# About Reading— A Comparison of Reading Mastery and Horizons

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ne way to appreciate the actual details of effective reading programs is to examine extremes—two effective programs that are very different from each other but that require roughly the same amount of time to induce the same level of reading performance across the same range of children. I have been involved in the development of two greatly different beginning-reading programs, both of which have the capacity to teach any child with an IQ of 70 or above to read in a timely fashion, if the program is delivered or taught to specifications. These programs are Reading Mastery and Horizons.

Here are the various features these programs have in common:

- Both have lessons that are generally capable of being presented in a period and both provide enough lessons to cover a school year.
- Both have scripted presentations for the teacher, which provide the exact wording the teacher is to use in presenting the tasks.
- Both introduce skills in isolation before the children need them in the reading context.
- Both operate from a "two-lesson" rule, which means that any particular item that children are responsible for learning will occur on at least two consecutive lessons before the children are assumed to have learned it.
- Both use a track design, not an "object lesson" design. The track design presents ongoing development of four or five "skills" which appear on every lesson and which are continuously integrated and upgraded in complexity. The object-lesson design, in contrast, devotes entire periods to one theme or activity.
- Both provide structured teaching for all the skills the children are accountable for learning including identification of punctuation marks and conventions related to paragraphing, all details of comprehension, and the strategies for attacking all the words and word types they will read in the program.
- Both follow the same sequencing rule for what the children read: All the words in stories are words that have been taught in isolation before the story is

presented; all sounds for letters in the words that are taught in isolation are taught before they are introduced in the words.

 Both produce a high rate of children's responses and have periodic "tests" so the teacher receives a great deal of data on each child's performance.

Although the programs are the same in many fundamental ways, they differ greatly in the sequence of letters, the treatment of the vowels, and the kind of prompts that are used to key pronunciation of letters or letter combinations.

- Both have lessons with a structured part (which occurs first) and an independent-work part. After children have learned enough words to read stories, the structured part consists of sounds for isolated letters, word reading (lists of words), the decoding of a story, and various comprehension skills. The independent work consists of various word- and story-related activities.
- Both focus on oral reading during the structured part of each lesson and have provisions for teaching silent reading.
- Both provide "prompts" to help the children identify the "sounds" that letters make, and both provide for the "fading" or removal of these prompts later in the program.
- Both follow the general design rule that the presentation must not permit any child to produce the correct response for the wrong reason. This rule governs the designs of prompts and suggests which sorts of prompts are taboo (such as pre-reading discussions and picture analyses that are part of many traditional programs).
- Both have provisions for dealing with phonetically irregular words; neither treats these words as mere "sight words."

- Both introduce sounds for only a few letters (not all) before children read words.
- Both teach many more words than traditional programs teach during a year (more than three times as many than traditional programs teach in a year).
- Both are "phonics" programs and present procedures for identifying the "sounds" that letters make in words, but neither uses traditional verbal "rules" for discussing the sounds.
- Both were extensively field-tested before publication and liberally revised on the basis of field-test data.

### Differences

Although the programs are the same in many fundamental ways, they differ greatly in the sequence of letters, the treatment of the vowels, and the kind of prompts that are used to key pronunciation of letters or letter combinations.

Reading Mastery

Reading Mastery may be thought of as presenting unlimited prompts. Reading Mastery is based on the supposition that there are no constraints on letter introduction or what could be done to prompt pronunciation of various word parts. A further assumption is that the children who enter the program know absolutely nothing about reading. They are not assumed to know the alphabet, letter names, or any of the support skills assumed by reading, such as rhyming or identifying whether words alliterate. Children entering the Fast-Cycle program are assumed to be bright, but without knowledge.

The primary goal of the program is to regularize the reading code so that children are able to apply the smallest set of rules to read the maximum number of words. The primary means for achieving this goal is a modified orthography, which serves as something like training wheels. This orthography makes a relatively large number of words regular, which means that the children are able to identify the word in this set by saying the assigned sound for each of the symbols. Initially, the program introduces only one sound for any given letter or letter combination. The letter t makes the sound in tap, and no other sound. In the Reading Mastery orthography, the t in tap is this symbol, f. The t in th is this symbol: **th**. Similarly, the symbols for vowels have only a single sound. The orthography provides for long vowels (as in made) and short vowels (as in mad). The orthographic convention for Reading Mastery shows long vowels with a macron (a EIO  $\mathbf{Q}$   $\mathbf{\overline{y}}$ ). Short vowels are shown as traditional letters (a e i ο u y).

This orthography makes a relatively large number of words regular, which means that the children are able to identify the word in this set by saying the assigned sound for each of the symbols.

