ROLLANDA E. O'CONNOR: So thank you very much. I was a Pennsylvanian for 11 years and so it's really been wonderful to fly over the state, see the snow on the ground. Riverside does not have snow. In case you were wondering, it's halfway between LA and Palm Springs. And just to see those rolling hills and the trees covered with snow was a real delight for me.

Now, do any of you have children of your own? I have to raise my hand here and admit to one and two-thirds of a grandchild, as well. [audience laughing]. But what this means is, if you have children of your own, you're very aware of what research identified as important only about 10 to 12 years ago. And that's that reading starts with attempts at oral language.

Now think about what that infant is doing around eight months of age. The child goes, "Bah, bah, bah, bah, bah." What does the mom do? "Bah, bah, bah, bah, bah." What the child is doing is eliciting speech sounds from that running stream that surrounds him or her during infancy. It's been hypothesized that children even pick up voice, human voice, the speech sounds within a language while the child is in utero. So that by the age of 3 or 4 weeks, the child will respond more strongly to language in which the child is being raised than any other sound. Unless it's something that actually hurts the eardrums, something that loud.

So, when we think about that interplay, how language develops, the interesting thing for me as a researcher is that the child is picking out the sounds in spoken words from infancy. And we -- that eventually leads, of course, to learning words as language, naming objects, putting objects together with verbs. By the age of two and a half or three, being able to begin to pick up adjectives, adverbs, and develop a running speech stream. And what we want children to do, prior to kindergarten, is to get as strong an oral language as they can because research has identified that by third and fourth grade, the child's oral language abilities, and in particular vocabulary, have a very strong impact on children's reading comprehension, which is why we bother to teach reading at all.

But what we'll mainly be talking about over the next hour are those places in between oral language and phonemic awareness that are so important to getting children jump-started into reading. So, while we want children to have strong oral language when they come to us in kindergarten, in order to learn to read we need to ask them to stop thinking about words as meaningful reference for objects and events and to start backtracking to where they were at 8 months to 2 years of age, which was picking out the phonemes, the speech sounds in a running speech stream. So, in a way, we're asking them to regress. And, of course, children don't remember that that's what they used to do in order to learn spoken language because what they've been using is language for communication, which is exactly what we want them to do. Which makes teaching young children to read somewhat problematic because if we think that learning to read is easy, then we don't convey the incremental ground steps that children need in order to learn to read well.

So, phonemic awareness may seem like old news now -- anybody never heard the phrase? That's actually how my research career began in the early 1990s was when phonemic awareness was first being brought to researcher's attention. And yet, the research that was being done around phonemic awareness at that time was done with very high-skilled children. The first three studies

published around the impact of phonemic awareness on reading development were conducted with children with an average IQ of 113. Now, one might expect that most of those children won't have too much difficulty learning to read, so my work extended that phonemic awareness into children who had risks for reading difficulties, children who'd already been identified as having special needs, children who came from low-income families, children who had less exposure to literate events. And so my work was initially in seeing to what degree can we transfer that new knowledge around phonemic awareness to a struggling reader population, the children that we expect to have some difficulty, the children who need the most careful reading instruction that we can provide.

Now from phonemic awareness, hearing the speech sounds in a spoken word, and just as a refresher, here's a word, fish. Say that word.

AUDIENCE: Fish.

ROLLANDA E. O'CONNOR: How many phonemes within that word? That's right, three phonemes, okay. Now from phonemic awareness we want to teach children letter sound correspondences. And it's been documented that if, in kindergarten, children have phonemic awareness already, then learning letter sound correspondences is really quite simple. And that's because the letter sound correspondences become meaningful, even though they're just little bits. If the child hears that -- hears the letter C and it makes a sound "kuh" and the child has phonemic awareness, the child can say internally, "Oh yeah, kuh, like the first sound in cat or the last sound in duck," even though the last sound in duck is spelled with both a C and a K. If the child cannot hear the speech sounds within a short, spoken word like cat, then here's a letter C and it makes kuh -- is meaningless information. And it takes that child who can't see the purpose for learning the sound for the letter C much longer to learn and retain that letter because it is meaningless information.

Now from letter sound correspondences we want to teach children to decode, to see a word like C-A-T and produce "kuh-ahh-tuh," cat. And that works for a while. It's good to learn later in kindergarten, it's good to learn throughout first grade how to decode words, but then the child sees a word like they. Sound that one out. "Tuh-ha-ee-ya." How about a word like laugh? Starts out okay. "La-ug-ha." Doesn't work very well. So we need to teach children to extend beyond just decoding and to learn words as wholes when they can't be decoded, the non-decodable or irregularly spelled words, and then they need to learn not only to decode and to recognize words, but to recognize them quickly. Because if children labor over decoding in first and second grade, then they can't read sufficient -- with sufficient flow to their reading to be able to backtrack to their oral language and use that to comprehend what they've read. So you see how interrelated all of these features of early reading are.

And, of course, fluency is not anywhere near sufficient. You've probably sat children down, listened to them read aloud, and asked them a question and you get the blank look. So we also need to teach children to attend to what they're reading and be able to chunk what they're reading into meaningful phrases that they can put together. We need to teach children vocabulary, and even though this first session, this first 2 hours, is primarily about getting those words off the page with sufficient facility to be able to comprehend, vocabulary should be introduced in kindergarten and virtually never

goes away. Because if we fail to teach vocabulary, which will be part of what's folded into this afternoon's session, then all of what we teach children about getting the words off the page is not linked to the meaningfulness of words that they thought was the whole purpose of learning language in the first place when we first met them in kindergarten. So all of these things are interrelated. Yes, good spelling would be nice, but it's beyond what we could do today.

Now, many of you work with children across a range. How many work with children of more than one grade level? So, although I'm going to be approaching this morning thinking about what are the foundations of kindergarten-ness around reading and first grade and second grade and third grade and fourth grade, I'd like you to think about the children you work with because we cannot presuppose that because the child is in second grade the child already knows what a kindergartener should have learned or a first grader should have learned. And so at any point we need to keep that whole continuum in our minds, figure out where the child falls on that continuum, and make up for lost time while still using age- and grade-appropriate materials and strategies so the child feels strong. So this is where we're going for the morning.

Now, all of these features are important for reading words , phonemic awareness and phonics, structural analysis, multiple word strategies, morphemic analysis, and contextual analysis. We'll be spending most of our time this morning on the first three, and then moving into the other areas later this afternoon for those of you who are here for the long haul. And what I'd like you to notice is this last feature, contextual analysis, and see where it falls on this developmental program of skills. The reason that it's last is that good readers don't guess. Good readers use the skills they possess. They try to decode, they try to match it to a known word, they take a look at the word endings, the prefixes, the affixes. They give it their best guess using their skills and then, when they have a spoken rendition of the word, they see whether that spoken rendition fits in the flow of language.

That is very different from what many struggling readers do, which is look at the first sound and guess. The problem with that approach is it's very effective in first grade. Children who look at the first sound and guess are right about 50% of the time, and that's enough reinforcement to keep that strategy going. Unfortunately, they keep that strategy going for a very long time. And by third or fourth grade, that multi-syllable word that they do not understand, that they do not know, that they cannot decode by looking at the first sound and guessing, carries the meaning of the sentence, which means that context is now irrelevant. So, as we work with children who are either struggling readers or children at risk, we want to think about what we can do to give them sufficient skills at each age and grade to be able to decode words with a high likelihood of coming very close. Because if they can come very close to the real pronunciation of the word, then it's likely that they can use context, that they can rely on their oral language ability, that they can rely on their decoding and vocabulary to be able to predict the word with a high likelihood of success.

