Teaching a Core Vocabulary of High-Frequency Irregular Words to Beginning Readers

Arguing that most basal reading programs lack appropriate instructional strategies for teaching irregular words, this paper summarizes a teaching strategy for introducing new irregular words to children and discusses learning activities to ensure students will have an instant recognition of these words. The paper suggests presenting three to six dissimilar words in five steps: (1) present the words to be learned and use them within the context of a sentence; (2) model the words to be learned; (3) have the class read the words as a group; (4) have individual children read the words; and (5) help the children visualize the words in their minds. The paper presents five learning activities (companion study, mastery checking, seat work exercises, parental involvement, and word games and activities) and guiding principles to make sure students receive enough practice and review of the irregular words. Twenty-three references and three appendixes of sample learning activity worksheets are attached. (RS)
Teaching A Core Vocabulary of High-Frequency Irregular Words to Beginning Readers

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Reading is one of the most important basic life skills a child can attain while in the early years of schooling. It is a cornerstone for a child's success in school and, indeed, throughout life. (Anderson, Hiebert, Scott & Wilkinson, 1985).

According to Friedman and Rowls (1980), three general perspectives govern the concern with reading as a skill to be taught in the public schools. First, reading is an important facet of achievement in all school subjects. If a child has problems with reading, he or she is immediately handicapped in math, science and social studies—to name just a few achievement areas. Research has shown that failure in such content areas is associated in large part with deficits in reading ability. Second, reading is an important way for people to obtain information about their environment, especially the environment outside the realm of school. Larrick (1987) quotes Jonathan Kozol's report that 25 million adult Americans cannot read the poison warning on a can of pesticide or a letter from their child's teacher. An additional 35 million read at a level below the full survival needs of our society. These 60 million people represent over a third of the adult population of this country. Third, reading is seen as a critical skill in terms of entertainment. Much like movies and television, through reading a person can experience ideas, adventure, feelings and situations not available in the everyday real world. These three perspectives alone establish the sovereign importance of reading in our daily lives.

Given the importance of reading, it is imperative that children have a successful experience when they are first learning to read in their early school years. Carnine and Silbert (1979) cite research which shows that failure in reading strongly influences a child's self-image and feelings of competency. Students who fail in reading often feel inadequate and ashamed. They are anxious and have a feeling of inferiority. Students' experiences in beginning reading instruction not only have an important psychological effect, but their success or failure in the early years sets the stage for later learning. Historically, children who have reading problems in the early years have reading deficits as they progress through school. Friedman and Rowls (1980) explain that remediation is more difficult in the higher grades than in the early years of reading instruction. Marie Clay (1985), who is known for her work in reading recovery procedures, states the first essential in remediation is effective reading instruction in the early years. Although some students will learn to read in almost any reading program used, other students' success greatly depends on the effectiveness of the reading instruction (Carnine & Silbert, 1979). The importance of effective reading instruction in a child's early years cannot be overstated.
According to the report *Becoming a Nation of Readers: The Report of the Commission on Reading* (Anderson et al., 1985), one of the cornerstones of skilled reading is learning word identification skills. Ehri (1980) states that the most important capability to be acquired in learning to read is learning to recognize printed words accurately, rapidly, and also completely in the sense that the word's meaning as well as pronunciation is apparent when the printed word is seen. Effective beginning reading instruction should teach children word identification strategies.

According to Marzano, Hagerty, Valencia and DiStefano (1987), instructional strategies to improve word identification are usually categorized into two broad areas: immediate and mediated word identification. Immediate word identification refers to the ability to recognize words by sight; the word is recognized instantly. These instructional strategies help the students learn the word as a whole, usually because the word cannot be decoded. On the other hand, strategies which students use when they don't know a word immediately by sight are called mediated word identification. Marzano and his colleagues suggest that three types of mediated word identification strategies need to be taught to beginning readers: phonic analysis, structural analysis, and contextual analysis. Phonic analysis is the act of translating letters into speech sounds. In structural analysis, the reader learns an unfamiliar word by looking for smaller meaningful parts within the word. As an example, a child might figure out the word enjoyable by recognizing the more familiar root word joy or the suffix able. Contextual analysis is the use of surrounding words in a sentence or paragraph to help determine an unknown word.