In addition to these conventions, Reading Mastery has joined letters for dipthongs: the sheet where que.

A final convention is small letters. The rule about a small letter is that it makes no sound. It is part of the word and occupies a particular place in the word, but it is not pronounced. Here are examples: have, hāi! Note that the vowel in the word may be long or short. Each word has three sounds. The small letter makes no sound.

The small-letter conventions help make it possible to spell all words presented in the program correctly (using a variation of the same symbols that would be used to spell the word with traditional orthography). At the same time, the small letters permit the child to sound out the word with assigned values for the various symbols. Following are some of the words the children are able to read as "regular" words where were why shack little tear tear those hose toes.

Note that all these words may be "sounded-out" without applying any sort of traditional "phonics" rules. No vowels are talking and no other letters are walking. Children simply "sound-out" by saying the sounds for full-sized letters.

Once the reading behavior is firmly established with this set of orthographic conventions (after 200 lessons in the sequence), the children will have acquired a generalized skill that permits them to read hundreds of words and to spell any word that they can pronounce a sound at a time. Their spelling would be invented to the extent that it wouldn't always conform to conventional spelling; it would always correspond to the way the children pronounce the words.

**Limiting Prompts** 

Reading Mastery does not attempt to regularize all the words that children are to read. Some words are purposely introduced as "irregular words" and are introduced early in the program (starting on lesson 89). These irregularly spelled words are not treated as "sight" words that children are to somehow recognize as a visual "unit." If words are to be consistently recognized, they must be recognized

as a specific arrangement of letters linked to a specific pronunciation—a particular spelling that is linked to a particular spoken word. The procedures in Reading Mastery for teaching irregulars is guided by this fact. Children sound-out the irregular word by saying the sound values they have been taught for the various letters. In sounding-out the word was, for instance, they would say the sound for the three symbols w, a, s. They would be told, however, that the word is not pronounced wass (which rhymes with bass) but "wuz" (which rhymes with buzz). This treatment assures that the children do not assume that "irregular" words are arbitrarily spelled in different ways on different occasions, or that there is no firm relationship between the sounding-out and the pronunciation of the word. They do not assume that what they have learned about the sound values of the different letters is somehow attenuated or negated. They say the same sounds for the letters a and s in was that they say in the word sat. They understand simply that was is a funny word, and that after you sound it out, you have to remember how to pronounce them because the sounding-out is not a strict key to how to pronounce the word.

The irregulars that are introduced early in the program are was, said, to, do, of, you, mother.

Later in the program, children learn about another type of irregularity—the letter combinations: ar, al, ou, oi, oy. Combinations are irregular because when the two letters occur in combination, they have a unique pronunciation. Children learn the most common sound for these combinations. For instance, the a in al is not the pronunciation they learned for a. The combination al does not rhyme with pal. Rather, it rhymes with Paul.

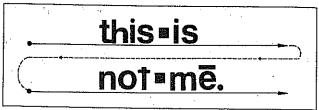
The combinations are not signaled by any visual prompts. Words with a particular combination are presented as families that are irregular in the same way. For instance, the ar combination is introduced with the word groups like arm, farm, harm, charm. Children sound out arm by saying the assigned value for each sound. Then the teacher says, "That's how we sound-out the word. Here's how we say the word, arm."

For the rest of the words, the teacher says, "This word rhymes with arm... Get ready." The children read the word the fast-way: farm, harm, charm.

Early in the program, no capital letters are introduced. The reason is simply that the amount of practice required to teach these letters, especially those that are different from lower-case counterparts, does not warrant priority status early in the program are from year reasonable of the program and from year reasonable of the program and from year reasonable of the program and the program are so that the program are the program and the program and the program are the program and the program and the program are the program and the program are the program and the program and the program and the program are the program and the program are the program and the program and the program are the program and the program and the program are the program are the program and the program are the program are the program and the program are the pro

A much higher priority is to induce behaviors of reading connected sentences. Periods, quote marks, and commas are used in a conventional manner. Early prompts for reading connected sentences are dotted lines that guide children from the end of one line to the beginning of the next.

Take-Home 61



The final set of "prompts" that are provided by Reading Mastery involve the shape of the letters. Some of the more difficult letters are designed in a way that makes them more readily distinguishable from letters children sometimes confuse with them. For instance, children sometimes confuse a with a. They also confuse b with a. The Reading Mastery orthography reduces the problems with these discriminations by using modified letters: a d b.

Note that these letters are not highly similar. The base of the **d** is modified so **d** and **b** are not mirror images. The **a** has a curved top, which makes it easily distinguished from **d**.

