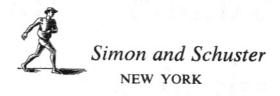
SIEGFRIED ENGELMANN

Chapter 4 Reading for the Nonreader

SOUNDS AND LETTERS

Pgs 81-101



4 Reading for the Nonreader

A nonreader is a child who cannot read three-letter words that are phonetically regular. Like John, the nonreader may have learned a few words that he recognizes at sight, but generally he will not be able to discriminate between a familiar sight word and another word that is similar in configuration. Although he may always identify the word little correctly, he may also call other words little—letter, light, listen. The nonreader lacks the attack skills that allow him to derive the sound a word makes from the arrangement of the letters. Regardless of what grade the nonreader is in, he must learn these basic attack skills before he can hope to read. This chapter outlines the approach.

The Form of Instruction for the Nonreader

The act of reading is interesting, so interesting that it has been an obsession of American education for the last fifty years. The amount of research that has been conducted is appalling in terms of its productive yield. The controversy between the look-and-say method and the phonic approach has stimulated an incredible amount of discussion, and most of it has been sterile. The controversy is based on an argument over what reading is. Is it an experience, with the whole child participating in it meaningfully? Is it a mechanical code-cracking skill? There are two ways to resolve the controversy. The first is to conduct experiments with the two approaches and note which approach produces better readers. The second is to analyze the controversy carefully and see which arguments are reasonable.

Jeanne Chall, in her book Learning to Read, has provided an eloquent answer to which of the approaches gets better results. Her well-documented analysis shows that just insofar as code cracking is diluted with "sight-reading experience" will the approach be inferior to

the intensive code-cracking program. The evidence in favor of the phonic approach is overwhelming.

An analysis of the skills that must be used in reading provides the same answer. The code-cracking, mechanical skills are logically prior to the gross experience of meaningful reading. To see why they are logically prior, consider the child who is asked to read the statement The horse is on the ridge. The child may read the statement correctly. or he may not. He may or may not understand what he reads. There are a number of possible combinations. The most publicized possibility is that the child may read the statement correctly and not be able to demonstrate in any way that he understands what he has read. However, an equally interesting possibility is that he may not read the statement correctly and yet demonstrate that he understands what he has incorrectly read. For example, he may read "The horse is on the bridge," and when he is asked to draw a picture of what he has read, he may draw a picture of a horse on a bridge. Does he understand what he read or doesn't he? If we say that he does, we are giving both "reading" and "comprehension" rather strange meanings. If we say that he doesn't, we are admitting that code cracking (the ability to translate written symbols into appropriate word sounds) is logically prior to comprehension. We are saying that the child cannot possibly demonstrate that he understands the statement unless he first reads it correctly. The most basic question is not "Can he understand what he reads?" but "Can he read what is written?" Before he can comprehend, he must correctly identify the words that appear in a statement. The first step in reading, therefore, must be to teach the child how to identify words correctly. This step has nothing to do with meaningful experiences or with total involvement.

A teacher does not make the child's job any easier by teaching reading in connection with meaningful objects and meaningful experiences, because the basic skills that he must learn are sound skills, not skills associated with objects. All that he can derive from a series of symbols, such as glickering or door, is a series of speech sounds, not an object.

Let's look at the problem from another angle. Let's say that we are confronted with a child who correctly reads the statement *The horse is on the ridge*, but cannot demonstrate that he understands the meaning of the statement. If his failure is a reading failure, it should imply a remedy that is unique to reading. But does it? Let's say that

we present the statement *The horse is on the ridge* verbally and then ask the child such questions as "What's a horse? What's a ridge? Was the horse under the ridge?" The child may fail some of these tests. Does it follow that we should work on reading? These tests are certainly not tests of reading, and we would be hard pressed to indicate how reading has anything to do with the child's failure. Yet it is almost certain that if a child cannot handle statements presented verbally, he will not be able to handle them in written form. In other words, the child cannot be expected to pass tests of reading comprehension unless he is able to pass comparable tests of language comprehension. But the remedy implied by a child's failure of a language test is *language instruction*, not reading instruction. The most obvious and direct remedy is to teach the child the meaning of that statement—teaching the meaning of each of the words and demonstrating the form of the statement.

In summary, there is one primary type of failure that calls for a reading remedy. That is the type in which the child does not correctly identify the words that are presented. In this situation there is no possibility that the child can comprehend what is written, because he cannot identify what is written. The remedy is to teach him how to translate the written symbols into appropriate sounds. The implication of this situation is that in reading instruction the first step is to teach the child how to identify words correctly. A further implication is that he must master all the subskills involved in word identification.

The Basic Reading Skills

The typical school failure is likely to encounter trouble with any of a number of subskills involved in word identification.