Many words which are phonically regular or follow a rule can be decoded by using mediated word identification strategies. However, because the English language is by no means a phonically pure system, some words need to be learned using a whole word (also called look-say, or sight method) approach. Gottfredson (1984) refers to these words which require a whole word strategy as phonically irregular words. He explains there are three major types of word classes: phonically regular, rule-governed, and phonically irregular. A phonically regular word is one in which the sound of each letter in the word is the sound most commonly associated with that letter (i.e., cat, pen, ship, hop, run). Rule-governed words are large groups of words that have consistent irregularities. Phonetic generalizations or rules can be formed to account for the consistent irregularities. For example, most often, when a word ends with the letter "e" that is proceeded by a vowel consonant blend, the final "e" becomes silent and the other vowel assumes a long vowel sound rather than its regular short sound (e.g., hope, fire, bake). Phonically irregular words may be groups of words that have consistent irregularities that allow a rule to be formed; however, because the number of words accounted for by the rule is so small or
the number of exceptions to the rule are so great the rule does not merit learning. In addition, some words are classified as irregular because they contain sound letter relationships that are completely irregular (i.e., the, was, come). These words cannot be decoded by any other procedure except memory.

It is important to clarify a few terms which are sometimes very confusing in the literature related to immediate word identification. According to Hood (1977), there are at least three different contexts in which the term "sight words" is used. First, sometimes the term refers to words that are not phonically regular or do not follow a common phonetic generalization, as Gottfredson (1984) defined in the preceding paragraph. To reduce confusion throughout the remainder of this document, we will call these words "irregular words." Second, the terms "sight words" and "sight vocabulary" are used to represent the entire group of words a child can recognize on sight, regardless of whether they are a phonically regular, rule-governed, or irregular words. We will refer to these as a child's instant words. The third use of this term is to designate that core of heavy duty words (also called basic vocabulary), including many function (also called structure wor) words, that we use most frequently as we speak or write. To avoid confusion in terminology, we will refer to this set of words as the core vocabulary. It is important to get our definitions straight because so many people have such different meanings for the term "sight words."

The overall goal of most reading programs which teach word identification strategies is to help students come to the point where they recognize the words they read instantly. Harrison and Wilkinson (1976) state that once a person proceeds to read with any degree of regularity, many words that would be decoded using a mediated strategy upon the first few encounters are subsequently read as instant words from memory and do not require the continual application of phonetic, structural, or context analysis. Johnson and Pearson (1984) stress the importance of instant word identification by stating that the ability to recognize words rapidly is essential to comprehension. LaBerge and Samuels (1974) use the term automaticity to describe an efficient and fluent reader's ability to recognize words immediately. Automaticity occurs when a skill or piece of knowledge is overlearned so students can make use of it with little conscious attention. They explain that readers who are capable of instant or automatic word recognition are free to focus their attention on higher cognitive skills necessary for reading comprehension.

Even though beginning readers may be very good at using mediated word identification strategies, they will be poor readers unless they have an instant recognition of a core vocabulary of irregular words. Because high frequency irregular words comprise 60 percent of the words found in most basal readers, instant recognition of these words is
essential if a child is to become a fluent reader (Falcon & Simms, 1985). Common irregular words comprise over half of all written material (Harrison, 1987). Lewandowski (1979) found that most of the words included in a core vocabulary list based on high frequency were phonically irregular.

In addition to teaching mediated word identification strategies, effective reading instruction should also include appropriate instructional strategies for teaching a core vocabulary of irregular words. Instructional strategies for teaching irregular words are different than those used for teaching regular or rule-governed words. Irregular words must be memorized as a unitary whole. The instructional strategies for teaching irregular words should be based on appropriate instructional theory for teaching a memory task.

Appropriate instructional strategies for teaching a memory task include such activities as adequate drill and practice, systematic review, appropriate feedback, and chunking. Chunking refers to the number of words introduced at a time in one instructional session. Adequate practice and review is necessary so students will be able to recognize these words instantly. In addition, adequate practice and review is necessary so students will not confuse similar word pairs, such as what-that and when-then.

In light of the importance for beginning readers to learn a core vocabulary of irregular words, the next question to ask is: do reading programs use appropriate instructional strategies for teaching irregular words? Unfortunately, to our knowledge, the majority of reading programs do not.