To further reduce the possibility of **b**-d confusion, the letter **d** is introduced very early in the sequence (because it has far more utility in generating words than **b** does) and **b** is introduced more than 100 lessons later. Children receive a lot of practice with words that have the letter **d** before they encounter **b**.

Fading Prompts

The orthographic prompts are faded or removed during the second level of the program. Capital letters are introduced during this sequence, and the emphasis on identifying a word is shifted from "sounding-out" the word to spelling the word. Note that spelling is the only accurate means of referring to the letters that make up words, once the orthography no longer permits for each symbol to generate only one possible sound. Once the macrons are removed, the letter a has many possible sound values in different words; for instance, the sound in was, the sound in wall, the sound in part, the sound in pan, and the sound in pane or pain. In all cases, the sound is signaled by a in combination with other letters. Therefore, as part of the prompt-fading procedures, the stories and lists are designed so that students receive a lot of practice with each "faded" elements on the state of the st

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### Sounding-Out

The sounding-out procedure that children learn assumes that the primary emphasis of the program is on reading, not spelling. The procedure is designed to make the sounded-out word as similar as possible to the word spoken in normal conversation.

Children are taught to say sounds without pausing between them. The word fan is not sounded-out as: fff (pause) aaa (pause) nnn. It is sounded out as: fffaaannn, with no pauses during which there is silence. The only difference between the sounded-out word and the word as it is normally spoken is the rate at which it is said. This sounding-out convention permits children to process all words that do not begin with a stop-sound.

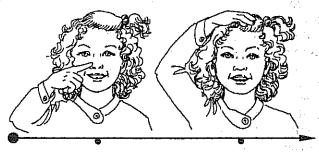
### Oral Blending

Before reading is introduced, children practice blending orally presented words. For the procedure that is most like reading, the teacher says, a word in parts or slowly, such as mmmaaannn. Then the teacher directs the children to, "Say-it-fast." The children say, "man."

Children also practice saying the sounds of verbally presented words. For example, the teacher says rrruuunnn, and directs the children to "Say it with me." Following this recitation, the teacher says to "Say-it-fast."

This activity embodies all the verbal components of reading aloud. Without pausing between sounds, the children say the sequence of sounds that make up the word. Then they say-it-fast and identify the word. The only component that is later added to make this a reading task is the written symbols that provide the basis for the sequence of sounds the children produce when they "sound-out," the word.

Also, before children read words, they play "symbol action" games, which are signaled by pictures shown on an arrow that points left-to-right.



For this example, the children follow the arrow, touch under each picture and perform the sequence of actions that is illustrated (touching their nose, then touching their head). These activities acquaint

children with some of the conventions of reading, particularly the notion of sequencing events that occur in time. The written code shows events that are to occur earlier to the left, and those that occur later to the right. In the word ant, the first event is the sound for a; the next event is the sound for n. In the symbol action games, the events are different, but the left-to-right sequencing rule is the same.

The symbol-identification exercises early in the program display letters arrows. Continuous sounds have a little ball directly under the symbol.



The teacher "follows the arrow" with her point. When she touches the ball under the symbol, children say the sound. They keep on saying it for as long as the teacher touches the ball.

Stop-sounds (and h) have a little arrowhead under the letter rather than a ball. The arrowhead indicates that you can't stop, but must keep going.



Children are told that these are "quick sounds" that must be said quickly. The teacher follows the arrow quickly to the end. Children say the sound for the letter as soon as the teacher's finger passes the marker under the letter.

All mistakes that the children make are correctable by using some variation of what had been presented earlier in the program. Therefore, any child who meets mastery on the pre-reading activities will read.

The pre-reading practice on sound identification, the say-it-fast component, and the symbol-action games permit children to practice all the component behaviors of initial word reading. When they do the initial reading, they follow the arrow, touch under

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each symbol, and produce the sound for the symbol. They say the sounds for the letters continuously (without pausing). After they have said the sound for the last symbol, the teacher directs them to sayit-fast.



For this word, the children say mmmaaat as the teacher signals for the three sounds. Then children "say-it-fast."

All mistakes that the children make are correctable by using some variation of what had been presented earlier in the program. The references to what constitutes the "first" sound and the next sound had been established in the symbol-action games (by referring to the first picture and the next picture). The values for the sounds had been taught in sound-identification activities. The oral-blending activities had assured that the children had the phemic-processing skills implied by the initial-reading tasks. Therefore, any child who meets mastery on the pre-reading activities will read.

The most difficult skill for the children in Reading Mastery is decoding words that begin with a stop-sound (dan, can, tan, pan). These words are presented after children have worked with various words that begin with continuous sounds.