- 1. He may fail to learn the relation between individual letters and verbal sounds, or to learn that, in most words, every letter functions and that the same letter has the same sound-producing function in various words.
- 2. He may fail to learn how to blend. It is not all uncommon to see third-grade children who cannot read the word cat. A child sounds out the word, "cu, ah, tu," and the teacher asks, "What word is that?" The child repeats, "cu, ah, tu." The teacher becomes more insistent. "John, what word is that?" But the child stares at the word a moment before repeating, "cu, ah, tu."

3. He may fail to learn that there are "regular" words and "irregular" words. He may be able to read the word bat but fail to read the word ball (because the a in ball has a different sound from the a in bat). And then, when exposed to the idea that words are not always regular, he may conclude that spelling is purely arbitrary and go on a wild guessing spree—perhaps calling the word many "people" because the two words had been presented together on a previous occasion.

A carefully worked-out reading program must help the child over these potential trouble spots. If the program is to succeed, it must focus on the hidden verbal skills. Rhyming is a hidden verbal skill. Let's say that a child attempts to sound out the word fan, and he knows that the last part of the word is an. Unless he can rhyme, however, he may not understand that when f is added to an, the word will rhyme with an. Before the child can be expected to handle this task, he should be required to demonstrate that he can handle a similarly constructed verbal task: "O.K., JC, we're going to rhyme with an. Listen big: fff . . ." Unless the child can complete words by rhyming, he will probably encounter trouble when he tries to sound out words.

Another pair of hidden verbal skills consists of sounding out words that are presented verbally and then telescoping the sounds together. He must learn the relation between the word when it is sounded out and the word spoken at a normal speaking rate. Many school failures are unable to perceive this relation. The teacher may tell the child, "I'm going to show you a picture of a f-a-n. What am I going to show you a picture of?" The child may be unable to answer the question. Or he may be unable to handle the more difficult task of sounding out a word: "Listen, John. I'm going to sound out a word: f-a-n. Your turn: fan. Sound it out." The child may repeat the word at a normal speaking rate.

The reading program outlined in this chapter provides for the teaching of the hidden verbal skills. It is geared to the child who has not been taught these skills at home. It structures tasks so that the children will be transported over the trouble spots of sound and letter correspondence, blending, and irregular words. By following it, a teacher should be able to teach the potential school failure the critical reading skills of code cracking. Chapter 5 extends these skills and integrates them into a realistic comprehension program.

Word counting

The first rule the disadvantaged nonreader must learn is that people talk in words and that words are entities. For the child to understand this, he must be able to count events.

- 1. Without any great buildup, say, "Listen to what I say: She is happy. Say it with me." After the children have repeated the statement a few times, ask, "How many words are there in She is happy?" Repeat the statement slowly, pausing between the words: "She-is-happy. How many words? Let's count them" (assuming the children understand what this means). Repeat the statement, a word at a time, and hold up a finger for each word: "Three words. She -is-happy." Have the children count the words with you by holding up fingers: "How many words? Three words." Don't attempt to explain what you mean by word. The meaning will become clear from your demonstrations.
- 2. After the children have counted the words successfully, introduce the next task: "Listen to what I say: Is she happy? How many words did I say? Listen again: Is she happy?" The purpose of following the statement with a question using the same words is to make the children aware that a word is a unit independent of the other words that occur before or after it.
- 3. After counting the words in the question Is she happy? with the children several times (asking the question "How many words?"), introduce a variety of statements for the children to analyze. Use statements that contain at least one two-syllable word. Unless two-syllable words are programed from the beginning, the child may get the idea that a word is a syllable, and that to count words, one simply counts the syllables.

Initially introduce only nouns that do not require the articles (a or the), and only statements that use a form of the verb to be:

Fish are animals.

We are sitting down.

John is smiling at me.

They were driving cars.

After the children have counted the words in a statement, convert the statement into a question: Are fish animals? Is John smiling at me? (These statements can be converted into questions merely by changing the order of the words.)

4. After the children have demonstrated that they can count the

words in short sentences, introduce statements containing articles (but still using a form of the verb to be):

A dog is an animal.

The dog is brown.

He is a happy boy.

She is a woman.

The children may have some trouble counting articles as separate words. When counting the words with them, say the sentence very slowly and emphasize the articles, so that the children get used to hearing them: "Listen: She—is—UH—woman." Do not produce the word a as long a unless you would normally do so.

Work on the articles (a, an, the) until the children have a solid understanding that they are words. You can draw this conclusion when the children consistently count them as words.

(Note: In the first set of exercises a word always changed position from statement to question: These are men. Are these men? In the second set, most of the words changed position: This is a man. Is this a man? The article, however, still preceded the word man, which makes it relatively more difficult for the child to learn about articles than about such words as is and man.)

5. If the child continues to have difficulty recognizing articles as words, introduce a basic statement with different articles, thereby demonstrating that articles can be removed from a statement.

Introduce a statement in which the article is the first word uttered:

A dog is an animal.

Then, after counting the words, introduce variations:

The dog is an animal.

