

Core Knowledge Language Arts

K-2

Skills Strand

General Overview

Appendix: About This Program

The Core Knowledge Language Arts Program

The Core Knowledge Language Arts Program is unlike most reading programs you are familiar with. It has been developed not by a large, for-profit publisher, but by a small, non-profit foundation. The Core Knowledge Foundation is a non-profit, non-partisan educational foundation based in Charlottesville, Virginia. The foundation's mission is *to offer all children a better chance in life and create a fairer and more literate society by educating America's youth in a solid, specific, sequenced, and shared curriculum*. This program is an attempt to realize that mission. Specifically, the program aims to combine excellent decoding instruction with frequent reading-aloud in order to ensure that students can translate letters into words and make sense of the words they are decoding.

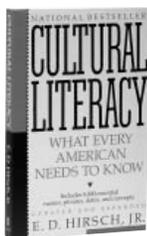
About Core Knowledge



E. D. Hirsch, Jr.

Core Knowledge was founded in the late 1980s by E. D. Hirsch, Jr., a professor at the University of Virginia. In the 1980s Hirsch's research focused on what makes one piece of writing easier to read than another. As part of this research, he created two versions of the same passage for college students to read. One version was considered well written because it followed principles of clarity and style laid out in style books like Strunk and White's *Elements of Style*. The other version did not follow those principles and therefore was considered poorly written. Hirsch then asked a large number of college students to read the passages. He recorded how long it took them to read the passages and how well they were able to answer comprehension questions on the passages. He wanted to see if the well-written passages would be read more rapidly and understood more fully than the poorly written ones. He found that they were, but he also found another factor that was even more important for comprehension than the clarity of the writing. *He found that readers who possessed a wide base of background knowledge were able to make sense of a wide range of passages, whereas students who lacked this knowledge were not.*

Hirsch did his tests at the University of Virginia and a nearby community college. He found that the students at the community college could decode well enough and could read and understand passages on everyday topics like roommates and manners, but many of the community college students struggled when the passages treated historical and scientific subjects. One passage on the Civil War generals Ulysses S. Grant and Robert E. Lee was especially difficult for many of them. It turned out that many of the community college students tested knew little about the Civil War. They did not know who Grant and Lee were, and, as a result, they struggled to make sense of the passage, even though they could decode the words Grant and Lee well enough. Hirsch realized that these students were struggling to make sense of the passages, even though their decoding skills were good. It was obvious, then, that reading comprehension required something more than just basic decoding skills.



Cultural Literacy

Hirsch wrote about his discoveries in a 1987 bestseller, *Cultural Literacy*. He argued that full literacy requires not just decoding skills but also knowledge of words, concepts, persons, places, and ideas that writers tend to take for granted and not explain. Schools must take the responsibility of imparting this body of knowledge, which Hirsch called “cultural literacy.” Hirsch went on to found the Cultural Literacy Foundation in order to promote the teaching of cultural literacy in American elementary schools. The foundation later changed its name to the Core Knowledge Foundation (CKF), but its mission has never changed. CKF publishes curriculum materials for Pre-K through grade 8, provides teacher training, and hosts an annual conference for educators teaching in Core Knowledge schools across the country.

The Core Knowledge Language Arts Program is an attempt to build an early reading program based on the work of E. D. Hirsch, and to combine those insights with fifty years of reading research, as summarized in the report of the National Reading Panel.

The Simple View of Reading

Hirsch’s insight about the necessity of background knowledge has been confirmed in many experiments. Virtually everyone who writes about reading now recognizes that reading comprehension requires more than just decoding ability. Many reading researchers now subscribe to a view of reading that is known as “the simple view of reading.” This view, which is associated with reading researchers Philip Gough and William Tunmer, holds that there are two chief elements that are crucially important to reading comprehension: *decoding skills* and *language comprehension ability*.

To achieve reading comprehension, a person needs to be able to decode the words on the page and then make sense of those words. The first task is made possible by decoding skills and the second by language comprehension ability. If the person cannot decode the words on the page, she will not be able to achieve reading comprehension, no matter how much oral language she can understand. But even if the person *can* decode the words on the page, that in and of itself is still no guarantee of reading comprehension (as Hirsch discovered in his experiments). If the sentences the person is attempting to read are sentences she could not understand if they were read aloud to her, then there is not much hope that she will understand them during independent reading either.