To prepare children for words that begin with stop-sounds, Reading Mastery introduces convergent rhyming. Children are told a word-ending and then are directed to affix a specified beginning to form a word.

Listen: You're going to rhyme with at.
What are you rhyming with? (Signal.) At.
Start with mmmm and rhyme with at. Get ready.

Start with ssss and rhyme with at. Get ready. Sat. Start with b and rhyme with at. Get ready. Bat. The stop-sound rhyme comes at the end of the

The stop-sound rhyme comes at the end of the initial series because it is more difficult than the other words.

When children initially decode words that begin with stop-sounds, they use a variation of the same task presented for rhyming. The ending of the word they read is shown in red. The first letter is black.



The letters at are red. The c is black. The teacher directs the sounding out of the red ending. (Children say the sounds aaat and say-it-fast: at.)

The teacher says: "This word rhymes with at. Get ready," and moves quickly along the arrow from the left, under the letter c. The children say, "Cat."

After children have learned a few words that begin with stop-sounds, subsequent words are introduced more quickly. The teacher tells the children that the word begins with a "quick sound," and prompts the children to look at the next sound in the word. The teacher then moves quickly from the beginning of the arrow and stops under the second letter as the children say the sounds for the first two letters of the word. For instance, if the word is pat, the teacher stops under a as the children say "paaa." The teacher then moves under t as the children complete the word: paaat.

### Horizons

As noted earlier, Horizons shares many features with Reading Mastery. If has "symbol action" games, phonological pre-teaching activities like "say-it-fast," and a design that introduces all the component skills that are required for the complex applications that follow.

Horizons is different from Reading Mastery in sequence, procedures, prompts, orthographic conventions, and in teacher-presentation conventions. These differences stem from the general goals of Horizons. The program was designed to overcome some of the criticisms of Reading Mastery. The first column of table 1 presents the more frequent criticisms of Reading Mastery. The second column indicates the solution that Horizons provided.

To overcome criticisms 1, 6, and 7, Horizons had to be designed with a more "traditional" orientation toward the standard print conventions (such as capital letters at the beginning of sentences) and the traditional ways of referring to letters that compose words (rather than calling letters sounds). The adoption of these conventions created a need for a different sequence of beginning skills. If the teacher is going to refer to letter names, the reading program could not start before the children learned letter names. Therefore, letter names are taught or reviewed at the beginning of the program. If the children are expected to read words that begin with capital letters, some teaching of capital letters is needed before these words appear.

To overcome criticism 2, the program had to be designed so that blending skills are presented so that children learn how to blend orally-presented words consistently when they are "segmented" with

Table 1. Criticisms of Reading Mastery and Horizons Solutions.	
Criticisms of Reading Mastery	Horizons Solutions
<ol> <li>Requires children and teachers to interpret many orthographic prompts—unusually- shaped letters, joined letters, small letters, and macrons.</li> </ol>	Utilizes adult print from the beginning of the program. The only orthographic prompts are underlining and blue letters.
<ol><li>Requires teachers to learn difficult blending skills, such as sounding-out words without pausing between sounds.</li></ol>	Utilizes simplified blending skills that do not require children to sound-out words without pausing between sounds.
<ol> <li>Requires teachers to learn difficult presentation skills—displaying the presentation book to children while presenting word-attack exercises.</li> </ol>	Simplifies presentations by utilizing the children's workbooks and readers as the presentation material the teacher refers to.
4. Requires extensive teaching for children who enter the program mid-year with some reading skills.	Readily accommodates mid-year children and requires only a minimum amount of orientation to the underlining and the blue letters.
5. Takes too long to introduce hard-bound books.	Hard-bound books are used exclusively from lesson 1.
6. Does not use capital letters early in the program.	Capital letters appear on the first lessons that present sentences (after lesson 90).
7. Does not refer to letter names early in the program.	Refers to letter names from lesson 1 and uses them to teach approximate pronunciation of letter sounds.
8. Presents only limited writing and copying activities.	Provides extensive writing and copying activities.
9. Has a spelling program that does not deal with a broad range of word families.	Has spelling program that provides children with practice in using the full range of basic word families (including basic combinations like ai, ea, oa and ar).
10. Lacks any but a supplemental literature collection.	Provides literature lessons at regular intervals throughout the program.
11. Lacks whole-class and cooperative learning activities.	Utilizes whole-class presentation formats for it literature lessons and extensions for spelling and writing—many opportunities for cooperative and learning and group projects.
12. Lacks stimulating visual material.	Presents visually-engaging displays for each part of every lesson, all in full color and designed to augment the lessons.
13. Lackstengaging comprehension activities. A creation of a control of the contr	Presents a variety of stimulating story-reading formats that both facilitate children's understanding of the story and engages them in analyzing the details of stories.

pauses between the sounds.

