaign, IL: Center for the Study of Reading, University of Illinois.
- McConkie, G. W. and D. Zola. (1987). Two examples of computer-based research on reading: Eye movement monitoring and computer-aided reading. In Reading and Computers: Issues for Theory and Practice, ed. D. Reinking. New York, NY: Teachers College Press.
- Perfetti, C. A. (1985). Reading ability. New York, NY: Oxford University Press.
- Rayner, K. & Pollatsek, A. (1989.) The psychology of reading. Engelwood Cliffs, NJ: Prentice Hall.
- Resnick, L. B. (1977). Theory and practice in beginning reading instruction. Paper presented at the Fall Meeting of the National Academy of Education. New York.
- Resnick, L. B., & Weaver, P., Editors. (1978). Theory and practice of early reading. New York, NY: John Wiley.

- Samuels, S. J. (1988). Decoding and automaticity: Helping poor readers become automatic at word recognition. The Reading Teacher, 41, 756-760.
- Smith, E. B., Goodman, K. S., & Meredith, R. (1970). Language and thinking in the elementary school. New York, NY: Holt, Reinhart.
- Stahl, S., J. Osborn, and P. D. Pearson. (1992). The effects of beginning reading instruction: Six teachers in six classrooms. Unpublished paper. University of Illinois at Urbana-Champaign.
- Stanovich, K. E. (1986). Matthew effects in reading: Some consequences of individual differences in acquiring literacy. Reading Research Quarterly, 21.
- Talbot, Virginia. (1997). Teaching reading and spelling: All you need to succeed. Thousand Oaks, CA: Corwin Press, Inc.
- Tremain, R. and J. Baron. (1981). Segmental analysis ability: Development and relation to reading ability. In Reading Research: Advances in Theory and Practice, ed. G. E. MacKinnon and T. G. Waller. Vol. 3. New York, NY: Academic Press.

APPENDIX A

Phonics for a Year:
A Guide for Teachers of Beginning Readers

by Laura Lyn Diamond

June 2000

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Introduction

One of the significant concerns facing beginning reading teachers is the role of phonics instruction in a balanced reading program. Research shows that understanding the alphabetic principle is the most significant factor in becoming a fluent reader. So, the discussion about phonics instruction is not "if," but "how" and "when." This handbook is designed to answer those questions. Phonics is a necessary component of reading instruction. This handbook relies on a research base that encompasses how children learn as well as what they learn.

This handbook deals only with one component of a balanced reading program: systematic phonics. It does not specifically cover concepts of print, phonological and phonemic awareness, vocabulary development, or structural analysis. Classroom practice needs to include all these. This handbook was designed for use in first grade classrooms. But you may find that you need more review at the beginning of the year. Or, if you have an exceptional class, you may find that you can cover beyond what this handbook suggests. It is always good practice

to tailor classroom instruction to the needs of your students.

This handbook covers the following:

- 1.) A brief look at the research base for explicit phonics instruction.
- 2.) A scope and sequence for 1st grade word analysis.
- 3.) A suggested order in which to teach phonics.
- 4.) A generic 20-minute plan for phonics lessons.
- 5.) Weekly lists of words to explore in phonics instruction.
- 6.) Activities to support phonics learning.
- 7.) Instructional strategies for teaching high frequency words.
- 8.) Instructional strategies to deal with more complicated diphthongs and digraphs patterns.
- 9.) Lists of literature books that support phonics learning.

You can look at this handbook as a guide for phonics instruction. From their kindergarten experience, students have the nuts and bolts for reading. By teaching phonics, you will help provide some powerful tools to

enable children to take those nuts and bolts and build, build, build toward reading fluency. One of the most important things to keep in mind is that as you teach phonics explicitly, you should always go back and apply it to meaningful text. This handbook only deals with out-of-context instruction. It is up to the teacher to connect it to reading experiences that emphasize a transfer of skills.

Why Teach Phonics? Research Has The Answers

1. Phonics Instruction Helps Children Learn To Read

For beginning readers, Chall (1967) notes that students make faster progress in acquiring literacy skills by being taught phonics. When children come to school, most have a speaking vocabulary of around 6,000 words. With explicit phonics instruction, children learn to read and write these words at a faster rate than without phonics. Phonics leads to more accurate decoding of words. And readers who are skilled at decoding comprehend text better (Lesgold and Resnick, 1982).

2. Phonemic Awareness is Paramount to Beginning Reading Readers

According to Adams (1990) and other researcher, one of the most crucial determinants of future reading success is good phonemic awareness. Many children only think of words in term of "wholes." That is, many do not recognize that words are made up of a series of discrete sounds, "chunks" of sounds if you will. Since future

reading success is greatly dependent on the understanding that words are made up of sounds, teachers need to directly teach phonemic awareness.

3. Poor Readers Have Weak Phonics Skills

To become a skilled reader, students need to rely on many reading strategies. Poor readers, according to research, tend to rely heavily on one or two strategies (usually context clues or picture clues). Poor readers tend to have weak phonics skills and therefore difficulty with decoding. And difficulty in decoding has shown to be one of the strongest links to poor reading skills (Adams, 1990; Chall, 1996; Cunningham, 1990; Stanovich, 1986).

4. Phonics Knowledge is Directly Connected To Decoding Ability

According to Adams (1990), Chall (1996), and many other education researchers, the use of graphophonic cues facilitates word recognition. And automaticity in word recognition is key the comprehension. This is why phonics knowledge is so crucial. It is the early

attainment of decoding skills that aids readers in their word recognition. Skilled readers recognize most of the words they encounter quickly and effortlessly, independent of context (Cunningham, 1975). In fact, research has shown that a first graders' ability to quickly decode words is directly linked to comprehension in later grades (Lesgold and Resnick, 1982).

5. Explicit Phonics Instruction Is The Most Effective

When looking at the three types of phonics instruction, explicit, implicit, and intrinsic, explicit is the most effective (Adams, 1990). According to Chall (1996), explicit phonics instruction for beginning readers not only leads to better reading, but to better accuracy of word recognition, spelling, decoding, and comprehension. Additionally, by second or third grade, children who have been taught with explicit phonics generally surpass the reading abilities of their peers who have been taught in other ways (Chall, 1996).

6. Phonics Instruction Improves Spelling Ability

Reading involves the putting together of sounds to read words. Spelling involves the breaking down of words into sounds. Since reading and writing are complementary processes, phonics helps improve success in both. Good readers are generally good spellers because spelling and reading share a common link: Strong phonics knowledge. Good spellers apply phonics rules they know and have a many sight words stored in memory. Poor spellers experience difficulty in reading and writing (Adams, Tremain, and Presley, 1996).

7. Skilled Readers Pay Attention To Every Letter

Research on eye movement shows that skilled readers pay attention to each and every letter in print (McConkie and Zola, 1987). Phonics instruction focuses the learner's attention to all the letters in words. And the study of spelling patterns aids a reader in committing words to long-term memory (Ehri, 1987). It is this sort of full analysis that leads readers to greater fluency.