Supporters of the simple view—and there are a growing number of them among reading researchers—argue that a person’s reading comprehension ability can be predicted, with a high degree of accuracy, based on two basic measures. The first is a measure of decoding skills, e.g., a test of single-word reading or pseudoword reading. The second is a measure of listening comprehension. Researchers who hold to the simple view say, “Tell me a person’s decoding ability, as ascertained by a word-reading task, and tell me that person’s language comprehension ability, as ascertained by a listening comprehension task, and I can make a very accurate prediction of that person’s reading comprehension ability.” If the person is a rapid and accurate

decoder and also able to understand a wide range of oral language—for instance, classroom presentations, news items on the radio or T.V., books on tape, etc.—then it is a safe bet the person will also do well on tests of reading comprehension.

An interesting thing about the simple view of reading is that it can be expressed as an equation:

$$R = D \times C$$

In this equation, each of the letters is a variable that stands for a specific skill:

R is a measure of reading comprehension ability.

D is a measure of decoding skills.

C is a measure of language comprehension ability as measured using a listening task.

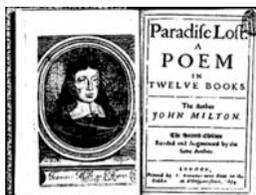
Each of these skills can be quantified as a numerical value between 0 and 1, where zero stands for no ability whatsoever and 1 stands for perfect, not-to-be improved upon ability. Obviously most people have a skill level that falls somewhere between these two extremes.

The equation says that if you have some decoding ability ($D > 0$) and you also have some language comprehension ability ($C > 0$), you will probably also have some reading comprehension ability ($R > 0$). How much reading comprehension ability you have will depend on the exact values of D and C .

What does it mean to have no decoding ability ($D = 0$)? It means you cannot turn printed words back into spoken words. A person who cannot decode letters on a page cannot read. The person is illiterate.

What does it mean to have no language comprehension ability ($C = 0$)? Basically, it means you do not know the language. You cannot understand any of it when you hear other people speaking or reading aloud in the language.

It is not very common for a person to have decoding ability ($D > 0$) but not language comprehension ability ($C = 0$). Why would you learn to read and write a language you cannot understand? But it does happen. One famous example involves the English poet John Milton, the author of *Paradise Lost* and other well-known poems. Milton went blind late in life. Since Braille had not yet been invented, this meant he could not read for himself. Nevertheless, Milton found a way to keep learning from books: he had friends and relatives read the books aloud for him. However, he was not always able to find a scholar who had the free time and the ability needed to read to him in Hebrew, Greek, Latin, and other ancient languages. The solution? Milton taught his daughters to decode these languages so they could read books in those languages aloud to him. But Milton did not teach his daughters the actual languages—the thousands of words and tens of thousands of meanings. That would have been a difficult, time-consuming task. He only taught them the rules they would need to turn letters into sounds. Thus, his daughters acquired solid decoding skills for these languages ($D > 0$), but they would have scored a zero on any measure



John Milton

of language comprehension ($C = 0$). They could turn symbols into sounds, but they had no idea what the sounds meant. Milton, on the other hand, on account of his blindness, had no functional decoding skills ($D = 0$). However, by virtue of his great learning, he was able to understand Hebrew, Latin, and Greek when they were read aloud to him ($C > 0$). Between Milton and his daughters, you might say, there was reading comprehension (R), but the younger generation brought the decoding skills (D) and the elderly poet brought the language comprehension (C).

The Milton example is an unusual one, but it is possible to give a less unusual one. A decent teacher can teach you to decode Russian letters (or the letters used in many other writing systems) in the course of a couple days of intensive work. Since you already know a lot about reading, all you would need to learn is which sound values the unfamiliar letters stand for. Once you learned that, you would be able to sound out most of the words in the language, but nobody would claim that you are *reading* Russian. You would have some rudimentary decoding skills ($D > 0$), but you would be lacking language comprehension ($C = 0$). You would be able to pronounce words, but you would not be able to make sense of them. Essentially, you would be doing what Milton's daughters did.

How These Ideas Inform This Program

Although this may seem very abstract and theoretical, there are two ideas here that are very important for reading instruction and for understanding this program. The first important idea is that reading comprehension depends crucially on both decoding skills (D) and language comprehension ability (C); the second is that language comprehension ability takes a lot longer to build up than decoding skills.