Criticism 3 results from the fact that in each lesson of Reading Mastery, the children look at words and letters that are displayed in the teacher-presentation book. Presenting these words with clear directions requires coordinating pointing, touching, saying, and signaling children to respond. Horizons solves this problem by not using teacher-display material. Instead, nearly all the examples of words and letters that the program presents are in the children's textbook and workbook. This focus on the textbook and workbook requires Horizons to provide more skill preparation for the children so they perform accurately in response to verbal directions about touching and saying sounds for letters. If the directing is not effective, children will not make the appropriate letter-sound associations because they will not point to the correct letters in their book.

To overcome criticisms 5, 12 and 13, the story-reading formats were designed so the program provided a greater range of comprehension activities, presented a larger number of illustrations for each story, and presented stories in hard-bound books.

The trick in designing the program was to meet these various criticisms without reducing the program to a traditional "phonics" program, or designing it so that it would be appropriate only for high performers who were "ready" to learn reading. The challenges involved meeting the criticisms in a way that preserved the goal of designing sequences so that all children who qualified to enter the program would learn all the skills taught in the program.

Simplified Orthographic Prompts

Horizons provides orthographic prompts but they are not as extensive as those in Reading Mastery. Basically all of the Reading Mastery prompts tell exactly how to pronounce a particular letter. For instance, the letter a directs children to say only one sound—the first sound in the word at—while the letter a directs the first sound in ate.

Horizons uses only three prompts: (1) underlined letter combinations; (2) squiggled underlining for combinations or letters that are irregular; (3) blue letters, which signal children not to pronounce the letter and to say a letter name for another letter in the word.

None of these prompts is sound-specific. In other words, these prompts do not provide children with information about how to pronounce specific letters or combinations. The prompts simply show where the children are to use a particular pronunciation strategy, is to shatch an guisdian

Horizons provides orthographic prompts but they are not as extensive as those in Reading Mastery.

#### **Underlined Combinations**

Unlike Reading Mastery, Horizons underlines letter combinations. The program presents the following combinations: th, sh, ch, wh, ir, er, ur, ai, ea, oa, al, ar, ay, oy, oi, ou, oul, ce, ci, ge, gi. An underlined combination always makes the same sound that the children have been taught for the combination. Here are some of the early words: she, that, far.

Squiggled Underlinings

The squiggled underline appears in parts of words that are "irregular" with respect to what children have learned about the various sound values.

## was said from

The word was has a squiggled a. The word said has a squiggled ai. The word from has a squiggled o.

### **Blue Letters**

A blue letter in a word indicates two things:

- 1. The letter that is blue does not make any sound.
- 2. Some other letter in the word says its name. Blue letters appear as the second letter in combinations that make a long vowel sound. (The bold letters are blue in the program.)

### ai ay ea oa

The black letter in these combinations says its name. The combination ai, says the letter name A. The combination oa says the letter name O.

A blue letter also appears at the end of long-vowel words that end in e, such as:

### make fine flame

There would be no blue letter for the word have because no letter in the word says its name. Therefore, have is taught as an irregular word.

### Introduction of Sounds for Vowel Letters

Horizons also differs from Reading Mastery in the order of sound introduction, largely because of the inability of the Horizons' conventions to distinguish between single-vowel-letters that are long, versus single-vowel letters that are short. Reading Mastery can easily process words like **not** and **no**. The line over the **o** in **no** indicates that it is long. Horizons is unable to show this detail of pronunciation. Therefore, a critical decision in the Horizons' design was whether to introduce the long-vowel sounds or the short-vowel sounds early in the program.

Horizons assumes that children have been taught letter names. Therefore, the first sounds children are taught for the vowels are long-vowel sounds because those are the letter names. Early in the program, children are introduced to words like he, no, and 1. This strategy works well for words with the vowels e, i, or o, because a fairly large number of words with the vowel letters o or e (including double e) are available (me, see, need, feet, etc.). However, there are not many common words with single-vowel letters that make the long-vowel sound for a, i, or u.

...the first sounds children are taught for the vowels are long-vowel sounds because those are the letter names.

Consequently, the short-a and short-i sounds are introduced fairly early in the program. Also, letter combinations with blue letters (<u>ai</u>, <u>ea</u>, <u>oa</u>) are introduced very early (starting with lesson 33). Together, these variations permit the introduction of many words.