8. Good Readers Rely Less on Context Clues Than Poor Readers

Research shows that good readers use context clues only after they have applied their knowledge of phonics and spelling patterns to a word. Poor readers, by contrast, rely heavily on context clues because they have such weak decoding abilities. While the use of context clues is good, it can only take a reader so far. It has been estimated that about 25% of words can be predicted from context (Gough, Alford, and Holley-Wilcox, 1981). Many of those words are function words such as the, of, an, etc. Unfortunately, those are not usually the words that carry the meaning of text. It is the other "content" words that determine meaning. The content words can be predicted through context only about 10% of the time (Gough, et al. 1981). Therefore, phonics is absolutely necessary in order to decode to meaning.

What should I be teaching and when should I teach it?

Scope and Sequence for First Grade

1st Trimester

- concepts of print
- phonemic awareness
- review of letters and sounds
- blending and word building
- short vowels (a, i, o)
- CVC pattern*
- 30 or more high-frequency words
- vocabulary development

2nd Trimester

- phonemic awareness
- blending and word building
- short vowels (e and u)
- CVC pattern
- digraphs (ch, sh, wh, th)
- consonant clusters (br, cl, ST, etc.)
- final e (CVCe Pattern)

- structural analysis: verb endings (ing, ed), contractions, plurals, compound words
- 50 or more high-frequency words
- vocabulary development

3rd Trimester

- phonemic awareness
- final e (CVCe pattern)
- triple consonant clusters (spr, str, etc.)
- vowel patterns (ea, ee, oa, ow, ai, ay, etc.)
- other vowel patterns (oo, oi, ou, oy, etc.)
- structural analysis: verb endings (ing, ed), contractions, plurals, compound words
- 50 or more high-frequency words
- vocabulary
- r controlled vowels* (-ar, -ir, -ur, etc.)

Suggested Sequence for Teaching Phonics

- Week 1 Review: l, h, t, d, k, h and b
- Week 2 Review: c, m, n, r, s, v, w, x, and z
- Week 3 Review: g, j, p, q, and y
- Week 4 short a
- Week 5 short a
- Week 6 short a
- Week 7 short i
- Week 8 short a & i, ck blend
- Week 9 short a & i, ck blend, and qu
- Week 10 short o
- Week 11 short o & i and double consonants
- Week 12 short a, i, and o review and ng blend
- Week 13 short u
- Week 14 digraphs th and sh
- Week 15 digraphs ch and wh
- Week 16 short e and digraph review
- Week 17 consonant blends (l)
- Week 18 consonant blends ®
- Week 19 consonant blends (s)
- Week 20 syllabication
- Week 21 triple consonant blends

| | |
|---------|---|
| Week 22 | final consonant blends |
| Week 23 | final consonant blends |
| Week 24 | tch digraph and digraph review |
| Week 25 | r-controlled vowels |
| Week 26 | r-controlled vowels |
| Week 27 | r-controlled vowels |
| Week 28 | single-syllable long vowel (me, he, etc.) |
| Week 29 | magic final e |
| Week 30 | syllabication |
| Week 31 | syllabication |
| Week 32 | y as a vowel |
| Week 33 | diphthongs ay and ai |
| Week 34 | vowel combinations: ee, ea, ie, and ey |
| Week 35 | vowel combination: ie = long i |
| Week 36 | vowel combinations: ao, ow, and oe |

Students spend the first three weeks of school reviewing the consonants. Most should have learned this in kindergarten. For those who need remediation in letter/sound identification, a small group setting is suggested.

Students spend what seems to be an inordinately long time on the short a. This is the time that they really

learn the skill of blending. Once blending techniques are learned, then students can move more quickly through the other phonics concepts.

Weekly Spelling Lists

On the following pages you will find a spelling list for each week of the school year. The spelling lists are coordinated with the scope and sequence for first grade. In addition to the weekly spelling lists, there are also lists of words to use for "making words," and other phonics activities that students can engage in. The lists are only suggestions. They were derived from the phonics components of popular programs such as Project Read, McCracken phonics, MacMillan McGraw-Hill, and Scholastic. The most important thing to remember is that after your students have participated in direct phonics instruction, the teacher needs to go back and connect the phonics lessons to meaningful text, allow students multiple opportunities to practice, and finally provide an opportunity to apply their phonics knowledge to writing.

What Does Good Phonics Instruction Involve?

- 1) Both direct and indirect instruction*
- 2) Multiple opportunities the practice
- 3) Connection to meaningful text

4) Opportunity to transfer and apply skills to writing

*This handbook concerns itself only with the direct instruction aspect of phonics learning.

Week 1

Concept: Review of consonants

l, h, t, d, k, h, and b

These beginning weeks of school are devoted to review of consonants. During this time students should work on both letter formation and phonics concepts. Please see the instructional activities in this handbook for ideas on reviewing letter/sound identification.

Week 2

Concept: Review of consonants

c, m, n, r, s, v, and w

Week 3

Concept: Review of consonants

x, z, g, j, p, q, and y

Week 4

Spelling List

Concept: short a

cat at

sat bat

fat am

Words to Use for "Making Words":

cat at sat bat fat

mat bam cab am Sam

Week 5

Spelling List

Concept: short a

pal hat can jam

ran has man fan

Words to Use for "Making Words":

hat pat lap jab fan man tan

can ran rat nap ham jam pal

has

Week 6

Spelling List

Concept: short a

had dad

bad gas

van cap

Words to Use for "Making Words":

had dad gas van bad cap lad

sad tag pad bag mad rag

Week 7

Spelling List

Concept: short i

big is sit it

him did pin win

Words to Use for "Making Words":

hit bit wig fig sit it kid

did lid tin fin win pig big

him is

Week 8

Spelling List:

Concepts : short a, short i, and ck blend

kid pack sick kick back cap

Words to Use for "Making Words":

cap can cab lick kid kit
tick pack tack rack sack kick
tick back sick pick

Week 9

Spelling List:

Concepts: Short a & i review, ck blend, and qu

quick fix quit am
yip can is did
six will

Words to Use for "Making Words":

quack quit quick ax wax tax fix
mix six yap yip zap zip will
can did is am

Week 10

Spelling List:

Concept: short o

dog on

got hot

not box

top job

Words to Use for "Making Words":

dot got hot top bob

lot pot not fox dog

rot tot bob rob job

job cob on hop box

mop lock pop rock ox

Week 11

Spelling List:

Concepts: short o, short i, and double consonants

miss off

will pass

hill kiss

Words to Use for "Making Words":

miss kiss hiss pass kill mill mass
pill hill will bill jazz off fill

Week 12

Spelling List:

Concepts: short a, i, o review and ng blend

sing song
bank ring
long pink

Words to Use for "Making Words":

sing song ring wing yank
rang sang bank king bang
tank long pink sink ring

Week 13

Spelling List:

Concept: short u

up but bus fun
much brush truck us
run such

Words to Use for "Making Words":

| | | | |
|-------|-------|-------|-------|
| up | but | bus | us |
| truck | much | run | brush |
| fun | such | puff | crush |
| chunk | bunk | stung | blush |
| swung | skull | | |

Week 14

Spelling List:

Concepts: digraphs th and sh

| | | | |
|-------|-------|------|------|
| this | that | with | shop |
| thing | thank | dish | from |

Words to Use for "Making Words":

| | | | | | |
|-------|------|------|------|-------|------|
| thing | this | bath | thin | thick | that |
| math | thin | ship | shot | shop | with |
| wish | fish | cash | lash | dish | fish |

Week 15

Spelling List:

Concepts: digraphs ch and wh

| | | |
|------|-------|-------|
| whip | which | inch |
| rich | chip | pinch |

Words to Use for "Making Words":

| | | | |
|-------|------|-------|------|
| chill | chip | chap | with |
| chin | chat | inch | wish |
| pinch | whip | which | shop |
| this | that | ship | |

Week 16

Spelling List:

Concepts: short e and digraph review

| | | | |
|------|-----|------|------|
| get | yes | them | then |
| when | red | let | bed |

Words to Use for "Making Words":

| | | | | | |
|------|------|-----|-----|------|-----|
| get | yet | wet | bet | set | pet |
| let | men | hen | ten | red | led |
| fed | bed | yes | web | them | beg |
| then | when | leg | | | |

Week 17

Spelling List:

Concept: consonant blends

| | | |
|-------|------|-------|
| black | flag | glad |
| plan | sled | class |

Words to Use for "Making Words":

| | | | | | |
|-------|-------|-------|------|------|-------|
| black | block | bless | bled | slip | slab |
| slim | sled | flag | flat | flap | flash |
| glad | class | glass | plan | plot | clip |
| class | clock | clap | | | |

Week 18

Spelling List:

Concept: consonant blends

| | | | |
|-------|-------|-------|-------|
| fresh | grass | bring | drink |
| crack | dress | trip | |

Words to Use for "Making Words":

| | | | | | |
|-------|-------|-------|-------|-------|-------|
| bring | brick | crack | crab | crib | crash |
| press | fresh | frog | dress | drink | drop |
| drip | trip | track | trash | trap | grass |
| grab | drag | grin | | | |

Week 19

Spelling List:

Concept: consonant blends

| | | | |
|-------|-------|-------|-------|
| twin | smell | stop | still |
| snack | swim | spell | skin |

Words to Use for "Making Words":

| | | | | | | |
|-------|------|-------|------|-------|-------|-------|
| snack | snip | snag | snap | sniff | skip | smash |
| skip | stop | still | stem | stick | stack | twig |
| step | spin | spill | spot | spell | swim | twin |

Week 20

Spelling List:

Concept: syllabication

| | | | | | | |
|--------|--------|--------|--------|--------|--------|-------|
| pocket | napkin | rabbit | cannot | jacket | sunset | upset |
|--------|--------|--------|--------|--------|--------|-------|

Words to Use for "Making Words":

| | | | | | |
|--------|--------|--------|--------|--------|--------|
| picnic | napkin | velvet | until | muffin | batman |
| pocket | jacket | goblin | bandit | zigzag | insect |
| upon | rabbit | pigpen | sunset | cannot | magnet |
| fabric | locket | tablet | | | |

Week 21

Spelling List:

Concept: three consonant blends with /s/

| | | |
|--------|--------|--------|
| strong | spring | struck |
| splash | scrap | strap |

Words to Use for "Making Words":

| | | | | | |
|--------|--------|--------|--------|--------|--------|
| split | splash | scrap | scrub | scram | spring |
| sprang | strum | struck | strong | string | street |
| strap | strip | sprung | | | |

Week 22

Spelling List:

Concept: final consonant blends

| | |
|------|-------|
| fast | and |
| desk | went |
| jump | crisp |
| list | best |

Words to Use for "Making Words":

| | | | | | |
|------|-------|-------|-------|-------|------|
| land | hand | mask | fast | list | best |
| fist | cast | chest | trust | crust | desk |
| jump | bump | camp | stamp | and | send |
| went | plant | | | | |

Week 23

Spelling List:

Concept: final consonant blends

| | | | | | |
|------|------|------|------|------|------|
| held | felt | milk | kept | left | help |
|------|------|------|------|------|------|

Words to Use for "Making Words":

| | | | | | |
|--------|------|------|------|-------|------|
| held | weld | felt | melt | fact | act |
| insect | milk | silk | kept | swept | left |
| raft | soft | lift | help | yelp | gulp |

Week 24

Spelling List:

Concept: tch digraph and digraph review

| | |
|--------|---------|
| catch | pitch |
| much | stretch |
| stitch | such |
| which | rich |

Words to Use for "Making Words":

| | | | | | | |
|--------|--------|---------|-------|-------|-------|-------|
| catch | snatch | match | batch | patch | hatch | itch |
| switch | stitch | stretch | pitch | ditch | witch | fetch |

Week 25

Spelling List:

Concept: r-controlled vowels

| | | |
|------|------|-------|
| car | far | start |
| hard | dark | shark |

Words to Use for "Making Words":

| | | | | | |
|------|-------|-------|------|------|-------|
| car | far | tar | jar | dark | charm |
| arm | farm | star | part | bar | hard |
| yard | barn | harp | card | dart | start |
| park | shark | smart | | | |

Week 26

Spelling List:

Concept: r-controlled vowels

| | |
|-------|-------|
| her | first |
| turn | girl |
| shirt | bird |

Words to Use for "Making Words":

| | | | | | |
|------|-------|--------|-------|-------|------|
| her | stern | jerk | fern | first | girl |
| bird | shirt | squirm | twirl | dirt | turn |
| burn | surf | church | | | |

Week 27

Spelling List:

Concept: r-controlled vowels

| | | | | | |
|----|------|-----|-------|------|-------|
| or | born | for | sport | torn | short |
|----|------|-----|-------|------|-------|

Words to Use for "Making Words":

| | | | | | |
|--------|--------|-------|-------|-------|-------|
| or | fork | for | cork | cord | corn |
| horn | torn | born | sort | pork | short |
| thorn | north | torch | storm | stork | sport |
| forget | forgot | | | | |

Week 28

Spelling List:

Concept: open syllable words end in a long vowel

| | | | |
|----|-----|----|----|
| me | she | we | no |
| he | be | go | so |

Words to Use for "Making Words":

| | | |
|----|-----|----|
| me | he | go |
| we | she | so |
| be | no | hi |

Week 29

Spelling List:

Concept: magic final e

| | | | |
|------|-------|-------|------|
| home | use | like | made |
| ate | broke | smile | gate |

Words to Use for "Making Words":

| | | | | | |
|-------|-------|-------|-------|------|------|
| kit | kite | broke | like | ate | at |
| cut | cute | hope | hop | made | mad |
| cake | skate | rope | smile | joke | bone |
| chase | slide | close | | | |

Week 30

Spelling List:

Concept: syllabication

| | |
|--------|--------|
| picnic | until |
| cannot | dinner |
| after | basket |

Words to Use for "Making Words":

| | | | | |
|--------|---------|---------|---------|---------|
| happen | absent | picnic | basket | dinner |
| after | dentist | mistake | traffic | plastic |
| tennis | insect | until | blanket | |

Week 31

Spelling List:

Concept: syllabication

| | | | | | |
|-------|--------|--------|--------|------|--------|
| paper | become | silent | market | open | became |
|-------|--------|--------|--------|------|--------|

Words to Use for "Making Words":

begin beside prevent until paper
upon market muffin open became
invite forgot become silent prevent

Week 32

Spelling List:

Concept: y is a vowel at the end of a word

by my baby why
happy tiny funny sky

Words to Use for "Making Words":

my try by why daddy ugly penny
puppy lady happy baby pony sky fly
cry sunny bunny tiny candy copy story

Week 33

Spelling List:

Concept: diphthongs ay and ai

rain tail Sunday
wait say birthday
day play holiday

Words to Use for "Making Words":

| | | | | | |
|----------|------|-------|------|--------|-------|
| rain | nail | tail | pain | jail | snail |
| wait | mail | paid | gain | train | plain |
| say | may | paint | day | Sunday | gray |
| birthday | clay | play | | | |

Week 34

Spelling List:

Concept: vowel combinations ee, ea, ei, and ey

| | | | |
|------|-------|-------|------|
| see | three | field | read |
| need | week | each | key |

Words to Use for "Making Words":

| | | | | | | |
|-------|-------|-------|-------|--------|------|--------|
| see | three | tree | need | seed | week | monkey |
| read | leaf | cream | mean | beach | each | hockey |
| clean | meal | thief | field | shield | key | turkey |

Week 35

Spelling List:

Concept: vowel combination ie = long i

| | |
|-----|-----|
| lie | tie |
| die | pie |

Words to Use for "Making Words":

lie tie

die pie

Week 36

Spelling List:

Concept: vowel combinations oa, ow, and oe

coat road

own grow

yellow show

snow toe

Words to Use for "Making Words":

toe hoe tiptoe own snow boat

grow window yellow shadow show loaf

pillow coat soap road throw blow

Weekly Phonics Lesson Plan (Weeks 4 - 36)

20 Minutes-Monday Through Friday

Monday: Introduce New Concept

1. Have the words you want to cover written on flash cards. Have students unlock* the "words."
2. As you go through the new words, have 3 to 5 students orally generate sentences for each word.
3. Have students fingerspell*, tap-out*, skywrite*, use pocket chart to build words*, sand trays*, etc. (Choose activities appropriate for your class.)

Tuesday: Review & Introduce High-Frequency Word

1. Review spelling words from cards.
2. Have students fingerspell*, tap-out*, skywrite*, use pocket chart to build words*, sand trays*, etc. (Choose activities from pages 80 - 91 appropriate for your class.)
3. If a high frequency word is part of the week's spelling list, introduce and teach it.

Wednesday: "Making Words"

1. Pass out letter sheet and have students cut apart letters. Ask students to arrange letters neatly along the outside edge of their desk.
2. First, have students build their spelling words. (The teacher should call the words out slowly, allow time for word building, and then check for understanding.) Then, use the words provided on the weekly phonics list to have students build other words with similar sound chunks.
3. Provide envelopes for student to put their letters in. They can take them home for practice or use them at school to fill time when they finished with other learning tasks.

Thursday: Quick Review & Encoding

1. Review spelling words orally
2. Call students to pocket chart to build words

3. Have students take a practice test. With their pencils down, students will fingerspell the word first. Then, they will "sound out" words as they write.
4. Students check their own papers.

Friday: Assessment

1. Review spelling words orally with cards.
2. Have student fingerspell words.
3. Review high-frequency word(s) to be tested.
4. Give spelling test. Encourage oral "sounding out" of words.
5. Teacher checks papers.

25 Instructional Phonics Activities

Letter Sound Identification Activities

Letter Hunt (Margaret Allen)

Do this chant with a strong beat.

"Going on a letter hunt.

Ooo-lookee.

What is it?

It is (say the name of the letter you are looking for).

Can you find _____?

Can I find _____?

Let's start looking.

Here we go."

You can make pretend magnifying glasses out of laminating film and construction paper for students to search the room for letters.

What's the sound...? (Hallie K. Yopp)

("Old MacDonald Had a Farm")

"What's the sound that starts these word:

Turtle, time, and teeth? (wait for a response)

/t/ is the sound that starts these words:

Turtle, time, and teeth!

With a /t/, /t/ here, and a /t/, /t/ there

Here a /t/, there a /t/, everywhere a /t/ /t/.

/t/ is the sound that starts these words:

Turtle, time, and teeth!"

This song can be sung using any sounds of the alphabet.

Sounding Off (Margaret Allen)

("Farmer in the Dell")

Print the letters you want to review on paper plates. Have a few students come up front and hold the letters. As the class sings, one student twirls his or her letter around.

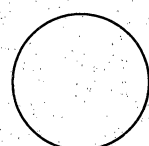
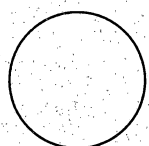
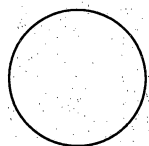
When the song is done, students say a word that begins with that letter sound.

"The _____ is rolling around.

The _____ is rolling around.

As soon as the letter _____ stops.

Say something that starts with its sound."



Paper plates

Magazine Search

Distribute magazines to the students. Have students search in magazines for letters you want to review. Also, you can have students look for pictures that begin with letter sounds you are reviewing.

Word Round-Up

Write a series of simple words on the board. Have most of the words start with the same sound. Read the words aloud to the children. Then have student volunteers come up the board and circle the words that start with the same sound.

Example: sun sat run sad top stir sick

Match It

Pass out one letter card to each student. Then, write a letter on the board. Next, ask the student who has that letter to come up and stand by the letter on the board. Use this as an opportunity to review the letter and sound. Ask students to think of words that start with that sound.

ABC Time

Pass out letter cards, one to each student. Then, say a series of letters out loud. Have the students with the

correct letter cards come up to the front. Next, have the students put themselves in ABC order.

"I See Something..."

This is just like the old fashioned version. The teacher starts by looking around the room, selects an object, and then says, "I see something that starts with /b/. Students offer responses. The student who guesses correctly continues the game.

Blending/Word Building Activities

Unlocking Words

This is an introductory technique for new spelling words. Write the spelling words on cards. Hold a card up, covering all the letters but the first one. Have the kids say the sound of the first letter. Then, move your hand to reveal the second sound. Have the kids say the second sound. Then, reveal the next sound and so on until the entire word is revealed. Next, help the students blend the sounds to say the word out loud.

Tapping (Project Read)

This technique is where students use their fist to "tap out" word sounds on a hard surface, usually their desk. If the word is cat, students take their fists and tap as they say /c/, /a/, /t/. Then they sweep their hand back over their desks as they blend the sounds together to say the word. This is a very tactile strategy.

Finger Spelling (Project Read)

Students use their fingers to sound out words and blend sounds together. They use their thumb first, then their pointer finger, and then their index finger. For cat, they will say the word; then they would put up their thumb as they say /c/, then on to the pointer as they say /a/, and finally to their index finger as they say /t/. To blend the sounds together they grab their fingers into a ball.

Sky Writing

After students have worked on blending their words for the week, they can practice them by writing them in the air. The teacher says the word and then sounds it out and blends it orally. As the teacher sounds the word out, students write the letters in the air with their finger.

Building Words

This is very similar to Cunningham's Making Words book. Instead of making words and eventually coming out with a long word, this version has student manipulate letters to create several words. First, students need to have a set of letters. They can be magnetic letters, or you can run off an alphabet grid, or you can use poker chips with sticky dots that you have written letters on...whatever way works for you. Students set up the letters around the edge of their desks. Then, you call out a word you want them to build based on the phonics concepts you are currently covering. Students move the letters into the middle of their desks to build the word. Appropriate lists for word building can be found in the weekly spelling list section of this handbook.

Pocket Chart Word Building

For a word building carpet activity, use a pocket chart with letter cards to build words. Call students up to the pocket chart and ask them to build a word. Appropriate lists for word building can be found in the weekly spelling list section of this handbook and in Appendices C and D.