So let's begin with the likely suspects. If a child is not reading well and the child is older than kindergarten, these are the areas which are most likely to be problematic for the child. If the child is a kindergartener, chances are the problem is understanding the alphabetic principle. And the alphabetic principle is just this, any word that we say can broken into sounds, and any sound that we produce can

be represented by a letter or a collection of letters from the alphabet. That's how reading and spelling work, and sometimes we're not explicit enough about that notion that children understand that that's why they're learning what they're learning in kindergarten. It's so that they can put together the sounds they hear with the letter sounds they're learning into a way to both capture their words in print, which is spelling, or see a printed word and bring it back into speech, which is reading. Now, if we see a child who is not reading well in first grade, what the child should be learning in first grade is a strong foundation in phonics and decoding words, multiple strategies for doing that. But it may also be that the child still lacks the alphabetic principle. So that's something to consider assessing when a child is a poor reader in first grade. But second grade, we assume that the child already has the alphabetic principle and phonics and decoding skills, but the child might not. So we might need to backtrack and teach some of those pre-skills, even though the job of second grade reading is reading fluently. As we move into third grade, you can see the problem. It could still be phonics and decoding, it could still be fluency, although at third grade we should be working on multi-syllable word structures, how to unlock those, which, if you teach kids who are struggling, you know it's when they get from quarter-inch words to half-inch words to one inch long words that they sort of give up and give you that blank look asking for help. So we'll be working with multi-syllable strategies during the second half of our presentation this morning.

We should be working directly on comprehension strategies because, although some children -- and it's estimated that about 60% of children who can get the words off the page and into speech can understand without additional help in comprehension. That leaves 40% who need specific comprehension strategies in order to make sense of what they're reading, even when they're getting those words off the page. And lastly, by fourth grade it could be any of those pre-skills along with comprehension and actively linking one sentence to another, one idea to another, drawing on background knowledge, building on the big picture.

So this is what we're after. But we can't actually start here when virtually every aspect that comes before is an enabler for our ultimate goal of reading comprehension. Now I'm not suggesting that we don't do anything around comprehension until third or fourth grade. Of course that's not the point. You can work on comprehension skills with kindergarteners through oral language, for example. And the same with first graders. But what I'm suggesting is that if a child has difficulty reading across one of these levels, we can't assume that it's the big picture idea that is problematic unless we go back a little ways and figure out specifically what is inhibiting the child from moving forward in reading development.

So let's start with the kindergarten skills. Now, for kindergarteners -- I was asked once by a teacher, "Well, if the whole point of reading in kindergarten are issues around, excuse me, phonemic awareness and letter knowledge, shouldn't we be spending our whole reading block around phonemic awareness and letter knowledge?" And what I would suggest to you is in our research studies we can do a pretty good job of phonemic awareness in 15 minutes or less a day. So we're not talking about spending our whole reading block on phonemic awareness, but what I'd like to show you are some targeted skills that you can use with intact classroom groups, or you can also use these with older students who lack phonemic awareness. And we're going to come back to this point when we talk about

measuring it. So segmenting, blending, letter sounds, the alphabetic principle -- and notice I've put the meanings of words in brackets here because vocabulary should be taught at every level. I'm just not going to be working with it this morning.

So, what I'm going to show you now is the easiest activity that we have found to teach blending and segmenting to young children. And I say the easiest way we have found because we have tried many, many, many different ways. We've spent time figuring what should we teach first, blending or segmenting, segmenting or blending? Should you be integrating it with letter knowledge or is one a precursor to the other? And what I'm suggesting is that the bulk of research suggests that we integrate blending and segmenting in the same activities, and if we do so, children learn both faster than if you taught one first and then the other in either order. So, first we're gonna name these pictures. This first one is book. Say that word.

AUDIENCE: Book.

ROLLANDA E. O'CONNOR: Frog.

AUDIENCE: Frog.

ROLLANDA E. O'CONNOR: Light.

AUDIENCE: Light.

ROLLANDA E. O'CONNOR: Sail.

AUDIENCE: Sail.

ROLLANDA E. O'CONNOR: Why did I bother to name those pictures? Could you have said something different to those pictures than what I said? Certainly. By naming the pictures first you get all of the children in your group on the same page. Now this kind of activity can be used individually, it can be used very effectively in groups of five or so, and it also works in large groups -- whole group settings in kindergarten. So, many of the activities that I'm going to show you are activities that can be used with whole class groups or flexible groups at a particular grade level, but also make very quick shore up activities for students who might be in first or second grade and didn't get it. And for these older students, when we're very targeted in our instruction, they learn it even faster than the kindergarteners. So, if you're working with a first or second grader who lacks phonemic awareness, you probably only have to do it for about 5 minutes out of your reading period. It's not laborious.

Now, I'm going to say -- I'm going back into my teacher mode. I'm going in and out of being a teacher with you as children, and a researcher talking to you as professionals, so I hope you sort of get that part. So I'm going to say these words in a funny way. Listen to this. S-ay-ul. Do it with me. S-ay-ul. Now you do that.

AUDIENCE: S-ay-ul.

ROLLANDA E. O'CONNOR: What word was that?

AUDIENCE: Sail.

ROLLANDA E. O'CONNOR: Sail. Excellent. Try this one. Luh-ie-t. Do it with me.

AUDIENCE: Luh-ie-t.

ROLANDA E. O'CONNOR: You do that?

AUDIENCE: Luh-ie-t.

ROLLANDA E. O'CONNOR: What word was that?

AUDIENCE: Light.

ROLLANDA E. O'CONNOR: Try this one. Buh-oo-kuh. Do it with me. Buh-oo-kuh. Now you do that.

AUDIENCE: Buh-oo-kuh.

ROLLANDA E. O'CONNOR: What word was that?

AUDIENCE: Book.

ROLLANDA E. O'CONNOR: Now, what I've been doing is going in and out of segmenting and blending. First you said the whole word, and that gave you a very small field to work with, just four words. Notice that I'm leaving the pictures up, so you don't have to hold them in your short-term memory. They're up there, provided for you. All you have to work on is saying them slowly, saying them fast. Now, you could buy a program. Fast Forward is one that's being marketed now heavily that does the same job for several thousand dollars. Or you could just say them slowly and say them fast. So it's up to you.

But what -- the reason that I want to show you this activity is for many children blending is highly abstract. Listen to me say these words in the old way. S-eh-oo. What word is that? That's really strange, isn't it? Imagine that you don't read, that you don't spell. B-oo-kuh. Isolated sounds is highly abstract to children who don't read and spell, and in fact, that kind of isolated sound blending is something most children can only do after they can already read. So it becomes a reading activity and not a learning to read activity. So, as much as we can, we want to stretch words out, and that's why we teach them to say them slowly. Let's do sail again and then we'll talk about why we're doing it this way. Say sail.

AUDIENCE: Sail.

ROLLANDA E. O'CONNOR: Let's see how slowly we can say it. S-ay-ul. Now, sail is a one beat word. Many children can't hear that there's a s-ay-ul within that word. But if we have them say it slowly, now they can hear each individual speech sound. So we're slowing down the speech stream to help children hear that what they hear as one sound, sail, actually has several distinct speech sounds within it. We're also having children take this slowed speech stream, s-ay-ul, and blend it into a single word, sail. Now, when we measure children who have a wide range -- imagine the whole bell curve of children -- we find that kindergarteners who go on to be good readers are often initially better at blending, and then they

pick up segmenting along the way. But children who go on to develop reading disability have the opposite pattern. We can teach them to segment with very careful instruction. They have great difficulty blending.

Have any of you seen a child write a word and then be unable to read it back? That's that phenomenon. And it's one of the leading signs that a child may go on to have reading problems if they cannot blend back what they just wrote, because in order to write a word, first they have to segment. S-ay-ul. And when they segment, s, they write the S. They hear the ay sound, they probably put the letter A. They the ul, they write the l. But they can't blend it back. And that's why we want to integrate blending and segmenting activities from the get go as we get started teaching children to read.