Milton chose to teach his daughters decoding skills because he could teach those relatively quickly. It would have taken him much, much longer to build up their language comprehension abilities. Likewise, in the hypothetical example just given, a decent teacher could teach you to decode Russian print in a few days of intensive instruction, but he or she would need to keep working with you for many weeks—possibly even many years—to teach you enough Russian words and phrases to understand a movie, make sense of a radio report, or read a short story.

You are facing a similar situation as a teacher in the early grades. You want your students to learn to read. A crucial first step is to teach them decoding skills. Strong decoding skills can be taught to most young children over the course of grades K–2. It takes longer to teach decoding skills to young children who are learning to read for the first time than it does to teach the same skills to adults who have already learned to read in another language, and it takes longer to teach decoding skills in English-speaking countries because English spelling is rather complex; but even so, most students can acquire basic decoding ability in the early grades. The children will continue to automatize their decoding skills, learn new spelling patterns, and build fluency for many more years, but the basics can be taught in grades K–2.

That is not the case with language comprehension ability. It is going to take you and your school system a long time to build up your students' language comprehension ability because this is not a job you can accomplish in the course of a single school year. Rather, language comprehension ability is acquired over many years. Your students began to develop a rudimentary ability to understand language even before they could speak and continued to increase their language comprehension abilities throughout the preschool years. They will make even more gains in your classroom and the classrooms they join after yours. With each new sentence they read or hear, and each new subject they study in school, they will be building up background knowledge, vocabulary, and cultural literacy, and thus increasing the range of materials they are equipped to understand, first orally and later via reading. The more you teach them and the more you expose them to, the more they will be able to understand. It takes a long time to build up the vocabulary and knowledge needed to make sense of most stories in a newspaper or magazine, but this build up is crucial for your students' reading abilities: for no matter how good their decoding skills may be, they will not understand what they read unless they have the language comprehension ability to make sense of the words they decode.

The Core Knowledge Language Arts Program includes two strands of instruction, and these strands correspond with the elements of reading isolated in the simple view of reading. The Skills Strand is meant to build students' decoding skills (D), while the Listening and Learning Strand is meant to build students' language comprehension ability (C) by exposing them to vocabulary, concepts, and ideas through frequent reading aloud. It is important that you understand that *both strands are crucial for reading comprehension in later grades*. You may feel that the decoding skills taught in the Skills Strand are more important to teach in the early grades, and certainly this is the area where you can expect to have the most immediate impact, but it is important that you not neglect language comprehension ability. Remember that it takes many years to build up enough vocabulary and general knowledge to understand a wide range of printed materials. The building of background knowledge needs to begin in Kindergarten (if not before) and continue throughout the elementary and middle school years.

If students are not building their language comprehension ability in the early grades, their reading scores are likely to begin to fall off in grades 4 and later. This has been called the "fourth-grade slump," and it occurs because what is tested on reading tests changes over time. As students progress through the grades, test questions focus less on rudimentary decoding skills and more on comprehension—and comprehension depends on having sufficient vocabulary, background knowledge, and cultural literacy to understand the words you are decoding. Thus, the importance of language comprehension ability increases with time. A weakness in this area may not show up on tests in the early grades, but it will show up in the later elementary grades.

This has been well documented in the research. In one very interesting study, researchers at the University of Kansas looked at measurements of reading comprehension (R), decoding/word recognition (D), and listening comprehension (C) for the same 570 students in second, fourth, and eighth grade. They found that the two factors D and C accurately predicted R in each grade, but they found that C became more important, in the sense that it explained more of the variation among students over time. The measure of decoding (D) was extremely important in the second-grade results. 27 percent of the variance in reading comprehension in second grade could be explained by decoding skills (D) alone. Only 9 percent of the variance could be explained by listening comprehension (C) alone. By fourth grade, however, the measure of listening comprehension had begun to account for more variance: the unique contribution of C rose to 21 percent while the equivalent number for D fell. By eighth grade, fully 36 percent of the variance in reading comprehension scores could be explained with reference to the children's listening comprehension ability. The unique contribution of D sank even further. In other words, while reading comprehension depended on D and C at every stage, as the simple view would predict, C explained more and more of the variation among students as time went by. What this tells us is that, once the intricacies of decoding are mastered (and in English this takes some time), reading comprehension depends more and more heavily on language comprehension. And language comprehension depends on background knowledge, vocabulary, and cultural literacy.