Bumping Sounds (Margaret Allen)

For this activity, you need a set of alphabet cards. Pass out the alphabet cards. Then tell the students they are going to bump sounds to figure out a word. Call up, for example, the letters m, a, and p for the word map. Have them stand up front, holding their alphabet cards. The student holding the letter m would go first. The student says the sound of the letter m as he/she leans over and "bumps" into the student holding the next letter (a). When a gets bumped, the student holding the letter a says the sound as he/she leans and "bumps" into the next letter. The student who is p says the p sound. After they have "bumped," they blend the whole word into map. This is a great activity for teaching and practicing blending.

Pyramid Writing

After students have learned some blending techniques, they can do pyramid writing with CVC, CCVC, CCVCC, and CCCVCC words. A pyramid for cat would look like this:

```
      c
     c a
    c a t
```

Students write the first sound they hear on top of the pyramid. Then, they blend the first sound with the second sound for the next row in the pyramid. Students proceed to build the pyramids until all the sounds are done.

Change-A-Letter (Margaret Allen)

Write an incomplete sentence on the board like "I like to see the rabbit ____." Then, next to the sentence write the missing word with one letter incorrect. For this sentence you might write hot. Then have a volunteer come up and fill in the correct word by changing a letter in hot and turning it into hop. Continue with other sentences and other words that are off by one letter.

Word Spinners (Margaret Allen)

Make each child three spinners. One spinner will have beginning sounds. One spinner will have vowel sounds. And one spinner will have ending sounds. The student places a paper clip flat in the center of the spinner and holds his/her pencil upright, inside the paper clip. Then, the student can flick the paper clip and it will spin. Whatever letter the paper clip lands on, the student writes it down.

The student must spin three times to create a word (one spin from each spinner.) After the student has created several words, he/she will decide if they are real words or silly words. Kids really love this one.

Word Ladders

Draw a ladder on the board. On the first rung, write a word. Then ask a volunteer to come up and change a letter to form a new word. The new word goes on the second rung of the ladder. Continue until the ladder is full. This works best with word families.

What's Missing?

Draw or display a picture on the board. Then write the name of the picture, leaving out one letter. Have a student come up and fill in the missing letter. For example, write c__t on the board. The student would come up and fill in the a.

Word Family Wallet (Margaret Allen)

As student work with and become familiar with word families, they can make a word family wallet. Start with a 12 X 18 piece of construction paper. Fold it in half, lengthwise. Then fold it in thirds, like a wallet. Staple each end shut

and staple along the two folds. On each third of the wallet, write a word family ending. Give the students some single letters to place inside their wallets build words from.

__an __at __op

The wallet is open on the top side so single letters can go inside the pockets for manipulation.

Unscramble It

Divide the class into manageable teams. Give each team a list of words that have been scrambled. Give the teams a few minutes to unscramble as many words as they can. This activity provides a little friendly competition.

Graph Me!

Students can combine phonics practice with math graphing techniques. Whatever phonics concept you are working on, have students can create a graph to show how many words they can find. For example, have students search a passage for all the short a, o, and i words. Then they can make a bar graph or pie chart of what they found.

Word Sorting

Divide the class into pairs or triads. Give them all a set of about 20 word cards. Have them sort the words into piles by phonics concepts. Maybe you want them to sort the words by their beginning sound. Or have them sort the words based on variant vowel patterns—all the ai words together, all the a_e words together, etc.

Silent Letter Riddles

Write a riddle on the board about a word with a silent letter. Then, have someone solve the riddle and come up to the board to underline the letter that is silent. For example, you could write, "I have two wheels. You love to ride me all over your neighborhood. Sometimes I come with a horn. What am I?"

The answer of course is bike. The student will come up and underline the e in bike.

High Frequency Words

High frequency words play a significant role in learning to read. Of the 600,000 plus words in the English language, a relatively small number appear frequently in print. In fact, according to Adams (1990) and Johns (1980), about 100 words account for approximately 50% of the words in print. This is why knowledge of high frequency words is so important for reading fluency.

Although most high frequency words carry little meaning in print, they have a strong affect on the way print flows. It is the high frequency words that make the language of books sound natural, similar to the way we speak. One drawback is that many of the high frequency words are "irregular." They often stray from common spelling patterns. According to researchers, such as Tremain (1981) and Lovett (1987), readers store these "irregular" words in the exact same manner as regular words. So, readers have to pay attention to every letter and the pattern of letters in a word and associate these with the sounds they represent. Instruction of high-frequency words, including irregular ones, needs to focus on each letter and/or letter pattern (Ehri, 1992).

Many children seem to have difficulty with irregular words. Cunningham (1995) notes that early readers often confuse high frequency words like on/no, was/saw, and words with h blends like with, what, this, that, and the like. Because it seems to be a bit more difficult for beginning readers to learn irregular high frequency words, it is very important that students are taught them with explicit instruction.

Use your judgment as to how many high frequency words to learn weekly. A suggested time line might be:

First Trimester: 2-3 Words per week.

Second and Third Trimesters: 4-5 Words per week.

How Can I Teach High Frequency Words?

Here is a quick, 6-step sequence, compiled from several sources, on how to explicitly teach irregular high frequency words:

1. With a word card in your hand, say the word out loud several times and use it in a sentence.

2. Ask several students to use the word in a sentence, making sure that students understand how the word works.
3. Next, choose one of the student-generated sentences and write it on the board. Read it aloud and have a student come up and read it to the class. Choose a student to come and underline the high-frequency word.
4. Then, have the children spell the word out loud as you point to each letter.
5. Have the children "sky-write" the word. (Write the word in the sky with their finger.)
6. Last, place the word card on your word wall. Revisit the word regularly to reinforce spelling and help students gain automaticity in recognizing the word in print.

Following this section, you will find a list of the 150 most frequent words in printed school English. Use it as a guide to make decisions about which high frequency words to deal with first. Many high frequency words are phonetic and children who receive regular, explicit phonics instruction

will be able to decode them easily. It is the "irregular" words that need a little extra attention.

150 High Frequency Words

| | | | |
|-------|--------|---------|---------|
| on | go | just | because |
| are | up | about | does |
| but | her | where | will |
| what | two | people | part |
| all | like | most | even |
| were | him | know | new |
| when | see | get | place |
| we | time | through | well |
| there | could | back | as |
| can | no | much | with |
| an | make | before | his |
| your | than | also | they |
| which | first | around | at |
| their | been | another | be |
| said | long | came | this |
| if | little | come | from |
| do | very | work | I |
| into | after | three | have |
| has | words | word | or |
| more | called | must | by |

| | | | |
|-------|-------|--------|--------|
| had | its | good | went |
| not | who | write | old |
| each | now | our | number |
| how | my | used | right |
| out | made | me | look |
| them | over | man | think |
| then | did | too | such |
| she | down | any | here |
| many | only | day | take |
| some | way | same | why |
| so | find | things | put |
| these | use | help | one |
| would | may | years | |
| other | water | off | |

Teaching R-Controlled Vowels

One of the third trimester concepts to teach in first grade is "r-controlled" vowels. The letter r affects the sound of the vowel that precedes it. In first grade, stick mostly with -ar, -ir, -ur. The other r-controlled vowel sounds will be dealt with extensively in 2nd grade. Project Read has an excellent way of explicitly teaching r-controlled vowels. Project Read suggests you use this type of anecdote:

"Once upon a time there was Mr. R. He was a nice letter most of the time. He only got bossy when he had to stand behind a vowel. When an a got next to him, he would say in a very nice way:

"Hey, letter a, would you like to go in front of me?"