The report *Becoming a Nation of Readers* (Anderson et al., 1985) estimates that 75 to 90 percent of what goes on during elementary reading instruction is driven by commercial basal reading programs. A basal reading program is a complete package of teaching materials. These materials-based reading programs provide an entire reading curriculum (summarized in what is called a "scope and sequence chart"), instructional strategies for teaching reading, a graded anthology of selections for children to read, practice exercises, and in some cases optional and supplementary materials (e.g., management and testing systems; visual aids such as word cards, sentence cards and picture cards; audio tapes; film strips; supplementary books).

Although extensive effort and work has gone into the development of these basal reading programs, they do not use appropriate instructional strategies for teaching a core vocabulary of irregular words. According to Carnine and Silbert (1979), most commercial reading programs do not provide adequate drill and practice to ensure children learn to recognize these words instantly in order to achieve fluency in reading, writing, or spelling. In addition, they have problems with the rate in which they introduce new irregular words and they do not provide enough systematic review of words previously learned.
Professors of Elementary Education at Brigham Young University, specializing in early reading instruction (Reutzel, 1988; Hollingsworth, 1988), agreed with Carnine and Silbert that instructional strategies used in most basal readers are inappropriate.

Because most basal reading programs lack appropriate instructional strategies for teaching irregular words, we feel that teachers need to supplement the primary reading program used in the classroom. If teachers solely rely on the commercial basal reading programs to ensure that their students will attain an instant recognition of high frequency irregular words, we feel teachers will be greatly disappointed.

With these issues in mind, we developed an instructional program for the introduction and teaching of high frequency irregular words to beginning readers. This paper will summarize a teaching strategy for introducing new irregular words to children and discuss learning activities to ensure students will have an instant recognition of these words.

Introducing Irregular Words

We suggest presenting three to six dissimilar words in five steps. A teacher can teach these steps in whole class instruction, small groups of students, or individually with a student. The teacher directives (a sample dialogue) are in large, bold type within quotes. Procedures are in small type preceded by a bullet "•".

Step 1: Present the words to be learned and use within the context of a sentence.

"Today we are going to learn to read these three words by sight."

• Write the following words on the chalkboard: the, I, a
• Use each word in two oral sentences. For example:

"I am now going to use the three words on the board in sentences."
"Sam sat by the cat."
"The boy ran from the dog."
"I am happy."
"I am a girl."
"Blackie is a dog."
"Nan is a thin girl."

• Point to the words as you use them in the sentences.
• Emphasize the new words for this unit with your voice as you use them.
Step 2: Model the words to be learned.

"As I point to a word, I will read the word."
"Then you repeat the word as a class when I touch the board."
"Okay?"

- After you model reading the word to the class, you should lead the class in group choral by reading the word as you touch the board pointing to the word. The children should say the word at the same time that you say the word (when you touch the board).
- Praise the children each time they read a word.
- Have the students repeat the each word at least five times as a whole class.
- If necessary, remind the children not to say the word until you touch the board. Unless you stress this expectation, some of the children will try to say the word when you point to the word.
- Explain to the children that the word "a" has different pronunciations. Some people say the word "a" using the long "a" sound, other people say the word like the short "u" sound. Sometimes the word "the" has different pronunciations, but most people use the pronunciation where the "e" in "the" makes the short "u" sound instead of the long "e" sound.

Step 3: Have the class read the words as a group.

"Now I want you to read the words as a class without me."

- Praise the class each time they read a word
- Alter the sequence when you point to the words.
- Have them read each word at least five times.
- Use the same hand signal so the children respond in unison.
- Make certain that all the children are looking at the board. If necessary, remind the children by name to pay attention.
- Make certain that all the children respond. If necessary, remind children by name to say the words with the rest of the class.
- Do not cue the children (i.e., mouthing the word, saying the word softly, etc.).
- As you work with the children note those which are having difficulties. These children should be tutored individually.

Step 4: Have individual children read the words.

"This time I am going to call on you individually to read the words."

- Call on the children you feel will be able to respond correctly to read one word.
- Praise the children individually.
If a child responds incorrectly, or does not respond within three seconds, refrain from saying "no." Simply tell the child the word and have him or her repeat it. Praise the child for repeating the word.

If children call out the word when they are not called on, remind them by name that they should not say the word unless you call on them.

Step 5: Help the children visualize the word in their minds.

"Now we are going to visualize each word in our minds. Look closely at the word 'the' and try to take a picture of it as a camera takes a picture. Now close your eyes and see if you can see the word 'the' in your mind. Open your eyes, look at the word 'the' on the chalkboard, and see if this is what you saw when you had your eyes closed."