Now, when we teach letter sounds, things have changed a great deal since I began teaching, and I will admit it, my first year of teaching was 1970, so when we were first teaching reading, we were taught to introduce words in alphabetical order because it took advantage of what children already knew about letters. For example, A-B-C-D-E-F-G, so you might even be able to show children either a randomized letter group or show them a list of numbers, and what would children say? A-B-C-D-E. In other words, they knew the song, they didn't know what they were actually doing.

And that's one reason for randomizing, to some extent, the order in which we teach, but there are more important reasons. First, which two letters do children tend to have the most difficulty with? B and D. How consistent you are. Let's think about alphabetical order. A-B-C, oops. So if we use alphabetical order, we are teaching children the very letter that we know they're gonna confuse with B before they have thoroughly learned the B.

Now, in Carnine's work, if you know which letters are confusable, there frankly isn't a one best order to teach them, but there are some principles that make a great deal of sense. When we know children are going to confuse two particular letters of the alphabet, put at least five to seven instructional weeks in between the two. By doing so, you can reduce reversals and confusions by about 70%. Isn't that worth it?

What two vowel letters do children tend to confuse the most? I'm hearing I and E. Well, why would that be? Ih, eh, ih, eh, ih, eh, ih, eh -- why would they confuse those? Well, they look the same in the mouth, they sound very similar, and when I was working in Pittsburgh for 11 years, there was no difference between the two. And think about it. Those of you who are familiar with Pittsburghese, there is no difference.

So, again, there doesn't really matter whether you teach the letter and the sound for E or the letter and sound for I first, just put five to seven instructional weeks in between the two. Now, when I was initially teaching, all of our reading materials had us teach the long vowel sounds first and that's because it mimics the name and so it would be easier to learn. Unfortunately, that's not how reading and writing works.

Somewhere in your notes, print the small word ran. She ran down the street. Change ran into rain. How'd you do it? Anybody add an I? Anybody put an E at the end? Anybody take the A away and

put that EIG in the middle? "The King Who Rained," if you're familiar with that book. So if you want the ah to say ay, you have to do something to it. It's rule based to make it say something other than the short sound.

Try the word sit. Please sit down. Change sit into sight. How'd you do it? Some people added that silent GH, some people put the E at the end beside the prime. C-I-T-E changed the whole thing up, sure. So all of those spellings are legitimate, but they're all rule based. So by teaching children the short vowel sounds in kindergarten, they can write many, many, many words independently. And then we'll leave these extra rules, the silent GH, the silent E rule for first grade teachers to deal with. So those of you who are first grade teachers, now you have this extra burden on you. On the other hand, if in kindergarten all children knew all the short vowel sounds, wouldn't they be a leg up?

We want to start teaching letter sounds as soon as possible. In 1970, we were told not to start until January, and that's because children need to settle into kindergarten and learn a lot of things that were not related to reading before we got started. Of course, the problem is it takes many children a long time to learn just the 26 lower case letters and sounds, let alone throwing in the upper case as well. And if you now compress the time, they no longer have September, October, November, December as instructional months, then we've compressed way too much learning into a short period of time for children who struggle. So, of course, the current recommendation, which is what most of you are doing already, is to teach your first letter sound in the first week of the school year in kindergarten so that children have as much time as possible.

We also want to use cumulative introduction of letters and sounds. When textbook publishers were getting a little more savvy, they started doing a letter sound of the week. Well, children can actually learn more than just one letter sound a week. On average, most kids can learn about two. The problem with the letter sound is -- of the week is after we taught here's the letter sound L, and it's the first sound you hear in lion, and then the picture of the lion goes up in its line around the classroom, children think that, okay, so here's this l, starts lion. But they don't necessarily hear that it's also the last sound in call, or will. They don't necessarily remember L when the teacher moves onto a whole week of M. And that's why, once a letter sound has been taught, you want to review it every day. It doesn't mean that when you're on your 25th letter of the alphabet that you have to sit children down and do all the 24 just before you teach the new one, but you want to integrate your teaching of letter sounds with everything you've taught so far sometime during your instructional days so that it doesn't have time to go away. That in and of itself, reviewing sounds every day that have been taught so far, reduces the problem that many struggling readers have with long term memory because you don't let it get long-term. You keep it in working memory and short term memory, which are easier for most youngsters to access.

We will start integrating the letter sounds that you're teaching with the phonemic awareness activities, because by doing so you're demonstrating the alphabetic principle, which is what we want all those little short people to walk out the door knowing.

And lastly, you want to think about accessing letter knowledge, especially when you have children who are moving in. Now, if you're working with a small group, my guess is you know exactly which letters children know and don't. If you're working with a large group, it's a little more difficult to keep a handle on every child, especially if they did pretty well in one week and then, doggone, here comes the winter break. And if children had no exposure for 2 or 3 weeks during that time, then there can be forgetting going on. So, keep children caught up. Know where they are at all times.

Now, in order to integrate letter sounds with what you're teaching, what I'm showing you now is sometimes called onset rhyme squares, onset being the first letter sound or letter blend, if it's something like a cl or a st, the rhyme part being the part that rhymes. And all those are spelled differently. Linguistically, they still have the same meaning. So if we wanted to say make in a funny way, and when you're working with kindergarteners, it's usually a funny way and not, "Now let's use the onset rhyme form of segmentation." So here's my funny way. I'm going to say make in a funny way. Um-ache. Do it with me. Um-ache. Now you do that.

AUDIENCE: Um-ache.

ROLLANDA E. O'CONNOR: Say the first sound.

AUDIENCE: Um.

ROLLANDA E. O'CONNOR: What's a letter that starts that sound?

AUDIENCE: M.

ROLLANDA E. O'CONNOR: Good, we'll put an M in the first box. Now if you're using these as laminated forms, which are very simple to make -- well, actually you probably think they're pretty hard. Any of you use a table function of your word processor? So this is a two-column, one row on your word processor. Make it as big as small as you want. Or, of course, you could get out a ruler and a crayon. What I'm suggesting throughout the session is, in many cases for beginning literacy, commercially prepared materials are much less important than a well-informed teacher. The materials you need are free. You just need to take the time to make them. And if you laminate them, then with cold and flu season coming on, you can also wash them off and keep them safe for the next child to play with. Moreover, do any of you work with groups of more than five? Not too -- oh, lucky you. Excellent, okay. Well, let's assume even that you're with a group of five. Now you can give each child their own laminated form and probably the sexiest tool in kindergarten is the smelly marker. [audience laughing]. So now you've really upped the ante. They're doing something so cool. And they can erase it and use it indefinitely.

Now, what you do then, of course, what you have to think about ahead of time is which letters and sounds are you teaching. And make a short list of words, probably only about five for each session, of words that use that particular letter sound in its initial position so that you can begin integrating letter sounds and phonemic activities within the first month of school. That gives children a heads up on the alphabetic principle. Now, the reason I say you have to think about it is, of course, we all know words and, unfortunately, many children's names follow this as well, that use a letter sound that is not

the letter sound that is most common. So you want to control your list. Don't do this part on the fly, but have your lists going in so that you know what you're doing.

Now, as children learn onset rhyme forms of words, which is the next step beyond stretched blending and segmenting, the next hurdle, of course, is to aim for children hearing at least three sounds in a spoken word. Once they can hear about three sounds in a spoken word, they can also transition into spelling if that's important to you. And I suggest that if it's not, perhaps it should be important to you because children do learn to both read and spell more accurately if you combine some simple spelling activities with your reading instruction. And that's part of the baby that we don't want to throw out as we move from one pendulum swing to the other. And a few of you, I don't think you've been around as long as I have in teaching, but some of you've been around long enough to hear -- see that pendulum swing from here to here and back again. And I think that both researchers and curriculum developers, which is probably even more important, are beginning to integrate the best features of the edges of this pendulum into programs that are more effective for children. So we do want to integrate reading and writing activities.