#### Introducing Consonant Letters

The sequence for introducing consonants is influenced by the fact that children know letter names. There are some systematic relationships between the name of consonants and the sounds they make. Horizons groups consonants that have the same pattern into "families" and presents the letters in each family at around the same time in the program sequence. Because all members of a family have the same pattern, children are able to "generalize" the pattern to all the letters in the family rather than learn the sounds for each letter through brute memorization.

The first family includes the letters f, l, m, n, r, and s. The common relationship between the name of the letter and the sound the letter makes in words is

that the sound is the last part of the letter name. For f the sound is fff. For I the sound is III, and so forth.

In learning this pattern, children first learn to say the letter names a sound at a time, with a pause between the sounds. For the letter name f, children say: eee(pause) fff.

For s, children say: eee (pause) sss. For n, children say: eee (pause) nnn.

After children have practiced saying the letter names a part at a time, they are introduced to the rule that for all these letters: The second part of the name is the sound these letters make in words. This rule not only makes the relationship between letter name and sound explicit. The rule also provides both teacher and children with a precise pronunciation of the sound. For the letter f, the second sound is unvoiced (whispered, rather than spoken with vocal-cord activity). That's the sound the letter makes in words (not fuh or fih but simply fff).

For the next family, the consonant sounds are not the second part of the letter name, but the first part. The set consists of: b, d, j, k, p, t, v, z.

The first letters the children learn from this set are p, t, and d. The introduction to b is held off until lesson 103, after children have done a lot of work with the letter d. (Familiarity with d reduces the possibility that children will confuse b with d.)

Like the first set, the pronunciation of the letter sound derives fairly precisely from the letter name. If the name for d is said a part at a time—d (pause) eee— the first part is a workable pronunciation of the sound, one that will serve the children in various words.

Note that this grouping of letters provides children with the long-i sound for the letter y. This makes words like try, my, and fly regular. Words like key and may have blue ys.

# key

The sound for y that occurs at the beginning of words (yes and yard) is not introduced until lesson 109.

The final family of consonants consists of the irregular sounds—c, g, h, and w. Consonants from these sets are introduced as they are needed to create texts that have increasingly natural language. Many common words children are expected to learn in a beginning-level reading program are irregular. Combinations th, sh, ch, ar, oo, ou, (oi, oy) ce, ge, and al are also introduced as they are needed for words.

Unique blue-letter words that are presented in

Horizons include those that have the combination ar and the word you.

# **yo**u ke**y**

The combination ar always has a blue letter, because the combination says the letter name, R. In the word you, only the u is black. That's the letter that says its name. The word key has a blue y; the e says its name.

### Strategies for "Blending" Sounds into Words

Reading Mastery teaches children to blend so there are no pauses between the sounds. Horizons teaches blending that has pauses between sounds. There are two reasons for this convention:

- 1. Blending continuously is relatively difficult for some teachers (not children).
- 2. The strategy used in *Horizons* to teach some early vowel sounds requires spelling. For spelling, saying sounds for words with pauses is more practical than saying sounds without pauses.

Spelling for Reading

.. When children spell words from the sound of the spoken word, they must be able to hold the sequence of sounds in their memory. Because there will be long pauses as children write the letters in a word like for, the task is easier for them if they have practiced saying the word as three sounds separated. by pauses.

To make sure that children are facile in blending sounds when there are pauses between them, the children receive a lot of oral practice in saying words a sound at a time (with pauses) and identifying words that the teacher says a sound at a time (with pauses). One benefit of presenting words with pauses is that words that begin with stop-sounds become much less difficult than they are in Reading Mastery. The reason is that whether the initial sound in a word is continuous or a stop-sound, the same blending strategy is used. The control of the control of

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The spelling that children learn in Horizons is designed to teach some spelling but, more relevantly, to teach reading skills attain our in our inci-

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Spelling strategies are used when children know one sound for a particular letter or combination

and the goal is to introduce another sound for that letter or combination. For instance, after children have learned the long-vowel sound A, the shortvowel variation is introduced through spelling. Children are given a rule: "If you hear the sound aaa in a word, it is written with the letter A." They immediately apply the rule to the spelling of words like ant, sat, man, etc. through the same process.

Here's an example from lesson 31:

- n. Touch the star. 🗸
- You'll write the letters for ran on that line.
- Ran has three sounds. Say ran a sound at a time. Get ready. (Tap three times.) rrr . . . aaa . . . nnn.
- Let's do it again.
- p. Say the first sound in ran. (Signal.) rrr. Say the next sound in ran. (Signal.) aaa. Say the last sound in ran. (Signal.) nnn.
- q. (Repeat step p until firm.)
- r. What letter will you write for the sound rrr? (Signal.) R.
- What letter will you write for the sound aaa? (Signal.) A. What letter will you write for the sound nnn? (Signal.) N.
- s. Touch the star. 🗸
- Write the letters for ran. Remember the letter you'll write for the sound aaa. Pencils down when you're finished. (Observe children and give feedback.)