This dog is an animal.

Introduce a series of similar examples.

To demonstrate how the article *an* works, convert the statement into plural:

These dogs are animals. (The an has disappeared.)

Those dogs are animals.

Dogs are animals.

Also convert plural into singular:

Cows are animals.

A cow is an animal.

If the child does not understand the difference between singular

and plural (which is quite possible if he is a disadvantaged Negro), introduce basic language tasks. A procedure for teaching the distinction between singular and plural is outlined in the book *Teaching Disadvantaged Children in the Preschool*, by Carl Bereiter and Siegfried Engelmann.

6. Introduce statements that use verbs other than to be. If the child has successfully handled the preceding tasks, he should have no trouble with these. Start with relatively short statements (ideally one-word or two-word statements), and work up to seven- and eight-word statements. First repeat each statement slowly, then have the children repeat it, and finally have them count the words. Here are examples at the different levels of difficulty:

Stop.

Let's eat.

Slow down.

Let's play ball.

Who likes hamburgers?

Where did John go?

He ran down a big hill.

Earthmen live on the planet Earth.

Don't ask me if you can have a cooky.

If the children have difficulty with a particular word, use the word in various sentences. For example, if the children indicate that *planet* is two words, introduce several other sentences containing *planet*, strongly emphasizing the word:

Mars is a planet.

Planets do not burn up.

The children may not understand that events as well as objects can be counted. To correct this deficit, show them that you can count the number of times you clap your hands, then the number of times you jump, the number of times you open your mouth, and so on. Also introduce sets of mixed events: clap, stand, stamp. "How many things did I do?"

The children may have difficulty hearing what they say as a series of units that can be counted. The remedy is to give them ample practice. Soon the children should show good progress.

Rhyming

Begin to work on rhyming as soon as the children have finished their first word-counting exercises. This first set of exercises has

demonstrated what words are. They provide an operational definition that can be used in talking about words that rhyme.

1. Introduce rhyming with the following instructions: "Listen to this word: money. Say it: money. Say the word very slowly: muuuney. I'm going to say words that rhyme with money. Here I go: honey, funny, bunny. Listen—they all rhyme: money, funny, bunny, honey. If I ask you for a word that rhymes with money, you can say honey, or you can say—what, John?"

Play a game in which you say only the first part of the word and the children have to complete the word: "I want words that rhyme with *money*. I go first. Then you say *neee*. Fu—say it fast: funny; bu—say it fast: bunny."

The children may have trouble at first. If they do, go through each word, breaking it down into syllables and having the children repeat the words with you. Breaking down the words demonstrates that the last part of each word is the same: fu-ney, hu-ney, bu-ney, mu-ney. Then return to the game.

2. Start rhyming exercises with words of more than one syllable. The one-syllable word is more difficult for the beginner to handle, because the part of the word that rhymes is small. Words that rhyme with cat, for example, have only at in common. Here are some of the better words to work on:

hopping, stopping, mopping, bopping mister, sister, blister slapping, napping, tapping, capping sitting, fitting, knitting, spitting

Go through a rhyme series several times, breaking down each word into syllables.

Have the children repeat each word with you.

Then produce only the first sound and have the children complete the word *mis*—. Don't be dismayed if they fail on this task, perhaps producing bizarre words. If they are unable to complete the words, show them how and put the parts together to form the word: *mis*—*ter* . . . *mister*; *sis*—*ter* . . . *sister*.

3. Introduce nonsense words as soon as the children have begun to master the preceding tasks. Start with the word hamburger: "I'm going to make up words that rhyme with hamburger. Here I go: famburger . . . ramburger . . . whamburger." Point out that these words do not mean anything: "I don't know what a whamburger is,

but it rhymes with hamburger." Have the children repeat the rhyming words with you. Then have them make up words that rhyme with hamburger: "Who can do that?" If the children don't respond, say, "Listen: hamburger . . . ram—" Encourage the children to provide the appropriate endings: "Here's another one: fam—. And another: sam—."

- **4.** Follow hamburger with other relatively long words, such as Pontiac, television, crocodile. Introduce the word with four or five nonsense words that rhyme with it. After going through the series several times with the children, see if they can produce any of the rhyming words. Finally, see if they can complete the words if you provide the first syllable. Always give the model word before asking for the rhyming word: "Rhyming with crocodile: soc-, noc-, loc-."
 - 5. Reduce the cue for producing the desired word.

Begin with a relatively long cue: "O.K., I want you to give me a word that rhymes with *Cadillac*. It starts with *fad*. Rhymes with *Cadillac: fad-, mad-, dad-, sad-.*"

Cue them with smaller sound units: "I want a word that rhymes with Cadillac. Rhymes with Cadillac: ma-, ba-, sa-." And so on.

Reduce the cue to a single letter sound: "I want a word that rhymes with Cadillac: m-. Rhymes with Cadillac: sh-."