Now, for segmenting words into three phonemes, you want to make sure first that the word list that you've chosen is a word list that contains the letters and the letter sounds that you have been teaching, that the words that you have selected are not irregular words if you're going to have them integrate it with spelling, and that's an important if because, if you're only going to do this particular task as an oral language task, then the regularity of the spelling pattern makes no difference. But if you're going to have them write it, it makes all the difference in the world. So for example, we could take a word like sail -- say sail.

AUDIENCE: Sail.

ROLLANDA E. O'CONNOR: Tell me the sounds you hear.

AUDIENCE: Suh-ay-ul.

ROLLANDA E. O'CONNOR: So let's do it with your three squares. Say the sounds.

AUDIENCE: Suh-ay-ul.

ROLLANDA E. O'CONNOR: And if that's as far as you're going to go with the task, that's fine. You can even use words like make. You can even use some letter blends at the kindergarten level. Let's say snake in that funny way. Suh-na-kuh. But if you want children to also spell the words, then it is crucial that you're only choosing words that are three phonemes representing just three letters, and that those letters are making the most common sound that you've been teaching them. So that's why I'm saying you can't really do this on the fly, even though the materials are simple. You have to pre-think your instructional targets each time.

Now, if you were going to move to the next step, and this would be an end of kindergarten activity or a beginning first grade activity -- it's a nice way to start the year in first grade because it

refreshes all that we hope they learned in kindergarten as they get going. Here's a word, fit. Say that word.

AUDIENCE: Fit.

ROLLANDA E. O'CONNOR: Good, say the sounds.

AUDIENCE: Fuh-it.

ROLLANDA E. O'CONNOR: And what's the first sound?

AUDIENCE: Fuh.

ROLLANDA E. O'CONNOR: The first sound?

AUDIENCE: Fuh.

ROLLANDA E. O'CONNOR: That's right. Now, do you know the first letter that makes that sound?

AUDIENCE: F.

ROLLANDA E. O'CONNOR: Good. Move it into the first box. Now, what you can imagine here is you have another instructional activity set, which is very simple to construct. You print the letters of the alphabet in sets for children. I like to use about 72 point font so they're big enough for children to handle. And then you've got the laminated forms that you've been using forever. Keep your letter sets relatively small if you're having children in small work spaces. We like to keep it to no more than six or eight letters each time you do this activity because children can manage that many. I have seen kindergarten teachers very effectively use all 26 letters. These were the most organized teachers I have ever met in my entire career and they had children take their 26 letters and arrange them on the desk, put the vowels in the top row, put the rest in alphabetical order below. And she used that activity as a set-up activity as children were entering the classroom. So it was sort of a quieting activity and then they were all there. Now, what I see more often is that with 26 little pieces of paper on the table, they end up all over the floor and every other place and it's really hard to do.

When I was using this in our research sites, I used to stuff the envelopes for every child every day with the letters that we were going to use on that activity. Now that takes a couple of minutes, but I've also seen teachers very effectively write on the chalkboard or on their whiteboards or wherever they post things the particular set that is going to be used today. And then she had pocket charts with all 26 and it was a child's task to go and select those 6 letters and bring them back to the desk. So you can decide how to organize it. The important part is you need to think about how you're going to organize it before you actually use it so that it's going to be functional in your work environment. Now, as we measure progress toward the alphabetic principle, we'll be measuring both what children know about letters and what children know about phoneme awareness. Many of you are already using things like rapid letter naming. How many of you are? How many are using some kind of a measure of segmenting? Good, we won't spend time on this, but just to show that we do want to think about their letter naming,

we also want to think about the sounds that they know. Now, what's different here that I want to show you is that the goals for kindergarten are about this for a child naming about 50 of the letter names in a minute. Once they can name about 50 letters in a minute, accurately with two or fewer mistakes, you really don't need to measure it anymore. You could use the same tool you've been using and ask children now to start naming the letter sounds.

The thing is that once children get that fluent with naming letters, they tend not to regress anymore. The time you get the bounce is when children can name ten because which ten are going to be first on your particular measure is going to show you whether you consistently get ten or whether they sort of bounce up and down because the letters they know aren't within the time they are spending on them.

The same is true for segmenting. We want children to be able to pick out about 30 sounds in about 10 words within a minute. Once they can do that, they don't tend to regress on segmenting. And in fact, there's a danger that I want to show you here in measuring it for too long that we're finding in our research sites consistently. You get the children up to about 30, maybe even higher -- 30, sometimes you get 35 -- I've clocked children giving 80 in a minute. But the thing is that getting faster than 30 is not linked to higher reading achievement. Up to about 30, it seems to facilitate children's reading and spelling. Here's what's happens after they get beyond that hump. They learn to segment, they understand it. Now they're starting to read. That's excellent. It's exactly what we want. Once they start to read, they begin to start chunking. They see the A-T pattern, they know that's at. You show them a word like cat, they're not going to go kuh-ah-t. They can do it better than that, cat. It's what we want. But it will look as if they're regressing and segmenting and they're not. And we've seen teachers say, "Oh gosh, they got midway through first grade and now they're getting worse. Their scores aren't as high. I guess I should just stop teaching reading and go back to segmenting because they're regressing." Well, that's not the case. If you see that children are beginning to use the patterns in words, that is more efficient reading. Stop measuring segmenting. It will mislead you.

So, think about your measurement system. Most of those that are out right now, DIBELS and AIMSweb, are about the best things we have at the moment, so those are good systems if you're using them. But once children make these hurdles from those early literacy measures into real reading, don't measure this stuff anymore. It's not necessary. So, as we move into first grade -- I want to show you one more thing. Do any of you have trouble -- do any of your children have trouble picking off the first sound in a spoken word? Nobody? Okay, I see just a few hands, so this is only going to take a minute.

You know that stretch segmenting that we were doing? Say sail.

AUDIENCE: Sail.

ROLLANDA E. O'CONNOR: Let's see how slowly you can say it.

AUDIENCE: Sail.

ROLLANDA E. O'CONNOR: Do it again, I'm going to stop you.

AUDIENCE: S--

ROLLANDA E. O'CONNOR: Stop. What sound did you make? S is the first sound in sale. You can use stretch blending -- have them go all the way through, first. You can warn them, "Do it again, but I'm going to stop you." Stop on the first sound. And then use the language, "Yes, that's the first sound," so that then when you ask children to pick out the first sound they know the language of the activity as well as how to do it. Okay. So, as we move into first grade, the segment to spell that I already demonstrated is a good place to start.

We want to teach phonics. It's no longer a dirty word, and in fact, without it most children don't learn to read very well. The reason that I say most children is that it's been well documented that somewhere in the neighborhood of 40% of children almost teach themselves to read. That's excellent. What they're doing is intuiting phonics rules by comparing one word to another. And these tend to be children with very high intelligence and with extraordinary experiences around books and print. Those are not the kids I'm talking about today. For the others, teaching the letter sounds that go together, teaching how to blend those letter sounds in printed words to generate a spoken word is crucial information. And notice that the meanings of words is still in brackets even though I'm not addressing it today because it is crucial. We should always be teaching vocabulary to children.

So, teaching the common sounds first, and I showed you why. Teaching blending those letter sounds. Now here's a difference if you're not a kindergarten teacher. Let's assume that you've met a child who's behind. It could happen. So you are in the position now of needing to play catch-up. So let's think about efficiency. You could take the time to teach all 26 of those common letters and sounds, however T-H, W-H, C-H, some of the other digraphs, some of the letter patterns are actually more common than some of the isolated letter sounds. So before you spend much time on things like Q and X and Z, think about introducing T-H, which is the most common two-letter pattern in print. You'll get more mileage out of it. And the more children see the particular letter and letter sounds that you're teaching in print, the more practice opportunities they receive. And children who are struggling with reading may take considerable practice in order to learn to read. After the consonant digraphs, there are several high-frequency letter patterns that you see here. Adding the silent E rule is going to get you a lot of mileage and will show the most efficient way to have children generalize that silent E rule. So when we're teaching letter patterns, it's very much like teaching a single letter sound. If we were teaching the single letter sound, we would say, "Here's a letter C and it makes the sound k. What sound?"