After children have spelled and written a lot of these words, they know two sounds for the letter a: one derived from the letter name; the other derived from the spelling strategy.

The same routine applies to the letter i. Children are told that if they hear the sound iii in a word, it is spelled with the letter i. They immediately apply the rule to words like if, sit, fin, etc.

After they are practiced at spelling one-syllable words that have the letter i, they know two sounds for the letter; and they have learned the combination without difficult discrimination learning. Note that this sequence is a lot easier than learning the short sounds for a and i through "reading" rather than spelling.

Even when children spell words that have either the short-a or the short-i sound, the children must choose from only two letters—i or a. When reading, on the other hand, the children must generate the appropriate sound from symbols, which is more difficult than identifying one of two letters for the sound.

Therefore, spelling in *Horizons* serves as a bridge for reading words that have new or unusual sounds. The spelling emphasis in *Horizons* is on patterns, not individual words. The goal is not to teach the children to spell particular words, like eat, but rather to spell groups of words that follow the same spelling patterns.

### Comprehension

Criticisms 12 and 13 had to do with Reading Mastery's lack of stimulating illustrations and extensive comprehension activities. Comprehension and the format for illustrating stories are different in Horizons than in Reading Mastery. In Horizons, stories that children read are a gradual extension of stories that children listen to. As part of the first lessons in the program, children listen to stories that the teacher reads to them. As part of the story presentation, children refer to illustrations in their story book and answer questions about what the characters did and said.

Here's part of the presentation from lesson 32:

m. Touch the first story picture. 🗸



- Who is that mud heap? (Signal.) Clarabelle.
- Where is she now? (Call on a child. idea: At the pond.)
- Everybody, do you think those ducks are happy that Clarabelle is near their pond? (Signal.) No.
- What's Clarabelle going to do? (Call on a child. Idea: Jump into the pond.)
- n. Everybody, touch the next picture.

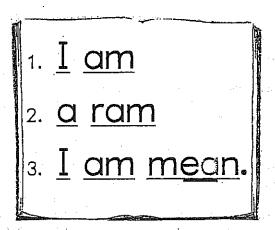


- What is Clarabelle doing? (Call on a child. Idea: Jumping into the pond.)
- When she jumps in, the other animals fly out.
- What kinds of animals do you see being splashed out of the pond? (Call on a child lideas: Frogs, fish, ducks.)
- What do you think those ducks will say to Clarabelle? (Call on a child. Ideas: Get out of our pond; You shouldn't have done that.)

- Only one animal in this picture looks very happy. Everybody, who is that? (Signal.) Clarabelle.
- But after she found out how mad she mada the other animals, she felt very sad.
- This is like a picture in your workbook.
   Later you'll color it.

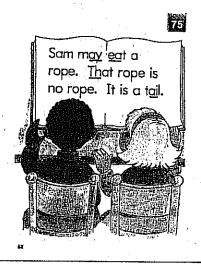
As children learn to read words, the procedure changes so that during each lesson the teacher still tells most of the story, but children read words, phrases, and sentences for key parts of the story. Here's part of the story reading from lesson 44:

- j. Touch number 2. 🗸
- Gorman said, "I can hear your voice, but I want to know what kind of animal you are. Are you a horse or are you a cow?"
- The animal said, "I am . . . "
- Everybody, tell me the first word. Get ready. (Tap.) A.
- Next word. Touch and say the sounds. Get ready. (Tap three times.) m...aaa...mmm.
- · What word? (Signal.) Ram.
- k. So the animal told Gorman, "I am (pause) a ram."
- I. Your turn. The animal told Gorman, I am ... (Signal.) A ram.
- m. (Repeat step I until firm.)

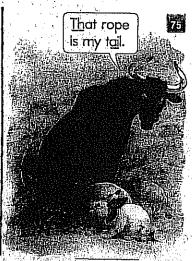


Beginning with lesson 47, children read entire stories. They first read the story in a mock-up of a book. The focus of this reading is on accurate decoding. Then children read an illustrated version of the story. This is the comprehension version. Children answer questions that are based on the text and those that relate the text to the illustrations. Some illustrations show characters saying things in "balloons." Sometimes the wording of the second version of the story is not the same as that of the first.