Use the procedure outlined above with a variety of longer words. Present two or three words a day.

6. As the children become increasingly proficient with long words, introduce short words.

Use common words that he will encounter in beginning reading materials, such as dog, have, he, has, me, to, new, who. Present only the initial sound to be used in rhyming: "It rhymes with he: r-."

Use nonsense rhymes liberally. If you only use words, the child may not catch on to the idea that there is a general rule for producing rhymes that applies to any combination of sounds. The child must learn to deal with syllables, and these are often nonsensical: cred, gov, tion. He will also deal with parts of words, such as op (as in shop, stop, crop), ent (as in sent, bent, went), oon (as in spoon, moon, noon). These are not meaningful words, but obviously they are important.

Alliterating

Practice in alliteration teaches the child that an initial letter sound can be used to form different words. Alliteration skills are not as important as rhyming skills, and they are not as difficult to teach.

1. Introduce alliteration tasks after the children are able to rhyme from a single-sound cue (a word that rhymes with batman: it's f-). Present the task of making up words that start the same way.

Begin with entire syllables and decrease the cue that is given until the child is able to work from a single sound or a group of difficult consonant sounds (spl): "Listen. I'm going to say some words that start the same way as ice cream. Here I go: ice-cube, ice-ing, ice-icle." Separate the sounds of the words so that the children can hear clearly what is being held constant.

Have the children repeat the words that start the same way.

2. Give them practice on such series as these:

pa-int, pa-le, pa-ce, pa-per, pa-ste let-ter, let-tuce, let-ting in-sect, in-side, in-to, in-ner.

Accent the first part of each word strongly and then add the remainder. Have the children identify the word. They may not be familiar with some of the words. If a child offers a nonsense word, accept it, adding, "I don't know what that means, but it starts the same as *in–sect*, doesn't it?" Repeat the series above until the children have learned them by rote.

3. Move to short words in which you give only a single sound as a cue: "I want words that start the same way as *run*: *r*-."

Here are some good words to introduce initially:

f-an d-og s-ing

Use other words that have a single consonant before the vowel. Repeat words from time to time until the children can handle them.

4. Now introduce double-consonant sounds. These are more difficult, but it is a good idea to work on them as verbal exercises. Children often have a great deal of trouble trying to read such words as *creep* and *sleep*.

Say, "O.K., here's a tough one. I want some words that start the same way as st-op." Make two distinct sounds at the beginning of the word: s-t-op. (Neither sound should be voiced. See page 97.) "What word is that?" Don't be surprised if the children have difficulty identifying it. Simply repeat the word faster: "St-op. What word is that? . . . Yes, stop. And I want some words that start the same way as stop: st-."

Concentrate on the beginnings cr, br, cl, bl, fl, sl, sp, st. Work on alliteration should take only a few minutes a day.

Saying words fast

1. Introduce "saying it fast" as soon as children have completed Step 2 in rhyming: "Listen to this story. I'm going to say some of the words slowly. See if you can tell me what they are. I went to a store where I saw a wo— [pause] man. What did I see? . . . I saw a woman. She was carrying a basket full of pup—pies. What was she carrying? . . . Yes, puppies. One of the pup—pies was wearing a red neck—tie. What was he wearing? . . . Yes, a red necktie. I said, 'That pup—py sure looks fun—ny.'" Pause for about one second between the parts of the words.

For the introduction, keep the story line strong, so that the words are somewhat predictable.

Initially, use only words that break into two syllables. If the children have a great deal of difficulty with these, introduce longer words, with only a single break: ham-burgers, Cad-illac, el-ephant, min-ister, mo-torboat.

Work on "saying it fast" for four to six minutes a day.

2. After the children have demonstrated that they can handle words that break into syllables, break one-syllable words into letter sounds. Begin by separating the first sound from the remainder of the word: "I saw a man wearing a great big sh-oo. On his other foot he had a s-ock. His hat had a h-ole in it. And he was eating a piece of w-ood."

Begin to mix the unpredictable with the predictable to show the child that he can't always guess the word from the context.

3. Next, break short words in more than one place: "His c-a-t was b-i-g." If the children have trouble with this task, avoid words that begin with b, c, d, g, k, p, and t. Use only words that begin with a, e, f, h, i, l, m, n, o, r, s, w—with primary emphasis on f, m, n, r, s, and the vowels. (These are continuous-sound letters. They can be held as long as you wish. Stop sounds such as b cannot be held. See page 97.) "At one e-n-d of the r-a-t w-u-z a big r-e-d n-o-s-e."

Have the children identify each word before proceeding to the next. Then summarize the statement up to that point. For example, if the children have completed the word was, summarize and continue, "At one end of the rat was a big r-e-d . . . What's that? . . . Yes, a big red n-o-s-e. . . . A big red what? . . . A big red nose."