AUDIENCE: K.

ROLLANDA E. O'CONNOR: That's right. And then we would move that letter C in among other letter pattern -- other letter sounds that you've taught so far. We do the same thing when we're teaching a new letter pattern, so it looks like this. A-I goes together and it makes a sound ay. What sound?

AUDIENCE: Ay.

ROLLANDA E. O'CONNOR: That's right. So do you see it here? What sound?

AUDIENCE: Ay.

ROLLANDA E. O'CONNOR: And here?

AUDIENCE: Ay.

ROLLANDA E. O'CONNOR: It's not underlined, but do you see it here?

AUDIENCE: Ay.

ROLLANDA E. O'CONNOR: And up there?

AUDIENCE: Ay.

ROLLANDA E. O'CONNOR: Okay. So let's use that sound to read words. Now I'm going to have you first work through sounding it out orally so that I can hear you. And the reason I do that is to make sure children are decoding accurately and so that if they start to make a mistake I can correct it instantly.

Now this, incidentally, is one of those correction procedures which is as effective for spelling as it is for reading. It's called word-wise correction. As soon as you hear an error, correct it right now. Don't proceed through the list and then go back and correct it later. The problem is that, if you go back and correct it later, children will forget what they said that was wrong. That's why we want to stop them right away, so that they can cognitively compare what they said with what they should have said. And it firms up that knowledge in a much stronger way. So A-I goes together and it says--

AUDIENCE: Ay.

ROLLANDA E. O'CONNOR: That's right. Use it to sound this out. R-ay-nuh. Do it again.

AUDIENCE: R-ay-nuh.

ROLLANDA E. O'CONNOR: What word is that?

AUDIENCE: Rain.

ROLLANDA E. O'CONNOR: Rain, yes. The rain came down. Let's do it the second -- in the second word. F-ay-ul. Now you do that.

AUDIENCE: F-ay-ul.

ROLLANDA E. O'CONNOR: What word is that?

AUDIENCE: Fail.

ROLLANDA E. O'CONNOR: You did not fail to decode that word. See it here? And you work on through the list that way. But what may be different from what you're doing right now is this middle list. Children do not see the word discriminate. That word is for you. This is that -- coming back to that notion of cumulative introduction. This week, I may be teaching A-I, but last week I might have taught O-A. And before that, I taught the S-H pattern. And before that, I taught O-L goes together and says ul. And before that, I taught R. So in this middle list I'm including a few examples of the new sound that I'm teaching, but I also fold in the letter patterns that I've been working for -- with for the last 4 to 6 weeks. If I don't do that, the lowest skilled child in your group is going to read main, bait, faish. I don't know that word. You see the problem? They're going to keep doing it because children who are struggling learners often over-generalize. So you want to have a list in the middle that makes them discriminate, "Oh, is this my new sound or is it something I already know?" So they don't lose what you've taught them around decoding so far.

And we need to include sight words. Now, many curricula include some sight words as kindergarteners as well, and that's probably a good thing. In the curricula we're using in California, they have an over-emphasis on sight words, and kindergarteners are supposed to know the 75 most common sight words. I think that's a little ambitious. [audience laughing]. However, teaching sight words is important. And so I'm going to fold that into instruction as well, and I'll show you a routine for doing that. Now, what I want to show you right now are the two methods we use for decoding. One we've already pretty much modeled with the fail and the sail, saying it slowly, starting at the beginning of the word, decoding it from the beginning to the end, not stopping between the sounds, and then saying the whole word. That's the easiest method of decoding.

But do any of you know kids who reverse? Anybody never met a child who reverses? Most of us know this child, and there's one in every group. Part of what happens is that if children break in the midst of decoding, then what they hear when they start to try to blend it is the last thing they said. So, for example, imagine the word bait using the A-I pattern that we just learned. If I allow children to break between the sounds, b-ay-t, the child may well go tai because T was the last thing they said. So what I want to show you has been around for a long time. In fact, Fayne and Bryant developed this technique in the 1980s, but we used it more recently with one of my colleagues from Greece in working with a study of Reading Recovery rejects. And I know that sounds very sad, but if you've worked with Reading Recovery, you know there's that first couple of weeks where you sort of explore the techniques you're going to be using with children, and if it looks like it's going to work, you keep those children in the fold, and if it looks like it's not going to work, you pick somebody else up because it's a very expensive program and you want to make sure you're using it with kids who will benefit from it. The problem was that in the school system where we were working, if children in first grade were rejected from Reading Recovery and they did not qualify for special education, there was nothing else for them, so they ended up in second grade with the same problems that they were showing us in the fall of the first grade year.

So one of those many problems they were having was a virtual inability to decode words. They had learned some of the letters and the letter sounds, but they still just couldn't figure out how to use that knowledge to get words off the page. So we did an experiment in which we used Fayne and Bryant's bigram blending. And the notion here is that if a word starts with a first sound that can't be stretched -- stretch out the first sound of the letter B. You can't, can you? How about the first sound for the letter H? D? T? P? There are lots of them, aren't there? So if the first sound cannot be stretched, think about bigram blending. It looks like this. This sound, you know this sound. Say that sound.

AUDIENCE: I.

ROLLANDA E. O'CONNOR: Good. Stretch it out.

AUDIENCE: I.

ROLLANDA E. O'CONNOR: Good. We're gonna use that I and we're going to blend it with this one. Ki-t. Again, what's the middle sound?

AUDIENCE: I.

ROLLANDA E. O'CONNOR: Good. Put it with the first sound. Ki-t. What that allows children to do is to stretch a non-stretchable word. It's using what they already know, because they know this sound. You're giving them a pause on this sound so that they can think about what sound comes next and blend it without stopping. If you can get them to stretch blend it, which you can if you use bigram blending, they tend not to reverse it because what they hear is Ki-t. Kit.

Now when we tried this experimentally, we were able to cut reversals down about 80% for a list of children who were virtual nonreaders in second grade. Now the reason that we think this is important is we used other blending techniques to learn a short set of words during the experimental conditions, and at the end of the study, they could read that list that we taught them regardless of what condition they were in. But when we came back a month later, the children who had not used bigram blending could no longer read that list of words. They had forgotten them. Children who learned bigram blending had a strategy and they were as accurate a month later as they were at the end of the experiment. That is a similar finding to Fayne and Bryant's work, as well.

So I want to bring this to your attention because sometimes we get the sense when we're working with children that because they are doing really well at the end of our session with them that they've learned it really well and we come back the next day or the next weekend -- after the next weekend and they can't do it anymore and our thought is, "Oh gosh, it went in one ear and," when really it means that they've learned it by some means that they can no longer recall, so it's an instructional problem more than a learning program. And the bigram blending tends to take care of that. Excuse me, I've got this. I don't need to do this.

Now what is the problem with word families? Now we're back to 1975 because virtually all curricula in the 70's used word families to teach reading. Problems? It's fine. No problems? It's okay? Here's what we see in our -- when we're working with very low-skilled children. We show them a regular word list, a word family list. Let's take the AKE pattern, so you see make, cake, snake, wake, rake, all of those words. And now I call on my lowest-skilled child. Can you read those words? Make, cake, she does really well. Right? I pat myself on the back. Gosh, good teacher, hey. I come back the next day and we're reading a sentence that has snake within it and she can't do it. What do I think? Forgetful child. What I have failed to realize that, by showing her this list in a word family, is she stopped thinking about what she was learning. She used her ability to rhyme to look at the first sound and guess. She did not learn AKE as a pattern. Now the higher-skilled children within that very same group may have internalized the A-K-E pattern to where now they know it, but as a teacher we need to get out of this pattern of saying, "Oh, great learner, poor learner," and rather what does the child who struggles with reading need in order to learn to read well? And we want to make sure we're not providing them the opportunity to use the first sound and guess because if I let her do that she's never going to stop.