Here's an example from lesson 75:







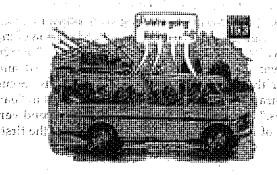
The children first read the story in the book mockup. Then they read the illustrated version. Note that the wording of the two versions is different. As they read the illustrated version, children answer questions about whether the rope is really a rope, what could happen if Sam took a bite out of that tail, and what they think Sam will do.

Note that the story is designed so it really doesn't make a lot of sense until the illustrations are presented. This feature strongly motivates children to want to do the illustrated version.

As the children progress through the program, the stories get longer and more sophisticated. On lesson 115, the book icon is dropped for the first reading of the story and a single version of the story is presented. It has text interspersed with illustrations. However, the two-reading routine continues. For the second reading, children read what characters say in the pictures.

By the end of level A, children read stories that are 200 words long and that incorporate a variety of words that they have learned. The stories are based on more than 1100 words that children have learned. Children engage in a wide range of story-comprehension activities that require interpreting pictures as well as responding to the content of the text.

Here's the story from lesson 153:



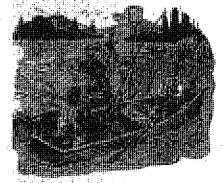
Ten Med

Ten men liked to do things with each other.
When one man went to a show, the other nine men
went with him. When one man went to the store, the
other nine men went with him.

One day, a man said, "Let's go fishing."

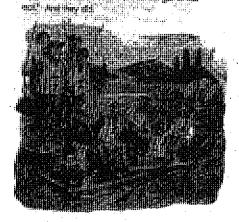
The other time men said, "Yes, let's go fishing."

So ten men got in a van, and away they went to e lake.



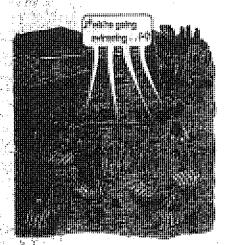
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As they started to leave the dack, the other men said; "We will get in this boat, too." And they

Did the boat hold the men? No.



So the ten men ald not go boating and did not go fishing. Those men went swimming.

The end.

By the end of level B, all prompts are faded, children have mastered about 600 more words than they learn in *Reading Mastery 1* and 2, and they read selections that are very sophisticated.

Here's an example from the end of *Horizon*s level

### Owen, Fizz, and Liz Part One

A long time ago, there were two islands that were almost the same in every way. They were the same size and the same shape. Both islands had a large beach on the north end. Both had a large mountain in the middle. Both had the same hills and the same valleys. But these islands were not in the same place. They were many, many miles apart.

Another thing that was not the same about these islands was the people who lived on them. On one island, there were ten little tiny people. These people were only about one inch tall. Some of the spiders on their island were bigger than they were. On the other island, there were three giants. They were almost twenty feet tall. They were so big that they could not walk through the doorway of your classroom. They would have to craw in. And they would not be able to stand up after they got inside. These giants were so big and strong that they could pick up a bear and hold it like a puppy.

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### Final Comparisons

The question, "Which program is better?" doesn't have a clear answer. Reading Mastery is the quintessence of efficiency. It requires fewer entry skills; it introduces the essential elements of the reading code in efficient ways. Because of its orthographic prompts, it is able to present a very wide range of words as "decodable" words, and it is able to fashion generalizations around these words. Reading Mastery's low-skill entry criteria mean that it works well with children in K and even pre-K. It is particularly valuable in working with lower-performing beginning readers.

Horizons teaches a greater number of words and a broader range of skills, both comprehension skills and decoding strategies. Horizons places more emphasis on illustrations and other features that are reinforcing to children. Horizons also works better than Reading Mastery as a remedial program for older students who have very limited decoding skills. Students entering Horizons do not have to learn as many new orthographic conventions. Also, after they have gone through the program, it is easier for them to transition to unprompted print.

The price of the *Horizons'* advantages is the additional preskills that entering children need. Because children should at least have some familiarity with letter names (and ideally know them) the program is not appropriate for very low beginning readers in K or pre-K. Once lower-performing children have learned letter names, however, *Horizons* is quite effective. A final advantage of *Horizons* is that it is a very good beginning-reading program for children who are second-language learners. The comprehension activities, pictures, and manner in which the text is transformed on some of the second readings give these children more information about how the language works and what various words and phrases mean.

Reading Mastery and Horizons are different in specific details, not in their overall capacity to teach children who meet entry requirements for them. Their differences highlight the fact that sounds of letters may be introduced systematically according to at least two different schemes. Both, however, are careful. Also, blending, comprehension, and other reading activities may be designed in more than one way, but the skills must be developed through systematic, small-step progressions that make it possible for all children whose performance qualifies them to begin the program to learn everything in the program and learn it in a timely manner.