After the children have learned to handle the initial set of letters, introduce words that begin with stop sounds (b, c, d, g, k, p, and t). Work extensively on words that start with these letters. The child's success in reading depends on his ability to blend these sounds. "So h—e said . . . Who said it? . . . 'Let's play b—a—ll.' Let's do what? Play . . . But he forgot his c—a—p. What did he forget? . . ."

Remember—c, k, p, and t are not voiced. They are produced by letting air escape from the mouth.

4. After the children become familiar with say-it-fast, drop the story line and work only from words.

Present a series of three-sound words in which the first and the last sound remain the same while the vowel changes. "Listen to these words and tell me what they are: c-a-t, c-u-t, k-i-t." Do not always vary the vowel changes in the same order. "Here are some other words: g-e-t, g-o-t, g-u-t, g-a-t."

Never work for more than a minute or two a day on these series. The children will forget how to process the sounds after a short period of time. The best practice is to present one series of words, such as m-a-n, m-oo-n, m-a-ne, m-ea-n, at the beginning of the period, changing the order of the words each time a series is presented. Repeat it in the middle of the period and review it at the end of the period. At the end of the period also introduce a series the children have worked on before.

Verbal blending tasks

1. Give the children a sound or syllable that they are to link with another sound or syllable that you give, the combination forming a word.

Start with relatively easy units, such as on, un, at, in, ar: "O.K., John, say at. When I tap you like this, say at. Don't worry about what I say; you're going to say—what? . . . Yes, at." Say mmmm (one long humming sound) and tap the child. "Let's do it again and see what word we have: mmmm—at. Say it fast and you'll see what word it is: mat. Let's hear it again: mmmmm—at. O.K., let's try another one. Remember, John, you're going to say at. Here we go: ffff—[tap]at. What word is that? . . . Listen again: fff—at. Say it fast, everybody: fat."

Introduce various examples. For the first sound of these words, use the sounds of the letters n, l, f, s, m.

- 2. Present the task of adding a single-sound ending: "This is tough. Everybody say nnn. Come on, get it going so I can hear it. NNNNN. That's good. Now when I clap, you say nnn. O.K., here we go: o-[clap]nn. What word is that? Listen again: o-nn... o-n. Say it fast: on. Let's try another. Remember—you say nnn. O.K.: i-[clap]nn. Again: i-[clap]nn. Faster: i-[clap]n. What word is that? n." Introduce exercises in which the children are asked to produce the n sound, the n sound (nn) on signal.
- **3.** Introduce exercises in which the children are required to produce a vowel sound on signal: "O.K. When I clap, you say *ee*. Come on, open up: *ee*. Here we go: *m*-[clap]*ee*. Say it fast: *me*."

Introduce exercises in which the children produce the sounds oo (as in moo), all the short vowel sounds, and the long sounds a, e, i, o.

Work on blending tasks until the children master them. The more thoroughly they learn to handle these tasks, the better prepared they will be to read.

Saying words slowly

After the children have completed Step 3 in saying words fast, they can start saying words slowly. This set of tasks makes the child aware that any spoken word can be broken into parts, and familiarizes him with the procedure.

Keep one point prominently in mind when presenting these tasks. The letter-by-letter breakdown with which you are familiar is arbitrary. We consider, for example, that the word *I* has only one sound. The child, however, may contend that it has two sounds: ah-y. If a child says this, he is thinking. He is simply not looking at sounds in the conventional way. On the other side of the coin are words which we consider to have more sounds than may be apparent to the child. The word were, for example, he may judge to have only two sounds: w-r. The instruction in say-it-slow should concentrate on vowels and word endings, because these are more difficult for children to handle.

- 1. Begin by telling the children, "I'm going to say a word. See if you can say it slowly: hamburger. Say it slow: hamm—burgerr. Your turn: hamburger. Say it slow." Introduce three or four relatively easy words (elephant, bicycle, hot dog, celery). If the children break down these words into at least two parts, accept their response.
- 2. Move directly from the introduction to more difficult words. The children should have an idea of what is expected. "Listen to this

word and see if you can say it slowly: man. Say it with me. . . . Now see if you can say it slowly. . . ." Have the children hold each sound and produce the next sound without pausing: mmmmaaannn. At first, introduce words that begin with the continuous (nonstop) sounds, especially f, m, n, r, and s. Introduce both one- and two-syllable words —farm, fan, fish, fishing, mop, mother, meet, red, reading, running, sit, sitting. (Remember that f and s are not voiced sounds.)