"Yes, thank you. I would like to go in front of you."

Then the letter a stepped in front of letter r, just like in the word car. (Show the word card.) Now Mr. R

showed his true colors. He was very bossy. He told the letter a:

"I let you go in front of me. Now you have to do what I say. SAY /r/."

The letter a had to do what the "bossy r" said. The a said /r/.

The kids love this little anecdote. I always begin teaching r-controlled vowels this way. Have kids come up and act out this little skit. One student is the r and one is the a. After they have experience with -ar, we do the skit in subsequent weeks with -ir, -ur, and -er (very limited). Teach it this way, and your students will never forget the "bossy r." On the following page, you will find list of words that contain r-controlled vowels. This list can be useful for word building.

R-Controlled Words

| | | | |
|------------|------------|------------|------------|
| <u>-ar</u> | mark | dirt | curb |
| arm | mart | fir | curl |
| bar | park | first | curse |
| bark | part | girl | fur |
| barn | part | shirt | hurt |
| car | scar | sir | nurse |
| card | shark | skirt | purse |
| cart | sharp | squirt | spurt |
| charm | smart | stir | turn |
| chart | spark | swirl | urge |
| darn | star | third | |
| dart | start | thirst | <u>-er</u> |
| far | tar | twirl | clerk |
| farm | tart | whirl | fern |
| guard | yard | | germ |
| hard | yarn | <u>-ur</u> | herb |
| harm | | blur | jerk |
| harp | <u>-ir</u> | blurt | stern |
| lard | bird | burn | term |
| lark | birth | churn | verb |

Teaching Digraphs

Project Read has a great way of dealing with digraphs. They suggest a short anecdote along with picture cards to help students remember the sounds of the digraphs. The anecdote goes something like this:

The Story of the H Brothers (Project Read)

There was once a woman who had four sons. She loved all her sons very much. The four h brothers loved to play and have fun together. And they looked a lot like one another. Even though they looked a lot like each other, it was easy to tell them apart. The first h brother was always going around sticking out his tongue, like this. Whenever he stuck out his tongue, he made a silly sound. /th/ The mother didn't like this at all. After all, it is rude to stick out your tongue. The second brother loved trains. He played with trains day and night. All day he would go around like a train conductor.../ch/, /ch/, /ch/. The third h brother wanted to learn how to whistle. But he just couldn't. All day he puckered up his lips like this /wh/. But only a breathy sound would come out. /wh/, /wh/, /wh/

all day long. But no whistle. Mother felt sorry for him. The last h brother was the mother's favorite. All his brothers were so noisy. All day long he heard, /th//th/, /ch/, /ch/, /wh/, /wh/. So he tried to quite them down by going /sh/, /sh/, /sh/. He was the quiet h brother. I guess that's why he was the mother's favorite.

Project Read has pictures of the h brothers to use as cue cards. I teach digraphs this way and found it to be very successful. My students are always on the look out for the h brothers when they read and write.

CVCe Instruction

The "silent e" pattern is one of the most reliable. It can be noted in four types of words: CVCe (make), CCVCe (shave), Vce (ate), and CCCVCe (strike). The "silent e" lets the reader know that the vowel sound is probably long. Some like to call the "silent e" the "magic e." This can be quite useful when put into a little anecdote.

When first introducing the "magic e," explain that when an e is at the end of a word, it often magically changes the sound of the vowel into a long sound. To get this point across is useful to use a pocket chart to build words. Have one card for each letter of the alphabet, but make the /e/ out of glitter. Then when students come up to build words, they use the magic, glittery e at the end to make the vowel long. A magic wand can be effective too. Have the student wave the magic wand to make the magic e release its magic. With a quick wave of the wand, the magic e makes the vowel say its name.

Teaching Variant Vowel Patterns

Once students have learned how to blend sounds and have mastered the more simple vowel patterns, it is time to teach the other variant vowel patterns. Variant vowel patterns include: ai, ay, oe, ee, ea, ie, oe, ow, ui, ue, au, aw, oy, oi, ou, ow, oo, and ew. Students will work with variant vowel patterns extensively in 2nd grade. So, the idea in 1st grade is to introduce and have children become familiar with the variant vowel patterns.

These vowel patterns can be divided into two categories--1) The "vowel talkers" and 2) The "vowel whiners." When teaching the variant vowel patterns, it is helpful to teach students a little chant to help them remember the correct pronunciations of the patterns.

Vowel Talkers

ai, ay, oe, ee, ea, ie, oe, ow, ui, ue

"When two vowels go walking, the first one does the talking. When two vowels go walking the first one says its name."

Use a clapping or snapping beat to teach students this chants. Have them act it out with letter cards. Then use some of the suggested activities beginning on page 80 to reinforce the concept.

Vowel Whiners

au, aw, oy, oi, ou, ow, oo, and ew

These vowel patterns were given the name "whiners" because the sound they make together sounds like whining.

"Uh, oh, stubbed my toe! AW! OY! OW! OO! Now you've got a boo-boo."

Again, use a clapping or snapping beat to teach students this chants. Have them act it out with letter cards. Then use some of the suggested activities beginning on page 85 to reinforce the concept.

CVC words

Short a

bad

bag

bat

cab

can

cap

cat

dad

fan

fat

gas

had

ham

hat

jam

lap

mad

man

map

mat

nap

pad

pal

pan

pat

rag

ram

ran

rap

rat

sad

sat

tag

tan

tap

van

wag

Short e

bed

bet

fed

get

hen

jet

led

leg

let

men

met

net

pen

pet

red

set

ten

vet

web

wet

yes

yet

Short i

bib

big

bit

did

dig

dip

fin

fit

hid

him

hip

hit

kid

kit

lid

lip

lit

pin

pit

rib

| | | | |
|----------------|-----|----------------|-----|
| rid | fox | sob | hut |
| rip | got | top | jug |
| sit | hop | | mud |
| six | hot | <u>Short u</u> | mug |
| tip | job | bud | nut |
| wig | jog | bug | pup |
| win | log | bun | rub |
| zip | lot | bus | rug |
| | mom | but | run |
| <u>Short o</u> | mop | cup | sub |
| box | not | cut | sum |
| cob | pod | dug | sun |
| cot | pop | fun | tub |
| dot | pot | gum | tug |
| fog | rod | hug | |

Books Featuring Short Vowels

Short a

Addie Meets Max by Joan Robbins (1985)

Alex in the City by Helen Griffin (1982)

Angus and the Cat by Bonnie Pryor (1986)

A Birthday Basket For Tia by Pat Mora (1992)

Caps for Sale by Esphyr Slobodkina (1940)

The Cat in the Hat by Dr. Seuss (1957)

The Fat Cat by Jack Kent (1971)

The Gingerbread Man by Karen Schmidt (1985)

I Can by Susan Winter (1993)

Jack and Jake by Alikei (1986)

Millions of Cats by Wanda Gag (1977)

My Friends by Taro Gomi (1990)

There's an Ant in Anthony by Bernard Most (1980)

Who Took the Farmer's Hat? By Joan Nodset (1963)