If you understand Hirsch's insight into the importance of background knowledge, and you understand the simple view of reading, you can understand why this program has two strands of instruction, and why both strands are very important. The next several sections of this appendix will tell you about the Skills Strand of CKLA.

Two Misconceptions About Reading and Writing

The Skills Strand of CKLA teaches the mechanics of both reading and writing. It is based on the most current research on reading and writing, but at the same time it has been written in opposition to some ideas that have been very influential in elementary education in recent decades. Two of those ideas are:

- Learning to read and write is natural.
- Learning to read and write is easy.

Both of these ideas have great emotional appeal. Unfortunately, both of them are wrong.

Learning to Read and Write Is Not Natural

Many scholars have argued that *spoken* language is natural for human beings. The cognitive scientist Stephen Pinker, for example, has argued that human beings have a *language instinct*, meaning that humans are born with an innate capacity for learning language. This may turn out to be true. It is at

least a plausible theory since historians, linguists, and anthropologists have never found a human culture that does not use language. When something is universal, it may turn out to be natural.

But what is true of *oral* language is not necessarily true of *written* language. In fact, with written language we know that we are dealing with something that is not natural or innate because we know when and where writing was invented, and we know that, even today, not all languages have a system of writing. There are still hundreds of languages in the world that are spoken, but not written or read.

Ten thousand years ago this was the norm, rather than an exception. At that time, there were probably no human beings who knew how to read or write. According to the linguist Florian Coulmas, the idea of writing down language was probably developed independently by three ancient cultures: the Egyptians, the Phoenicians, and the Chinese. Each used a slightly different system, and the mechanisms these pioneers developed for recording speech then spread from one culture to another, evolving as they went. If these initial inventors had not come up with schemes for writing down speech, we might all be illiterate today.

Writing is many things. It is an *art* that can be taught and learned. It is an *invention*—one of the greatest inventions in human history. It is a *technology* that enables us to do things we could not do without it—a technology every bit as exciting and amazing as airplane flight or electric power. *But it is not natural.* The same is true of reading, which is simply the process of unpacking, or decoding, what somebody else has written.

Reading and writing are both highly *artificial*. We tend to recoil at that word. We have internalized the idea that *natural* is good and *artificial* is bad. Therefore, we think, reading must be natural. In fact, as the reading researcher Philip Gough has written, reading is a highly *unnatural* act.

The first step toward good reading and writing instruction is to understand that reading and writing are *artificial*—but not necessarily in a bad sense. We need to remind ourselves that the word *artificial* derives from the word *art*. To say that reading and writing are forms of art that had to be invented and that need to be taught to children does not make reading and writing any less wonderful or important. On the contrary, it makes these things more wonderful and precious, and it also emphasizes the importance of your job as a teacher. There is no job more important than teaching young children the magnificent, valuable, and highly unnatural arts of reading and writing.

Learning to Read and Write Is Not Easy

The second idea noted above, that learning to read and write is easy, is also mistaken. Reading and writing are complex behaviors, and they are more complex in English than in many other languages because English has a fairly complicated spelling system. In Spanish, for example, the relationships between letters and sounds are mostly one to one, meaning each sound is usually written with one spelling, and each spelling unit is usually pronounced

one way. This is not the case in English. In order to read and write English with a high degree of accuracy, there is quite a lot that the student needs to learn.

As a way of demonstrating the complexity involved in learning to read and write in English, suppose we attempted to list all of the discrete bits of information a person needs to know in order to be able to read and write in English. As a starting point, we might begin with the 26 letters and argue that these are the 26 things one really needs to learn to read and write English. However, for each letter, one eventually needs to learn not only the letter shape but also the letter name (in order to be able to read abbreviations and initials). So that is 52 bits of information.

That is a good start, but we must not stop there. In English all letters can be written in uppercase and lowercase forms, and the uppercase forms are not always the same as the lowercase forms. Compare B to b, D to d, H to h, R to r, Q to q. At least 16 uppercase letters have a slightly different form than the matching lowercase letters. So we must raise our estimate of the complexity of the English writing system to 68 bits of information.

We are not done yet. Students must also know the 44 sounds these letters stand for. That raises our estimate of the complexity to 112.

If there were a simple one-to-one relationship between letters and sounds, that might be a fairly good estimate of the complexity of the code. Unfortunately, the relationships between sounds and letters in English are quite complicated. The 44 sounds of English can be spelled many different ways. In our work on this program we have identified 150 spellings that are frequent enough to be worth teaching in the early grades. That boosts our estimate of the complexity of the code to 262.