- 3. After the child has mastered continuous-sound beginnings, introduce words that begin with stop sounds. Initially, present words that have two sounds and begin with a single consonant, such as b-ee, p-ie, k-ey, d-o, t-oo, b-y, d-ie, t-ie, t-ea, g-o, g-uy. Have the child produce two distinct sounds with a pause. This may be a little difficult for him at first. Go over the troublesome words until he can manage them.
- **4.** After the child has mastered two-sound words, present three-sound words that begin with a stop sound. Have him produce at least three sounds for each word. Work in series of words, such as b-i-te, k-i-te, t-igh-t. Add continuous-sound words to the series: r-igh-t, m-igh-t, s-igh-t, f-igh-t. (First have him say each continuous-sound word slowly, with no breaks between the sounds. Then have him pause between sounds. If he is unable to pause, show him how: "B-i-te. Say that: b-i-te. . . . Good. What word is that? Bite."

Present the following groups of words. Work on one or two groups during each session.

gum, come, dumb, some, hum big, dig, rig, gig tag, gag, sag, nag top, bop, cop, hop but, gut, nut, cut

5. Introduce word endings after the children have become reasonably proficient at handling the tasks in Step 3 above. Endings begin with vowels; initially they may give some trouble.

Use the same basic instructions as those for the tasks above. Point out, however, that these are "funny words": "I'm going to say a funny word. Listen: ot. I don't know what it means, but I can say it. How would I say it slowly? O-t. How would I say this one: $\bar{\imath}t$." (Pronounce as in fight.) "Listen again: $\bar{\imath}t$. Say it slowly: $\bar{\imath}-t$."

Begin with two-sound "words" formed by linking a vowel with a consonant (either stop or continuous-sound). Make a series of similar

words by changing the initial vowel sound and holding the consonant constant. Begin with the series at, et, ot, it, ut, oot, ite, eet, ote, ate. Have the children pause between the sounds.

Follow the initial series with these: an, en, in, on, un, con, ine, een, own, ad, ed, id, od, ud, aid, ide, ood, eed, ode, am, em, im, om, um, ame, eme, ime, af, ef, if, uf, afe, efe, oof, ash, esh, osh, ush, oosh. Mix the order in which you present these "words" so that the children will pay attention to the word, not to the order.

6. After the children have learned how to say these "words" slowly with fair consistency, introduce three-letter endings.

Have the children produce three sounds for each of these: ant, ent, int, ont, unt, aint, ast, est, ist, ost, ust, east, ost, asp, esp, isp, osp, amp, emp, imp, omp, ump.

Expect the children to learn the three-sound endings only after considerable exposure. The sound combinations are new, and the children may have trouble holding on to the component sounds in isolation—especially the short e sound (end), the short a sound (and), and the short i sound (in).

When the children have mastered the verbal sound drills outlined in this section, they will have demonstrated that they possess the skills necessary to hold groups of sounds constant (such as the group ent) while they fit the appropriate beginning sound to it to form a word (sent). They will understand that the word sent should rhyme with the group ent. And they will understand that words are composed of sound units which can be heard in the word and can be separated with a pause. If the children fail to read, it won't be because they lack the necessary verbal skills.

Letter Identification

Work on letters should begin on the first day of reading instruction.

The approach to teaching letters is based on the idea that letters have sounds. Initially, rigid rules are presented: a particular letter has a particular sound, and no other letter has that sound. The letter a always has the sound short a (as in and); the letter l always has the sound l (as in low). Many children fail to learn to read because they are not taught that each letter in a word has a function, and that ideally a sound value is attached to each letter. If the child fails to learn this rule, he is obviously not in a good position to find parts of

words (see the and in sand), because he does not know that the letters and always have the sounds a-n-d.

To dramatize the way in which letters function, the teacher must present the general rule before presenting exceptions. This means that in early reading instruction each letter symbol is identified with one and only one sound and that all the sounds are then telescoped to produce a word. Initially, the word to is not pronounced too; it is pronounced to (as in top). Once the child has learned the universal rule that words are produced by identifying each symbol with a particular sound, he can be taught irregular words relatively easily. If he has not been taught the basic regularity of the code, however, he may never see the relation between the word and the sounds of which it is composed. Most irregular words are irregular only in the sense that the vowels do not add up. If the child has a set of rules by which to compare the behavior of vowels in various words, he is in a much stronger position than he would be if he had no idea how vowels functioned, or that they were supposed to have a function. The most efficient approach is to program a set of basic rules that allows the child to "read" words and then, as he becomes facile with the reading operation, to introduce irregularities (an irregular word being any word that deviates from the rules the child has already learned). In this way irregularities are understandable. They have been related to something the child already knows.

The program starts with the sounds of the letters—not the names. The teacher must be familiar with each sound. Unless she is, she will mislead the children.

1. Program the initial set of letters. Present no more than two letters at a time. When the children have mastered them, introduce two more. Do not drill for more than five minutes a day on letter identification. Do not rush the children. When they have learned all the sounds in the initial set, introduce reading tasks. Note that the children are not required to master all the letter sounds they will encounter before they start reading. Slow-learning children become extremely confused if they are required to learn letter sounds too rapidly. As a rule, they cannot be expected to learn more than two new sounds a week; they will need the greatest amount of practice on the vowels; they will tend to confuse letters that are presented at the same time, regardless of how different in configuration these letters may be.