"Now take out the sheet of paper I gave you a few minutes ago. I am going erase the word 'the' from the board. After I erase the word, I want you to write the word 'the' on the paper."

- Make sure each child has the paper on their desk.
- Erase the word "the" on the board and tell the children to write the word "the" on their paper.
- When each child has tried to write the word, write the word "the" on the board again. Have the children compare what they wrote on their papers to what is on the board. Look at many of their papers and give information about what was omitted, turned the wrong way, or put in the wrong place.
- Repeat the procedure for the words "I" and "a".

Learning Activities

Once new irregular words have been introduced to students, it is critical they receive adequate practice and review to ensure they learn these troublesome words to the state of instant recognition. We suggest the following learning activities and guiding principles to make sure students received enough practice and review.

**Companion Study.** Companion study involves students being assigned to work together in pairs called "companionships." One child is designated the "teacher" and one child is designated the "student." The student reads a Companion Study Exercise as the teacher gives direction and provides positive feedback. After the companionship completes the exercise, the children exchange roles.

We provided teachers Companion Study Exercises. These exercises were assembled into a Companion Study Booklet. The exercises were designed to give students practice
reading words in isolation and within the context of sentences. The student that is designated as the teacher has the responsibility of correcting mistakes and providing praise when the other student responds correctly. After the one student has covered the exercise, they reverse roles and the student who was the teacher becomes the learner and the student who was the learner becomes the teacher.

Research has consistently demonstrated that if students receive individualized help from someone, their chances of doing well in school increase dramatically (Hartley, 1977), especially if the tutors are trained, used prescribed materials, and work under the supervision of the classroom teacher (Ellson, 1968).

In a study that reviewed research involving tutors and peer tutoring (classmates tutoring one another), peer tutoring was just as effective as tutoring done by paid adult aides (Hartley, 1977).

As a result of empirical data showing peer tutoring to be effective, the National Commission on Reading recommends that reading teachers make use of "peer tutoring" in which the students alternate in the role of teacher (Anderson et al., 1985).

Companion Study as it is used in this program, satisfies the following four considerations specified by Criscuolo (1977) that help ensure that tutoring is effective:

1. The tutors are trained,
2. The teacher provides the tutors the materials to be covered,
3. The tutoring activities are correlated with classroom instruction,
4. The tutors are provided ongoing supervision.

In that research has shown students benefit from being a tutor as well as from being tutored, this learning activity gives every student the opportunity to work as a tutor. No student is excluded.

It is suggested the following procedures be used to assign companionships initially. Rank the students in terms of maturity and attentiveness. Create companionships by assigning students on a high maturity level with students on a lower maturity level. The key is to have students who are attentive and who follow directions assigned to students who are prone to be inattentive and not as disposed to follow directions carefully. Companionships can be changed at any time. If two students clash for any reason, do not hesitate to change assignments. As a general rule sex should not be a factor in assigning companionships. If anything it is advantageous for students to learn to work effectively with someone of the opposite sex. Other criteria that can be used in making assignments are the student's skill in teaching, recognizing errors, and in praising. As time progresses, you can assign the students to work with different companions when they cover the exercises. See Appendix A for a sample Companion Study Exercise.
Mastery Checking. Research has shown that learning is enhanced if students are checked for mastery regarding what has been taught on a regular basis. In reviewing elementary reading programs identified as being effective by the American Institute for Research, several common teacher behaviors were isolated:

1. Teachers monitored student progress very closely.
2. Student evaluations were based on specified objectives with observable outcomes.
3. Periodic testing was done, that in turn, impacted on instructional decisions.
4. Teachers addressed the needs identified by testing (Rupley, 1976).

In research conducted by Medley (1977), it was found that effective teachers interacted with individual students while the class completed seat work assignments. It has been found that mastery checks can be brief or extensive, depending on the situation.

In order to be effective in teaching reading, you as a teacher must be aware of the individual needs of students and then arrange for immediate help for students who evidence difficulty.

Students should be checked on a regular basis for mastery of what is being taught. Systematic mastery checks are very basic to good instruction. If students demonstrate mastery, the teacher is able to provide them with positive feedback. If students do not demonstrate mastery, they can be provided with corrective feedback and, if necessary, additional time and help to bring them to mastery.