In addition, students need to learn to track from left to right, to blend sounds into words (when reading), and segment words into sounds (when writing and spelling). They need to learn a handful of symbols used in writing, including the period, comma, exclamation point, question mark, quotation mark, and apostrophe. That raises our estimate of code complexity to about 270 bits of information.

We could boost the estimate even higher by adding tricky words and unusual spellings or by pointing out that there are many letters in English that can be pronounced different ways. We could also point out that reading a word like *thin* requires the students to group the first two letters and attach them to one sound, and that reading a word like *cake* requires students to scan ahead, see the 'e', and realize that it controls the pronunciation of the 'a' earlier.

But even without these additions it is clear that the English writing system is quite complicated.

The Problem with Whole Language

On a conservative estimate, there are 270 bits of knowledge a person needs to be able to read and write English. It is unwise to ask students to tackle all of this complexity at once and hope that they will figure it out. Yet that is precisely

what is done in so-called “Whole Language” approaches. Whole Language instruction is based on the assumption that learning to read is natural, and not difficult, so reading skills can be allowed to develop gradually, without much explicit instruction. Lots of students in Whole Language classrooms do manage to figure out the English writing system, but many others do not. Whole Language ideas have tremendous emotional appeal, but the Whole Language approach is actually a recipe for *leaving many children behind*. It is an especially risky strategy for disadvantaged children, e.g., children from low-SES homes.

A much better strategy is to introduce the English spelling code explicitly, beginning with the easiest, least ambiguous, and most frequently used parts of the code and then adding complexity gradually. That is the central strategy on which this program is based.

The strategy adopted in this program is the same strategy that successful coaches use when teaching children a sport such as tennis. The successful coach does not ask students to learn “Whole Tennis” and soak up the necessary skills all at once by trying to hit all different kinds of shots the first day on the court. Instead, the successful coach teaches the student to hit a forehand ground stroke and provides lots of practice hitting forehands. Then the coach moves on to teach a backhand ground stroke, then a forehand volley, then a backhand volley, then a serve, then an overhead smash, then a drop shot, etc. With each element taught, the student becomes a stronger and more complete player. In the same way, this program begins by teaching the most common and least ambiguous spellings for sounds and then moves on to introduce the more complex parts of the writing system.

Key Aspects of the Skills Strand

Some key aspects of the Skills Strand of CKLA are listed below.

- CKLA teaches reading and writing in tandem, since they are inverse processes. English writing involves making pictures of sounds; reading involves translating those pictures back into sounds and blending the sounds to make words.
- CKLA rejects the Whole Language notion that exposure to rich language and lots of environmental print is sufficient to ensure mastery of the writing system.
- CKLA explicitly teaches letter-sound correspondences as opposed to leaving students to figure these out on their own or deduce them by analyzing familiar whole words (as in some kinds of “analytic” phonics).
- CKLA focuses on *sounds*, or *phonemes*, as the primary organizing principle of the program, rather than *letters*.
- CKLA includes phonics instruction, but the instruction differs from the sort of phonics usually taught in the United States in that it begins with *sounds* and then attaches those sounds to spellings. In a typical phonics lesson in the U.S., the teacher writes the letter ‘m’ on the board and says, “This is the letter ‘em’ . It says /m/.” As a teacher using this program, you will be asked to present your lessons in a different way. You will be asked to begin with the sound. At

the beginning of the lesson you will tell the class: “Today’s sound is /m/.” You will then lead the class in some fun oral language exercises that will allow the students to say and hear the sound /m/. Once the students are familiar with the sound, you will show them how to draw a “picture of the sound.” You will write the letter ‘m’ on the board and explain that this is how we make a picture of the /m/ sound.