So what I want to show you instead is something that many of you may already use. There are two researchers who have worked extensively on word building. One of them is Pennsylvania's own Isabel Beck, and the other is Anne Cunningham. And both of these word building procedures have been well-researched, they're both effective. It doesn't really matter which one you use. But what I want to show you is the difference between a list like this and a list that was pet, wet, set, which would be a word family. When children construct a word, we're going to construct the word pet. Say that word.

AUDIENCE: Pet.

ROLLANDA E. O'CONNOR: Tell me the sounds you hear.

AUDIENCE: P-eh-t.

ROLLANDA E. O'CONNOR: What's the first sound?

AUDIENCE: P.

ROLLANDA E. O'CONNOR: Do you a letter than makes that sound?

AUDIENCE: P.

ROLLANDA E. O'CONNOR: Good. Push it into your page or you can have them write it, however you're using it with first graders. Okay, so far you have P. What comes next?

AUDIENCE: Eh.

ROLLANDA E. O'CONNOR: Good. Do you know that letter?

AUDIENCE: E.

ROLLANDA E. O'CONNOR: Push it up. Next, what do you have so far?

AUDIENCE: P-eh.

ROLLANDA E. O'CONNOR: What do you need?

AUDIENCE: T.

ROLLANDA E. O'CONNOR: Good. Fill out the word. Now you'll notice I even used bigram blending there. P-eh-t. It gives them think time while they're pausing on that vowel to finish the word. Okay. Take out the E, push in the O. What sound does the letter O make?

AUDIENCE: O.

ROLLANDA E. O'CONNOR: Good. Use that to sound out your new word. P-oh-t. What word now?

AUDIENCE: Pot.

ROLLANDA E. O'CONNOR: Good. Push out the O, put in an A. What sound does the A make?

AUDIENCE: A.

ROLLANDA E. O'CONNOR: Sound this one out. P-ah-t. What word now?

AUDIENCE: Pat.

ROLLANDA E. O'CONNOR: That's right. Push out the T, push in the D. Now, the routine that I just showed you is Isabel Beck's routine for word building, and it is similar but subtly different from Cunningham's. They're both good. I'm not a strong proponent of one over the other, but what I will tell you is if you are working with older children, second grade and beyond who don't yet have the alphabetic principle, there is more research with older children on Isabel Beck's model than on Cunningham's. Cunningham's works really well with a range, but if you're especially concerned about low-skilled children who are older, then it appears that Beck's routine, which is the one that I was just

doing, definitely has strong experimental evidence behind it. And if you're interested in looking that up, McCandliss was the lead researcher and Beck's the second author on that. He constructed the experiment, she provided the grist, the material that he was using.

Incidentally, if you want to know the difference, the difference was in Isabel Beck's I had you remove a letter, push in a letter, which I named for you. That makes it almost error-less. Kids can't make a mistake because they know the names of their letters. Then have them give the sound. That's the second most likely error they're going to make. And then read the word. The difference between that and Cunningham's approach would be, "Okay, we just spelled pet. We want to write pot. What are you going to need to change?" It requires two additional layers of thinking which is a problem-solving activity, which is great for average and high-skilled children and extremely difficult for the children who struggle the most. So that's why I'm recommending, slightly, one over the other, but they're both good.

In terms of making that distinction, if you're already using Cunningham's program and you're finding that some of your children are having trouble, then you might want to scaffold using Beck's approach. Now we all work on sight words. Children often have difficulty with sight words. But there's a reason for teaching them and the reason is this statement right here. And when I first learned that, I was sort of floored to realize that for children who are just learning to read that the 25 most frequent words make up nearly a third of what they read. So keep this in mind not just if you're teaching in first grade, but imagine that you're working in second or third or fourth and you just met a nonreader, and we've all known nonreaders at second, third, and fourth grade levels. One of the ways to catch them up and get them into the active reading is ensure that they know the 25 most frequent words because that's going to make up a big bulk of what they're going to be reading. And that the 100 words make up nearly half of print. It makes it well worth our time in teaching sight words.

So I'm going to show you two methods of teaching sight words. The first one is -- these are just what they are, but you know what they are. In fact, if any of you have confusions over which list should I use when you're teaching sight words? When I was writing the word-recognition book and that chapter on sight word knowledge, I was comparing one list with another to see which ones were used the most in schools. You take the 100 most frequent words, and whether it's Carol's list or Fry's list or Dolch's list or you just go online and say "100 common words," they are almost identical. If you have a list, use it, I'm sure you're fine. And in fact, in the 100 most common words, there are only about 5 words different across those 4 sources. And those 5 words that differ are in the next 25 to 50 words, so it really makes no difference. Just use your list, you're fine. What I want to show you first is a technique that was originated in special education, but it's also been very effective in general education for teaching sight words, and it's called constant time delay. And I know that some of you at the back probably won't be able to see these. I'm delighted to see such a big group, it's a bigger group than I expected, but what I have is just little word-card for high-frequency words. And even if you can't read them from the way-back, I'll at least -- you'll at least see how the procedure works. So, constant time delay looks like this. This word -- and those of you who are close enough can be kids. This word is they. I'm counting now. One, two, three. What word?

AUDIENCE: They.

ROLLANDA E. O'CONNOR: Excuse me, sir. I should have laminated them. Already.

AUDIENCE: Already.

ROLLANDA E. O'CONNOR: Comes.

AUDIENCE: Comes.

ROLLANDA E. O'CONNOR: Notice that I'm asking the students to wait for three seconds? And if I had more people jumping in, I would teach them, "Now you have to wait until I point to it, then it's your turn." Where.

AUDIENCE: Where.

ROLLANDA E. O'CONNOR: I'm going to show you a word but don't say it until I tap it.

AUDIENCE: Already.

ROLLANDA E. O'CONNOR: Already. Wow, what a sharp group, they got it the first time. Let me walk you through some of the procedures of constant time delay. First, the teacher reads the words. You don't ask for whether they know it because you've chosen these words because this group messes up on these words. You choose them from the most frequent words that children are still having trouble with. And as a rule of thumb, start with about four. If you find that your children can handle it, you can make your set as big as five, maybe six, but four is a good place to start. If four is too many to learn within a session, and a session should not go on more than about four or five minutes, then reduce the set to three. But you read it, you pause for three seconds, and then you have the children read it.

Now, during that three seconds, what the children do is somewhat of a mystery. First of all, they're staring at it and you insist that they stare at it. Some of the children are verbally rehearsing it, rehearsing it in their heads. Some are doing sort of a silent spelling task. Some are looking for some kind of a cue that's going to help them remember it. What they do is not the point. The point is that they're looking at the word for three seconds and then generating it themselves. After you've gone through your whole set that way, you mix them slightly, give a three second pause, which makes them stare at it again for three seconds and think, "Now what was that word? Hmmm," maybe use the cues that they noticed about it before to try to give a correct response. If they can't do it, you just provide it. Already.

AUDIENCE: Already.

ROLLANDA E. O'CONNOR: Already. That's right. So you just jump back to the first stage. If they can do it, you can just put it back -- if they did it beautifully and everybody in your group did it beautifully, you can put it in the knowns pile and just work on the ones that are left. It uses the notion of cumulative introduction because next week I'll take the two words that the children needed the most trials to learn, keep them in the set, and choose two new ones. The known words can go into a word wall if you use it, they can go into a child's individual practice set if they use that. So whatever other routines you're using instructionally, you can keep that going and this becomes the personal word set of the child or the group that you're working with. Now spelling words aloud is exactly what it sounds like. This word is already. Say it.