Seat Work Exercises. Seat work exercises allowed the students to write the irregular words several times and discriminate between words by completing sentences with the correct word in blank spaces. Students need to understand that during seat work they are expected to work independently. They should not be allowed to develop a pattern of relying on help from a classmate. Just as it is very important that they learn to work with a companion, it is equally important that they learn to work independently. See Appendix B for a sample Seat Work Exercise.

Parental Involvement. In 1978, Gordon wrote a chapter for a book in which he reviewed research that investigated the effects of parental involvement on learning. In a large majority of studies cited it was found that parent involvement impacted significantly on learning. It was found that as long as ten years after the conclusion of parent involvement programs, the students are still doing better than those in control groups. It was found that parent impact models are most effective when they are carefully planned or structured, have educational focus, and when they include parents working at home with their children as a major delivery system (Gordon, 1978).
During the past twenty years, research has shown that parent involvement in almost any form improves student achievement. Unfortunately, many parents and teachers are of the opinion that once children are in school, the responsibility for teaching academic subjects is the responsibility of the teachers exclusively. Consequently, some teachers fail to make effective use of parents.

We provided teachers a Share Sheet that was designed to be covered by the students with their parents (see Appendix C for a sample Share Sheet). This share sheet provides students additional practice and keeps the parents apprised of what is being covered in the unit.

The following recommendation was made by the Commission on Reading, "Parents should support school aged childrens' continued growth as readers. Parents of children who become successful readers monitor their children's progress in school, become involved in school programs, support homework, buy their children books or take them to the library, encourage reading as a free time activity and place responsible limits on such activities as TV viewing" (Anderson et al., 1985).

By means of orientation at Back-To-School nights and notes sent home with the students, parents are made aware of how important their involvement is for the success of their child. They were informed of the expectation to cover the Share Sheets with their child.

Word Games and Activities. Games and activities provide practice in a way that is purposeful, enjoyable and conducive to learning. According to the research, games and activities can be effective and motivating in reinforcing the irregular words the children are learning in the units of instruction (Marzano et al., 1987). We suggest teachers use various games and activities in their instruction. Games and other activities can be effectively used in whole class instruction, small groups or individually by students.

We piloted this instructional program for introducing and teaching a core vocabulary of high frequency irregular words with two teachers from two different elementary schools in Provo, Utah. Did the program we introduced work better than the basal readers teachers were previously using? The answer is yes, if teacher reports and testimonials are to be believed. Both teachers indicated that their students (after completing the pilot study) knew many more high frequency irregular words than previous year students. In addition, the pilot study students were able to recognize the words much more instantly than previous students. Words became a part of the children's reading vocabularies at a quicker rate than previous years.
References


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Reutzel, D. R. (1988, August). [Personal interview conducted at Brigham Young University, Provo, Utah.]

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Mel and Dan have a red pen.
Jen said the rat bit the man.
Is the pen as red as the bug?
Sam ran to the pig.
That dog is in the mud.
Jan is with Sam at the hut.
The cat sat by Mel.
I have a cat and a pig.
Is that hat for Sam or Dan?
Appendix B
Sample Worksheet

Name
Part 1. Write these words 3 times.

of
be
has
there
would
Part 2. Choose the correct word to complete each sentence and write the word in the space.

1. The cat___________ the dog ran with Sam.
   
2. Jen___________ the pig was fat.
   
3. The pig sat___________ Mat ran with the dog.
   
4. Jen and Nan ran___________ the big log.
   
5. Is___________ dog thin or fat?
   
   
7. The man is___________ the pup.
   
8. Jen and Jan___________ a dog and a cat.
   
9. Is the fan for Mat___________ Dan?
Dear Parent: Have your child cover this Share Sheet several times. Then sign and detach the note and send it back to school. If you wish, write a note to the teacher on the back of the note. Place this Share Sheet in a permanent file so it can be reviewed with your child throughout the year.

Part #1: Irregular Words Learned this Week.

of  be  there  has  would

Part #2: Sentences.

That rat bit my dog.  
Jen is with the man.  
The cat sat by the red box.

Part #3: Help Me Review.

the  I  a  for
this  is  was  are
you  my  and  said
as  to  that  with
by  have  or

-----------------------------------Detach Here-----------------------------------

Child's Name: ________________ covered Share Sheet #6 __ times.

Signature of Parent/Guardian: ________________ Date ______