- CKLA focuses consistently on the phoneme, or single sound, and not on larger units; students learn to read words that contain onsets, rimes, and consonant clusters, but they learn to view and process these larger units as combinations of smaller phoneme-level units. Rimes like *-ick* and initial clusters like *st-* are not taught as units but as combinations.
- CKLA uses a synthetic phonics approach that teaches students to read by blending all through the word; it does not teach multiple cueing strategies, use of pictures as a primary resource in decoding, or part-word guessing.
- CKLA begins by teaching the most common or least ambiguous spelling for a sound (the basic code spelling); later it teaches spelling alternatives for those sounds that can be spelled several different ways. Thus, the system is kept simple at first and complexity is added bit by bit as the students gain confidence and automatize their reading and writing skills.
- CKLA includes words, phrases, and stories for students to read and worksheets for them to complete that allow for focused, distributed practice working with the letter-sound correspondences the students have been taught.
- CKLA does not require students to read words that go beyond the letter-sound correspondences they have been taught. In other words, all words students are asked to read as part of the program are decodable, either because they are composed entirely of letter-sound correspondences students have been taught or because they are tricky words that have been taught. This means students have a chance to begin reading words and stories that are completely regular before tackling words and stories that are full of spelling alternatives.
- CKLA does not require students to write words that go beyond the letter-sound correspondences they have been taught. In other words, students are only asked to write words that can be spelled (at least plausibly if not always correctly) using the code knowledge they have been taught so far.
- CKLA avoids tricky words and exception words in the first part of kindergarten, preferring to have students learn to read and write with regular words that can be blended and spelled in accordance with the letter-sound correspondences taught.
- CKLA avoids letter names in the early lessons of kindergarten, because what is important for reading is not the letter names but the sound values the letters stand for. To read the word *cat*, it is essential to know /k/ /a/ /t/, not “see aay tee.”
- CKLA teaches lowercase letters first and introduces the uppercase letters later.

Components

The components for the Skills Strand for kindergarten are as follows:

Teacher Guides

- The teacher guides outline the lessons. There is one teacher guide for each unit.

Workbooks

- These ten books contain worksheets for students to complete as part of the lessons. There is one workbook for each unit. The worksheets are numbered consecutively so as to coincide with page numbers. The first worksheet is 1, the next is 3, then 5, and so on. When it is possible to include 100% decodable instructions, they are printed on the top of the worksheet. When it is not possible to do this, parent/teacher instructions are printed vertically along the left side. For take-home worksheets, the first item on each worksheet exercise has generally been done for the students, as a model. Each student should have a workbook.

Readers

- These readers contain 100% decodable texts for students to read in Units 6–10. There is a reader for each of the units listed, and new spellings taught in the unit are printed in bold throughout the reader to help students master new material. The last few stories in each reader are stories for the pausing point, which can be either assigned or skipped depending on the needs of the students in the class. Ideally, each student should have his or her own reader. Students can be allowed to take the books home for additional reading practice when the unit is completed.

Big Books

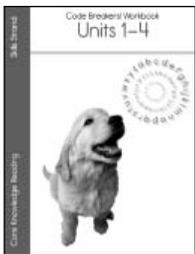
- These big books are exact replicas of the readers, but larger. They can be used for “demonstration stories” where you model reading for the students. In kindergarten the stories for Units 4 and 5 are available only in big books. The stories for Units 6, 7, and 8 are available as both readers and big books.

Media Disks

- The media disks allow you to present a Skills story as a demonstration story, using a computer and a projector or a smartboard, instead of the big book. Using projection allows for much larger images and print size, but it requires some equipment. If you wish to use the media disk, you will need a computer with either a 19 inches on the diagonal or larger monitor, a projector system, or a smartboard. You can use either the big book or the media disk to present a demonstration story. Only a few readers will be made available as big books; all of the readers will be available on the media disks. In other words, if you want to present a story as a demonstration story, and there is no big book for your unit, you will need to use a computer projection system, or else copy the story onto transparencies for display with an overhead projector.



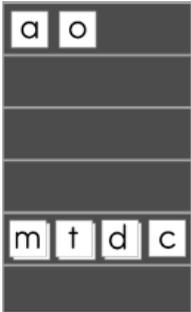
Kindergarten
Teacher Guide



Kindergarten
Workbook



Kindergarten,
Unit 6 Reader



Pocket Chart

Pocket Chart

- We expect that you have or can obtain a pocket chart for use in chaining exercises. We ask that you make letter cards out of index cards and use the cards to build words on the chart.

Large Cards

- This set of cards is used for teaching and reviewing sounds and spellings, especially during the Large Card Chaining exercise. The cards are used throughout grade K.



Large Cards

Mirrors

- Handheld mirrors allow students to see what the mouth does when it says a sound.