Short e

Elephant in a Well by Marie Hall Ets (1972)

Emma's Pet by David McPhail (1988)

An Extraordinary Egg by Leo Lionni (1994)

Get Set To Wreck! By Robert Rector Krupp (1988)

Hester the Jester by Ben Schecter (1977)

I Don't Believe in Elves by Jane Thayer (1975)

The Little Red Hen by Paul Galdone (1973)

Shoes for Grandpa by Mem Fox (1992)

Ten Pennies for Candy by Henry Ratchet Wing (1963)

Yeck Eck by Evaline Ness (1974)

Short i

Bit by Bit by Steve Sanfield (1995)

Call for Mr. Sniff by Thomas P. Lewis (1981)

The Doorbell Rang by Pat Hutchins (1986)

Fix-it by David McPhail (1984)

Gilberto and the Wind by Marie Hall Ets (1966)

Inch by Inch by Leo Lionni (1962)

Is it Dark? Is it Light? By Mary D. Lankford (1991)

My Brother, Will by Joan Robbins (1986)

Small Pig by Arnold Lobel (1969)

This is... by Gloria Patrick (1970)

Titch by Pat Hutchins (1970)

Two Crazy Pigs by Karen Nagel (1992)

Whistle for Willie by Ezra Jack Keats (1984)

Willy the Wimp by Anthony Browne (1984)

Short o

All About You by Catherine Anholt and Laurence Anholt
(1992)

Animal Trucks by Arthur Dorros (1991)

Big Frogs, Little Frogs by Patricia Miller and Ira Seligman
(1963)

Flossie and the Fox by Patricia McKissack (1986)

Fox in Socks by Dr. Seuss (1965)

I Need a Lunch by Jannette Caines (1993)

Mogwogs on the March by Olivier Dunrea (1985)

Mop Top by Don Freeman (1955)

Oscar Otter by Nathaniel Benchley (1966)

School Bus by Donald Crews (1993)

Short u

Big Gus and Little Gus by Lee Lorenz (1982)

The Cut-Ups by James Marshall (1984)

Donald Says Thumbs Down by Nancy E. Cooney (1987)

Fun/No Fun by James Stevenson (1994)

Hunches and Bunches by Dr. Seuss (1982)

Scrawny the Classroom Duck by Susan Clymer (1991)

Seven Little Ducks by Margaret Frisky (1940)

Thump and Plunk by Janice May Udry (1981)

Umbrella by Taro Gomi (1958)

The Ugly Duckling retold by Lillian Moore (1988)

CVCe Words

a_e

| | | | | |
|-------|-------|-------|--------|-------|
| ace | daze | lake | quake | stage |
| age | drape | lame | race | stake |
| bake | face | lane | rage | stale |
| base | fade | late | rake | state |
| blade | fake | made | rate | take |
| blaze | fame | make | rave | tale |
| brace | flake | male | sake | tame |
| brake | flame | mane | sale | tape |
| brave | frame | mate | same | taste |
| cage | game | name | save | trace |
| cake | gate | pace | scale | trade |
| came | gave | jade | scrape | vane |
| cane | glaze | page | shade | vase |
| cape | grace | pale | shake | wade |
| case | grade | pane | shave | wage |
| cave | grape | paste | skate | wake |
| chase | grave | pave | slate | wave |
| crane | hate | place | snake | waste |
| crate | haze | plane | space | whale |
| date | lace | plate | spade | |

i_e

| | | | | |
|-------|-------|-------|--------|-------|
| bike | five | mile | slice | tile |
| bite | glide | mine | slide | time |
| bride | hide | pile | slime | twice |
| chime | hike | pine | smile | twine |
| crime | hive | pipe | spice | vine |
| dice | kite | price | spike | while |
| dime | lice | pride | spine | white |
| dine | life | rice | stride | wide |
| dive | lime | ride | strike | wife |
| drive | line | rise | stripe | wipe |
| file | live | shine | swine | wise |
| fine | mice | side | tide | write |

o_e

| | | | | | |
|-------|-------|------|-------|-------|-------|
| bone | dome | joke | robe | stole | whole |
| broke | drove | lone | rode | stone | woke |
| choke | globe | mole | rope | stove | zone |
| chose | hole | nose | rose | stoke | |
| close | home | note | slope | those | |
| code | hope | poke | smoke | tone | |
| cone | hose | pole | spoke | vote | |

u_e

cube

cute

fuse

mule

use

Books Featuring Long Vowel Sounds

Long a

The Lace Snail by Betsy Byars (1975)

Moira's Birthday by Robert Munch (1987)

Owl at Home by Arnold Lobel (1975)

The Pain and the Great One by Judy Blume (1974)

The Paper Crane by Molly Bang (1985)

Sheila Rae, the Brave by Kevin Henkes (1987)

Taste the Raindrops by Anna Hines (1983)

Long e

Arthur's Funny Money by Lillian Hoban (1981)

Brown Bear, Brown Bear, What Do You See? by Bill Martin, Jr. (1967)

Clifford's Puppy Days by Norman Bridwell (1989)

Have You Seen Trees? by Joanne Oppenheim (1967)

Jenny's Journey by Sheila White Samton (1993)

Little Bo Peep by Paul Galdone (1986)

Miss Nelson Has a Field Day by Harry Allard (1988)

Never Tease A Weasel by Jean Soule (1964)

Pierre: A Cautionary Tale by Maurice Sendak (1991)

The Screaming Mean Machine by Joy Cowley (1994)

"Stand Back" said The Elephant, "I'm Going to Sneeze" by
Patricia Thomas (1971)

Ten Sleepy Sheep by Holly Keller (1983)

We Scream for Ice-Cream by Bernice Chardiet and Grace
Maccarone (1992)

Long i

The Bike Lesson by Stan and Jan Berenstain (1964)

If Mice Could Fly by John Cameron (1979)

Jamaica's Find by Juanita Havill (1987)

Night Sounds, Morning Colors by Rosemary Wells (1994)

No Fighting! No Biting By Else Minarik (1978)

Tight Times by Barbara Hazen (1979)

When the Tide is Low by Sheila Cole (1985)

Why Can't I Fly? by Rita Gelman (1979)

Wild Wild Sunflower Child Anna by Nancy White Carlstrom
(1991)

Winter Coats by Margo Mason (1989)

Long o

The Adventures of Mole and Troll by Tony Johnston (1972)

Bob the Snowman by Sylvia Loretan (1991)

The Giant's Toe by Brock Cole (1986)

Going Home by Margaret Wild (1994)

Lost! by David McPhail (1993)

A New Coat For Anna by Harry Ziefert (1988)

New Shoes for Sylvia by Johanna Hurwitz (1993)

Night Noises and Other Mole and Troll Stories by Tony
Johnston (1977)

One Monday Morning by Uri Shuklevitz (1967)

Osa's Pride by Ann Grifalconi (1990)

Roll Over by Mordicai Gerstein (1984)

Snowsong Whistling by Karen Lotz (1993)

Toad on the Road by Jon Buller and Susan Schade (1992)

When I Am Old With You by Angela Johnson (1993)

Long u

"Excuse Me--Certainly!" by Louis Slobodkin (1959)

Tell Me A Trudy by Lore Segal (1977)

The Troll Music by Anita Lobel (1966)

APPENDIX B

Reflections

When I first began this project, I had a strong feeling about the significance of phonics instruction for beginning readers. During the course of my study, I became increasingly impressed with the depth of research indicating that beginning readers do indeed need a strong foundation in both phonological awareness and phonics generalizations in order to become thoughtful, competent readers. But I also became increasingly sad about the "either-or" quality of the debate about phonics instruction. The tone and vocabulary with which educators choose to tout their theories has created much division among teachers. And this division, in turn, has hurt early reading education. Just think of all the lost opportunities for professional educators to talk freely about classroom practice. The divisiveness of the reading debate serves only to cloud the most critical issues in reading education today.