AUDIENCE: Already.

ROLLANDA E. O'CONNOR: Let's spell it together. A-L-R-E-A-D-Y. What word?

AUDIENCE: Already.

ROLLANDA E. O'CONNOR: This word is they. Say it.

AUDIENCE: They.

ROLLANDA E. O'CONNOR: Spell they. T-H-E-Y. What word?

AUDIENCE: They.

ROLLANDA E. O'CONNOR: Go on to the next one. And then you do a cold trial. So what word? If they have difficulty, you go back to the spelling. Let's spell already. A-L -- If they get it right, it goes into the known pile. Now we're not expecting these struggling readers to spell already, maybe not even to spell they. The point of the spelling is it makes them attend to every letter in the word from the beginning to the end. It also, while they're doing that spelling task, A-L-R-E-A-D-Y, they have to retain what word it is they're spelling, so then when you ask them, they've actually had a two or three second pause to say the word yet another time. So there -- yes, go ahead.

AUDIENCE MEMBER: Just real quick, in regards to constant time for the spelling, is it better to use one or the other depending on [inaudible]?

ROLLANDA E. O'CONNOR: To my knowledge, these two have not been pitted against each other. They're usually pitted against other kinds of repetition and practice routines. But I would suggest you just start with one, see how it's working. Where I have used spelling words aloud instead of constant time delay is if I'm working with older children and the constant time delay can seem a little too young for a child who's in third and fourth grade. But because third and fourth graders are expected to spell words, having them spell it aloud seems more age- and grade-appropriate, even though I'm not actually asking them to memorize the spelling of the word. It's something that they've had to do before at that grade and age.

Now let's go back here for a minute. I say word wall's okay, but be careful. Where we -- where children have difficulty using a word wall is when you mix with no cue whatsoever words that are decodable from words that they're supposed to have memorized like sight words. So if you use a word wall, consider a different color of card or a different color of ink for the sight words from the decodables. And then you can use the word wall as you've always used it. The other problem is we see teachers using a word wall, they work on a word, they put it up, and then they never refer to it again. If the teachers don't refer to the word wall, the children won't use it either.

Now, the nice thing about color-coding, whether it's the color of the card or the color of the ink, is some -- I didn't actually choose words that are, I chose words that aren't decodable no matter what you've taught children to do. But imagine a word like rain. I could teach rain as a sight word. It's in the high-frequency list, although not in the first 100. It's in, I think, up between one and two. I could teach it as a sight word because it's important for what we're going to be doing in class or what the general ed teacher is going to be doing over the next month. So I teach it as a sight word, I color-code it, I put it up on the wall. Now, three weeks later, I teach the A-I pattern. Now I take down that color-coded rain and I put it black-on-white or however your other words are and put it back up on the wall and show, "Now

you know how to read this word." So you can change over the color of the word when you teach the patterns that are necessary for reading the word.

Here are just some patterns in the most frequent words. And the reason that I thought this was fun, it was sort of an academic game to me, it was to figure out in the 100 most common words are there also letter patterns that are highly regular? And the answer is yes. So if you have taught children to read T-H, they can read that, then, and this. And they don't need to be taught as memorized wholes. They can be taught to decode them instead.

They can be taught to decode them instead. And the same thing for the other words. I have which in brackets because it has two patterns, the C-H and the W-H, both of which would have be taught before it becomes decodable.

The other reason that I thought this was useful to teachers and why I advocate now using these patterns is sometimes it's hard for a teacher to know, especially if you're working with a third or fourth grader who has a lot of catching up to do, which pattern should I teach first? These are the patterns that not only are high-frequency patterns, but they are in the 100 most common words as well. So, there are probably 30 or 40 two-letter patterns you could teach, but these are the most useful. These are the ones that children will see most often, which gives them that natural redundancy, the natural practice effect as they try to read text that'll keep this learning high, and will allow children to retain it and not forget it after you've taught it.

Now the silent E is another generalization that we need to teach. In the bad old days, when I was first teaching, our curricula had us teach in the first grade the silent E rule 17 different times across the school year. And it depended upon the pattern. So we taught A-K-E, if you see an E at the end, then the A says its name. And so they learned all the AKE words. And then when we got to words that had an I in them and a silent E, we taught it again. And if you see an I in the middle, but there's an E at the end, then you say, I. Right? And then, of course, there was U, and then of course there was, and then of course there was, and then of course there was, and there were -- there were all these silent E patterns that are common in first gradeness that we taught individually, when one generalization covers all instances. Now, it takes about two weeks to teach the silent E rule well. What that means is not two weeks of 90 minutes a day of instruction, but about five to eight minutes a day, every day, consecutively for about two weeks. And by the time you've done that, then kids pretty much have it. And the rule looks like this. When there's an E at the end, the vowel says its name. When there's an E at the end, the vowel says its name. When there's an E at the end, the vowel says its name. Is there an E at the end?

AUDIENCE: Yes.

ROLLANDA E. O'CONNOR: Will the vowel say its name?

AUDIENCE: Yes.

ROLLANDA E. O'CONNOR: What's the name of that letter?

AUDIENCE: A.

ROLLANDA E. O'CONNOR: Good, use A to read the word.

AUDIENCE: [inaudible].

ROLLANDA E. O'CONNOR: Is there an E at the end?

AUDIENCE: No.

ROLLANDA E. O'CONNOR: No. So will the vowel say its name?

AUDIENCE: No.

ROLLANDA E. O'CONNOR: What's the sound for that letter?

AUDIENCE: I.

ROLLANDA E. O'CONNOR: Good, read it to -- use it to read the word.

AUDIENCE: Sit.

ROLLANDA E. O'CONNOR: Is there an E at the end?

AUDIENCE: No.

ROLLANDA E. O'CONNOR: Will the vowel say its name?

AUDIENCE: No.

ROLLANDA E. O'CONNOR: What's the sound for that letter?

AUDIENCE: Ah.

ROLLANDA E. O'CONNOR: Good, use it to read the word.

AUDIENCE: [inaudible]

ROLLANDA E. O'CONNOR: Is there an E at the end?

AUDIENCE: Yes.

ROLLANDA E. O'CONNOR: Will the vowel say its name?

AUDIENCE: Yes.

ROLLANDA E. O'CONNOR: What's the name of that letter?

AUDIENCE: O.

ROLLANDA E. O'CONNOR: Use it to read the word.

AUDIENCE: [inaudible].

ROLLANDA E. O'CONNOR: What I want you to notice is, even though it's the first day of instruction, I'm mixing in words with E's and words without. That's to avoid overgeneralization. So children learn when to use the rule. What we've found with children who are difficult to teach is that if we give them now long lists of silent E words, they start saying the name every time. And all that very careful instruction around the sounds of the short -- the short sounds, out the window. So we mix it from the first day and have children learn when to apply the rule, and not just what the rule is. Now certainly we are going to be continuing to assess in first grade. You want to make sure they know the sounds that you're teaching, both in the short term and also cumulatively, what you've taught so far. We'll be teach -- this time, monitoring not the single sounds, because they may already know those, but rather we start assessing those letter pairs. And also the 25, 50, 75, and 100 most common sight words.

Now, it would be wonderful if all of our children kept up with what we were teaching all of the time and that children weren't allowed to move during the school year. But, of course, we know they do, and we also know that children learn at different rates. And that's why I would like to introduce the notion of pocket children. Now, I always teach with pockets. I don't know whether you do. But I always have two, I usually have four, but what I'm going to suggest is that you think in your head about the one child who is further behind than anyone else. Maybe that child is behind on just learning the sounds of the letters of the alphabet. Maybe the child is behind on learning those patterns, two-and three-letter patterns. Maybe the child is behind on sight words, whatever it might be.