Sound Posters

- The sound posters allow you to display code knowledge on the walls of your classroom as it is taught. When a sound is taught for the first time, the TG will prompt you to mount the poster for that sound on the wall of the classroom, along with the spelling card representing the basic code spelling, e.g., the 'm' spelling for /m/. The TG will also prompt you to post the spelling cards for spelling alternatives when they are taught. We suggest that you post the vowel posters on one wall and the consonant posters on another to emphasize the differences between these two categories of sounds. The sound posters will be very useful for students as they begin to spell words on their own. If they are not sure how to spell the /k/ sound, they can look up at the posters, find /k/ and see that four possibilities are 'c' as in *cat*, 'k' as in *kid*, 'cc' as in *soccer*, and 'ck' as in *clock*.



Sound Poster with spelling card affixed

Chaining Folders

- Students use these folders to practice building words with small cards. The folders are used whenever the teacher guide calls for the Student Chaining or the Chain and Copy exercises. During Student Chaining you call out words and the students arrange letter cards on their chaining folders to spell the words. Each student should have his or her own folder. The folder has pockets where the small cards can be stored between lessons.

Small Cards

- These cards are to be used in tandem with the chaining folders just described. We suggest you keep the cards in envelopes or in an organizer or caddy. As new sounds and spellings are introduced, you can either pass out small cards for the students to use during Student Chaining exercises, or change the cards before the lessons. Students will store their cards in the pockets of their chaining folders between lessons.



Students using chaining folders

Lesson Structure

The lessons in the program are laid out in the Teacher Guides. There are 150 lessons in each grade.

Each lesson begins with an **Objectives** header. This specifies the sounds, spellings, tricky words, and/or concepts that the students are expected to learn during the lesson. The focus here is generally on new letter-sound correspondences and new tricky words taught.

The **At a Glance Chart** gives an overview of the lesson. This chart lists the name of each exercise in the lesson along with the materials needed to teach that exercise and the suggested time allotted to each exercise.

The remainder of the lesson plan is devoted to a detailed description of the procedures for each of the exercises listed in the **At a Glance Chart**.

Those exercises that represent good opportunities for assessment are marked with a tens icon. For more on the Tens system of assessment, see the section below.



Tens Scores

In order to identify struggling students and keep track of the class's progress, we recommend that you use the Tens system of assessment.

Here is how the Tens system of assessment works. Raw scores are converted to numbers between 0 and 10 using the Tens Conversion Chart (printed at the end of this appendix). To use the chart to determine a student's Tens score, first locate the number of answers that the student got right (along the top of the chart) and then locate the number of "test items" (along the left side of the chart). Next, find the square where the column with the correct number of answers and the row with the number of items meet. This square contains the student's Tens score. By using the Tens Conversion Chart, you can easily convert any raw score, from 0 to 30, into a Tens score.

You may wish to record the students' Tens scores on the Tens Recording Chart (printed at the end of this appendix). To do this, list the students' names in the first row and the various exercises in the first column. Record a student's Tens score for a particular exercise in the square where the column with the student's name and the row with the exercise meet.

Once you have recorded a number of Tens scores, it will be very easy to get a sense of who is doing well. This is because all of the scores are comparable. By simply running your eye down a student's scores, you can form a reliable estimate as to how the student is doing.

We hope that you will calculate Tens scores for your students each time that you encounter an exercise that is marked with a Tens icon. Note that many exercises that are not marked with a Tens icon are also suitable for calculating Tens scores. Please feel free to calculate as many Tens scores as you see fit.

If a student appears to be doing poorly, your first course of action should be to provide the student with more support, either during the regular period of instruction or during a tutoring session. Often this will be enough to get the student back on track. If a student continues to post low Tens scores for a prolonged period of time, despite tutoring, that student may need pull-out instruction, preferably using a tutorial program with a sound-to-symbol orientation. Contact the Core Knowledge Foundation for recommendations.

Time Management

You should use the time allotments listed in the **At a Glance Chart** (and listed throughout the lesson) to guide you as you work your way through the lesson. For example, in Lesson 8, you should try to spend about 10 minutes on the "Teacher-Student Echo" exercise. You may find that 10 minutes is enough time to run through all of the sentences listed in the lesson plan, or you may find that you can only get through half of them.

If you are forced to choose, it is better to leave out a few items in each exercise than it is to teach one exercise in full and omit other exercises. In other words, *your primary goal should be to teach all of the exercises in the lesson rather than to teach every item in every exercise.*

To Learn More

To learn more about the program, visit the website:

www.coreknowledge.org/reading

To learn more about sounds, spellings, and the general approach to reading instruction used here, we highly recommend that you read and study Diane McGuinness, *Why Our Children Can't Read*.