So how are beginning reading teachers supposed to come through this debate with any sense of confidence in their practices? Well, I believe it is possible. First, we need to clarify what the critical issues are. They are

certainly not "phonics versus whole language." The whole language movement does not come down to the issue of phonics versus no phonics. Nor does it come down to meaningful literature versus the "Dick and Jane" series. It is about many complex and vitally important issues such as the nature of the learner and the role of the teacher. But the debate has polarized thought among teachers to the point that we have disregarded our mutual instructional goals: To teach children to read. And more specifically, the instructional goal for phonics is to help children understand and internalize the alphabetic principle. That instructional goal can be met in a variety of ways, many of which are associated with whole language approaches--- writing, reading of meaningful connected text, book sharing, language experience activities, and the like. So the debate really seems quite moot. And the critical issue with regards to phonics is not if, but how and when.

To answer this, one can look to the ample body of research about beginning reading. Both past and recent research supplies the answers for us. We need to teach phonics directly. And we need to teach it using a system. But, research also cautions us to always make sure that phonics instruction is connected to meaningful text so that

children can see the significance for themselves. This alone may have the power to extinguish the fire of the phonics debate. Direct and systematic doesn't have to mean endless, isolated drill sessions. A balanced approach to reading instruction includes a phonics component that is both interactive, integrated, and employs a whole-part-whole framework. Dechant (1993) reminds us that "reading is an interactive process which begins as a top-down process, but almost simultaneously and in parallel moves back and forth between a top-down and a bottom-up process; ...reading moves from whole to part to whole and when we focus on the parts we are ...talking about skill teaching" (p. 42). The phonics program suggested in this project deals specifically with Dechant's "parts."

Another significant point that came out of the research is a clear description of what good phonics programs look like. Good phonics programs do not treat phonics in a vacuum. Rather, they develop awareness of the alphabetic principle to the point that word recognition becomes automatic. From there, students apply this awareness to the forms and functions of text. And phonics must be developed in concert with real reading and writing experiences. Good phonics programs are not intensive.

They spend relatively few instructional minutes on developing phonics skills. But the instruction is indeed explicit and systematic and always returns full circle to allow application to authentic literacy activities. Also, good phonics instruction provides ample time for mastery. The absorption of the alphabetic principle takes time and practice. Good phonics instruction understands this and provides both in-context and out-of-context practice, brain compatible strategies, and experiences that allow transfer and generalization of skills to new print situations.

Looking at research has deflated the debate before my eyes. Wouldn't it be great if educators could stop bickering about methods and materials? We all have the same instructional goals. And research gives strong indicators about how to go about achieving those goals. There is plenty of room within the parameters of the research to allow for individual preferences. It is in all our best interests to learn about and understand the importance of phonics instruction for beginning readers. Although it is only one component of becoming a skilled reader, it is of great significance and deserves the careful attention of beginning reading teachers. We can be confident as teachers of beginning readers. As long as our

approaches to teaching young readers are shaped by the facts of scientific research, we can sleep a bit easier at night, knowing we are doing the best for our students. Teaching cannot only come from the heart. It must come from what we know about how children learn to read.

APPENDIX C

Bibliography

- Adams, M. J. (1990). Beginning to read: Thinking and learning about print. Cambridge, MA: Massachusetts Institute of Technology Press.
- Adams, M. J. & Osborn, J. (1990). Beginning reading instruction in the United States. Paper presented at the Meeting of the Educational Policy Group. Washington DC.
- Adams, M. J., R. Tremain, and M. Presley. (1996). Reading, writing, and literacy. In Handbook of Child Psychology, ed. I. Sigel and A. Renninger. Vol. 4. New York, NY: Wiley.
- Chall, J. S. (1967). Learning to read: The great debate. New York, NY: McGraw-Hill.
- Chall, J. S. (1983). Stages of reading development. New York, NY: McGraw-Hill.
- Chall, J. S. (1987). Reading and early childhood education: The critical issues. Principal, 66(5), 6-9.
- Chall, J. S. (1989). Learning to read: The great debate 20 years later. Phi Delta Kappan, 71, 521-538.
- Chall, J. S. (1992). The new reading debates: Evidence from science, art, and ideology. Teacher College Record, 94(2), 315-328.
- Clymer, T. 1963. Utility of phonics generalizations. The Reading Teacher, 16.
- Cunningham, P. M. (1990). The names test: A quick assessment of decoding ability. The Reading Teacher, 44.
- Cunningham, P. M. (1985). Phonics they use: Words for reading and writing. New York, NY: Harper Collins.
- Cunningham, P. M. (1975). Investigating a synthesized theory of mediated word identification. Reading Research Quarterly, 11.

- Ehri, L. C. (1992). Reconceptualizing the development of sight word reading and its relationship to recoding. In Reading Acquisition, ed. P. Gough, L. Ehri, and R. Tremain. Hillsdale, NJ: Erlbaum.
- Ehri, L. C. (1987). Learning to read and spell words. Journal of Reading Behavior, 19.
- Enfield, Mary Lee and Victoria Greene. 1986. Project Read (Phonology Guide). Bloomington, MN: Language Circle Enterprises.
- English Language Arts Content Standards. (1998). [Online.] Available @ <http://www.cde.ca.gov/board/standards/html>.
- Gough, P. B., J. A. Alford, and P. Holley-Wilcox. (1981). Words in context. In Perceptions of Print, O. J. L. Tzeng and H. Singer, eds. Hillsdale, NJ: Erlbaum.
- International Reading Association and the National Association for the Education of Young Children. (1998). IRA and NAEYC joint position statement: Learning to read and write: Developmentally appropriate practices for young children. The Reading Teacher, 52(2).
- Johns, J. L. (1980). First graders' concepts about print. Reading Research Quarterly, 15.
- Lesgold, A. M. and L. B. Resnick. (1982). How reading disabilities develop: perspectives from a longitudinal study. In Theory and Research in Learning Disability, ed. J. P. Das, R. Mulcahy, and A. E. Walls. New York, NY: Plenum.
- McKonkie, G., Kerr, P., Reddix, M., & Zola, D. (1987.) Eye movement control during reading: The location of eye fixations on words. Technical Report No. 406. Champaign, IL: Center for the Study of Reading, University of Illinois.

McConkie, G. W. and D. Zola. (1987). Two examples of computer-based research on reading: Eye movement monitoring and computer-aided reading. In Reading and Computers: Issues for Theory and Practice, ed. D. Reinking. New York, NY: Teachers College Press.

Perfetti, C. A. (1985). Reading ability. New York, NY: Oxford University Press.

Stanovich, K. E. (1986). Matthew effects in reading: Some consequences of individual differences in acquiring literacy. Reading Research Quarterly, 21.