Here are the letter sounds in the initial set:

a, ē, i, o, m, r, f, s

Note that these are continuous-sound letters. A continuous sound is one that can be held indefinitely. The first sound in the word fan (fff) can be held as long as you wish. (A noncontinuous sound, or stop sound, cannot be held. The first sound in the word ball must be produced very quickly; it cannot be held until the next sound is produced. Therefore there will be pauses in the word as the children sound it out. The pauses make the similarity between the sounded-out word and the say-it-fast word less obvious.) The advantage of introducing continuous sounds first is that they allow the construction of words that are easy for the children to read. The children read these words by holding a sound until they produce the next sound. They do not pause between sounds. Therefore, when they sound out a word, they are actually just saying the word slowly. They have already been taught the relation between words that are said slowly and the same words spoken at a normal rate. By saying the word quickly after first sounding it out, they can identify the word. The key to solving the blending problem is to start with the continuous-sound letter.

The "name" of each letter is given below. Note that these are the only names to be used in referring to the symbol. These names are the sounds the symbols make.

- a voiced sound as in and (represented in the dialogues of this book as aaa)
- \bar{e} voiced sound as in eat (represented as $\bar{e}\bar{e}\bar{e}$)
- i voiced sound as in if (represented as iii)
- o voiced sound as in on (represented as ooo)
- m voiced sound as in mat (represented as mmm)
- r voiced sound as in ran (represented as rrr)
- f unvoiced sound as in fan (represented as fff)
- s unvoiced sound as in sand (represented as sss)

A voiced sound is one in which there is a vocal effort. An unvoiced sound is produced simply by moving air; no vocalization is involved. You can feel the difference between voiced and unvoiced sounds by placing your hand on your throat and saying the word fan very slowly. Notice that you feel no vocal vibrations from your throat until you produce the a sound. The vibrations continue as you produce the n sound. Now say the word fat very slowly. You feel no vibrations for the f sound. You do feel them for the a sound. You do not feel

them for the t sound. The f sound and the t sound are unvoiced. The a sound is voiced.

Be very careful about accurately producing the letter sounds in the basic set. The f sound (fff) is not pronounced fffuu, with a voiced ending. It is produced as a single sound that does not change—fffff. There is no voice behind the sound, and it is possible to hold the sound until you run out of breath. The sound \bar{e} , on the other hand, is a voiced sound. It, too, can be held until you run out of breath. In fact, all the sounds in the basic set can be held in this way. Practice holding each of these sounds for at least five seconds. Refer to the guide word above for the correct pronunciation, and familiarize yourself with the sounds thoroughly before trying to teach them. Concentrate especially on the vowel sounds. There are many different sounds for the letter a. Unless you know that you are going to use only one of them—the sound that is in the word at—you may find yourself pronouncing al like awl rather than like the al in Alfred.

2. After the children have mastered the initial set and have begun to read words formed with these letters, continue to present new sounds at the rate of about one new sound a week. Increase this rate only if the children are thoroughly solid on the sounds that have been introduced and seem to be able to proceed more rapidly. Do not increase the rate of presentation unless every child in the group has mastered the letters that have been presented. Teach each child individually. Do not judge the performance of individual children on how well the *group* responds in unison to questions about letter identification. The group may give the impression of being very solid, but individual children in the group may not know some of the sounds.

Introduce new sounds in this order:

- voiced sound as in lap (represented in the dialogues of this book as lll)
- d voiced stop sound as in did (represented as d)
- n voiced sound as in nap (represented as nnn)
- \bar{a} voiced sound as in ate (represented as $\bar{a}\bar{a}\bar{a}$)
- t unvoiced stop sound as in tap (represented as t)
- u voiced sound as in up (represented as uuu)
- c unvoiced stop sound as in cap (represented as c)
- h unvoiced stop sound as in had (represented as h)
- w voiced sound as in will (represented as www)
- g voiced stop sound as in gas (represented as g)

Reading for the Nonreader

- b voiced stop sound as in bill (represented as b)
- k unvoiced stop sound as in kite (represented as k)
- e voiced sound as in egg (represented as eee)
- p unvoiced stop sound as in pin (represented as p)
- \bar{o} voiced sound as in open (represented as $\bar{o}\bar{o}\bar{o}$)
- j voiced sound as in jump (represented as jjj)
- y voiced sound as in yes (represented as yyy)
- ī voiced sound as in ice (represented as īīī)
- z voiced sound as in zoo (represented as zzz)
- x complex unvoiced sound as in fox (represented as ks)
- qu complex voiced sound as in quick (represented as qqww)

The *h* sound is particularly difficult to pronounce. It is almost a panting sound, with no voice—*hhhh*. Work on this sound.

Stop sounds are introduced as word endings rather than as word beginnings. A stop sound at the beginning of a word interrupts the flow of the sounding-out procedure, and words beginning with stop sounds should not be introduced until the children have mastered words beginning with continuous sounds.

Note that the two often-used sounds d and b are widely separated in the order of introduction. This is necessary because the letters representing these sounds appear to the child as the same object viewed from different sides. In the everyday world of the child, objects retain their identity regardless of position (a chair is a chair whether it is right side up or upside down). D is taught early because of its usefulness as an ending sound, whereas b is delayed until the children are ready to attack words beginning with stop sounds. Once both letters are introduced, the child begins to learn a new rule: Letters are named according to their position. This rule will apply also to the letters p and q.

Note that there is a long and a short variation of each vowel except u. The long variation is the letter name (as in the alphabet). It has a diacritical mark over it. The short sound does not have a diacritical mark. One advantage of using the diacritical mark for long vowels is that it allows you to present a number of words without misspelling them. The word he is presented as "hē." The child reads the word simply by combining the sounds. After he has been exposed to this word several hundred times, you can remove the diacritical mark and he will still read the word as "he." Another advantage of this use of the diacritical mark is that it introduces the child to the "double

take" so often required in reading new material. For example: A relatively advanced reader may identify the word *delicate* as "*dee*licate." In order to arrive at the proper pronunciation, he must "double take" and give the vowel e a short sound. The present program gives the children a great deal of experience in identifying the same configuration (e) as both eee (as in egg) and $\bar{e}\bar{e}\bar{e}$ (as in eat). The program therefore prepares the child for situations in which he will have to experiment with vowel sounds.

Rules for presenting letter sounds

- 1. Some of the children may already have learned to identify letters by alphabet name. If they have, tell them that the letters have sounds: "Yes, this is ef. And it has the sound fff." Use the question form: "What sound does this have?" This should not be confusing to them. Say, "Don't tell me that it's the letter f; tell me what sound it has."
- 2. In working with children who are weak on identifying letters, spend no more than several minutes on letter identification during a session.

Don't try to explain the configuration of the letters (or at least don't rely on such descriptions to teach the children).

Give the children daily practice in writing two different letters, saying the sound of the letter as they write it.

Present plenty of examples of letters when teaching the sounds.

Present examples on the chalkboard.

Demonstrate that a given letter can be made in various sizes and colors, using various thicknesses of chalk.

From time to time, present letters on cards to demonstrate that letters can also appear on various background materials, and can be surrounded by shapes such as the rectangular outline of a card.

3. The ideal presentation is one in which the teacher works fast, asking the children to find a particular letter, identify a particular letter, find examples that are not a particular letter, and answer the yes-no questions about these.

Write five a's on the board and three letters that are not similar in configuration to a—for example i, r, and f.

Identify one of the a's: "This is the sound a." Then ask one of the children to find other a's: "John, find another a... Good. Tell me what it is and you can erase it." Don't require full statements, just the appropriate sound. "Good, a. Find another a... And another... Good. Erase them. Mary, find a great big a... Erase it. George,

find a little bitty a. . . . Tell me about it. . . . This a is little."

Next, ask the children to "find a sound that is not a." After a child finds an appropriate sound, ask, "Is this an a? . . . That's right. It is not an a. Erase it."

Introduce a fooler game after identifying the a's and not-a's: "I'm going to touch all the a's. Tell me if I do it." Touch two or three a's before touching a letter that is not an a. If the children do not respond, act amused: "Oh boy! I fooled you. This is not an a, and nobody caught me." If some of the children catch the mistake, praise them (or present a tangible reinforcer): "Good thinking. I couldn't fool you, could I?"

After the fooler game, move on to another task, preferably a verbal task, and return to the identification at the end of the period. Write the letter a on the board and ask the children, "What sound is this?" If they do not remember, remind them, and then assign the task of writing a's on a sheet of lined paper. As they write, ask each child questions from time to time: "What sound is that? Is that an m? Is it an a? . . . Good." Remind them to talk to themselves: "Say the sound as you write it."

Remind the children of the letter sound they are studying as they leave the reading study group. Saying the name of the letter sound should be the last thing the children do before leaving the instructional group: "And what sounds are these on your paper, John? . . . Good boy! Mary, what are these? . . ."

Continue to work on letter identification for two to four minutes a day until the children have learned to identify the letter sounds a, i, o, m, r, f, s, \bar{e} . Remember—don't spend more than a total of about four minutes a day on letter sounds.

Reading Words Formed with Continuous Letters

1. Introduce word reading after the children have mastered the initial set of sounds and after they have mastered say-it-fast, say-it-slow, and rhyming tasks.

Draw an arrow on the board from left to right. Explain, "I'm going to make letter sounds. When I point to them, you say them. Watch me." Make an a on the arrow shaft and produce the a sound: aaa. Point to the a and keep holding the sound, as one holds a note in music. While holding the a and pointing to it, make an m to the right