Think about that child as a pocket child. So, most of my kids have already learned all the most common letters, they've learned six or seven of the high-frequency patterns, but I have one child who's moved in and is really having trouble with T-H. And so I'm going to teach T-H by putting T-H on a card and I'm going -- because I will have pre-tested the child, I'll know the letter sounds that are really firm, that the child gets right every time. I'm going to take three-letter patterns that the child always gets right, mix it with T-H into a little set that goes into my pocket. Then when I see her walk into the classroom, I'll say, "T-H goes together and it makes, Thh. Make that sound with me, Thh. Good." I'm going to mix it into her set, give her a trial on all four sounds. Into the pocket it goes.

How long did that take? Six seconds. Now I probably don't have 30 minutes to catch her up, but I have 6 seconds and I have so many 6 seconds during the course of the time that I see her that I can give her at least 10 repetitions on T-H. Even on the first day of instruction. That time when children are putting away their materials, the time when they're lining up, the time when she enters the classroom, the time when she's getting ready to leave, the time between one activity and another. There are so many times that you can spend six seconds with a child. So she's going to be my pocket child. And when she gives me T-H consistently the last four or five times on that day, I'm going keep that set, and when I see her tomorrow, the first thing I'm going to show her is the T-H card. She's got it. I'm going to keep T-H in the set, I'm going to take out one of the ones that she's always getting right, and pick out the next logical one to teach her and teach her that. So TH is still in the set, I have one new one. She's my pocket child.

Now, I -- when we do this, what we are allowed to do is opportunistic, cumulative introduction for the child who is struggling the most. When we use this with teachers, we find that teachers can give a child -- if they have 90 minutes, they can give a child a minimum of 10 repetitions on that new piece of learning, which for many kids is about what it takes, about ten trials to learn something that's new if they're struggling. The high achiever will learn it in two to four trials, but the child who's struggling will take ten, sometimes even more. And you know who they are. But keeping them -- and once you've got one child in your pocket, you can pick up -- and you're doing it easily.

And we find that the student teachers that we train can do this really well on one child. For experienced teachers, most have no trouble at all with two pockets. And we've seen teachers being very effective with four. But, of course, you have to know which child is in which pocket and be very consistent in order to carry that all, so I'd suggest you just try one. And if that feels comfortable, try two. And you'll know, you'll know your own limits, what can work.

Now, as we move into interventions in second grade, I just want to just point out one more thing. We've been doing a lot of decoding. I've been doing a lot of cueing with you. Which hand was I using? I'm hearing right and left. Let's -- you can all see me pretty much? All right. Let's say sit slowly. Sit. Now let's say sit slowly. Sit. What happens when I use my right hand? It's backward, isn't it? And what's the difficulty kids have when they're trying to decode? Right. So we can take care of that by anytime we're cuing children to decode a word, to say it slowly using our left hand if we're facing them. And whether you're sitting with a big group like this, whether you are at a little table, whether you're at a kidney table, whether you have just two kids in front of us. We're almost always have the children facing us and so the left hand is the one to use. Now, even if you're using a finger signal, like tell me the sounds in fish. See how that looks with the left hand? See what happens if I use my right hand? Backward. So you can use your -- anytime you' re using any kind of cueing with children for decoding, think about using your left hand. Now, if you're right-handed, that's easy. Just keep your writing tool in your right hand, don't put it down. You only have your left hand available. If you're left-handed, just think dominance. That's what I'll do. Okay.

Now, as we move into second grade, we're thinking about common letters and affixes. We worked with some of this with first graders too. And we're moving into fluency. Now, this is a list of the patterns that the research community recommends that reading teachers teach. You'll notice that O-U-G-H is not there. Why not? What sound does O-U-G-H make? Could be O. Although. Rough, could be Uff. Ow, that's right, what else? Yeah, so there are six sounds that O-U-G-H can make. That's why it's not here.

The purpose of teaching children the most common sound in kindergarten is so children will usually be right when they're trying to read or write a word. The reason that we want to teach these particular sounds is if you teach the sound these letters most commonly make, children will be right most of the time. And in fact, some of these sounds are so highly regular they're almost as if they were single sounds. A-I, for example, makes A more than 99% of the time in words. Now the one that does not in this list is the double O. Whether it says Uh like in book, or Oo is -- like in moon, is about 50-50. So for Oo, you -- the double O, you pretty much have to teach both sounds simultaneously. Try this one. If

that doesn't work, try that one. It's going to be one or the other. The majority, aside from the double O, make the sounds you think they will make about 90% of the time or more. And that's what makes them so worth teaching.

Now, as we move away from phonics, which is just the letter and letter sounds and the combinations, we need to give children additional strategies and we need to move into two syllable words. Most of us start that kind of instruction, at least with the inflected endings, in first grade. If we -- if you have older children who aren't familiar with the inflected endings, and that's a good place to start [inaudible] just change the tense or the plural/singular of a word. The next place to go with these kids is words that divide between consonants. Now, what I want you to notice is that I'm not saying words that divide between double consonants, even though sometimes they are, but rather words that divide between two consonants together because the rule is broader than just two consonants that are the same. Most of the time, if there are two consonants in the middle of a word, the word divides between them. And if children can make that division, even in a longer word like this, divide here, can you now sound it out? Ab. What do you have so far? Ab. Now let's -- sent. Sent. And children can decode it. So it's one of the easiest ways to shift children from the quarter-inch words into the half-inch words, is to look for two consonants together with which they can divide. Many words at this point will be decodable if they know where to divide the word into two consonants.

Common affixes we want to begin teaching as well. I was really amazed to come across this task when I was working on that last book, that just those four prefixes account for 58% of the prefixes in words that children see. So if you're not sure which prefixes to teach, how about this set? If you have time, you can certainly teach more, but you'll get so much mileage out of teaching this core that it's a good place to start. I wish that the suffixes were as succinct. They're not. But this is the list that is more common than the others, and this list of -li and -er, -tion, -ible, -al, -y, -ness and -less account for quite a chunk, and the others are of much lower incidence. So when you're working with second graders and want to get them into affixes, these are good lists to keep at the ready.

Once children know those -- that little set of four prefixes and that small set of suffixes, they can then start underlining and identifying them. Here and here. You find the ones you know, what's left? It's a word you already know, right? Now you can read the whole thing. What's the word? Mm-hmm. You know this prefix, underline it. You know this suffix, underline it. What word is left? You already know that one, don't you? Good, let's put it all together.

AUDIENCE: [inaudible]

ROLLANDA E. O'CONNOR: So it gives a wonderful bridge into longer and longer words. And particularly for working with an older child, a student in third, fourth grade or beyond, fifth grade, sixth grade, we want to try to use this level of decoding rather than the one sound, one symbol because it is more age- and grade-appropriate. And as words move into two, three, four, five syllables, what we taught them around reading the little three letter words is not going to be the core of what they see in text. So moving into affixes and multi-syllable words will become increasingly important.

Now let's take a little bit of a bridge away from decoding to think about fluency. In general, we don't measure fluency at the beginning of first grade because too many first graders aren't reading connected text. I noticed that Roland Good is coming to speak to this conference also. We used to play tag-team. He would teach you how to measure it, I'd teach you how to teach it, and it's all about the same stuff. But, regardless, if you think about measuring fluency, it makes no sense to measure it until you're getting scores above 15 because there's just going to be too much bounce. If children can't read 15 words correctly in text in a minute, don't measure it. Work on reading the words. And once they're getting some facility with the words, then move into measuring it.

Now, it's one piece of the comprehension puzzle, and I mentioned just one piece of that puzzle because, until fairly recently, we had not established a causal connection between the rate at which children read and their reading comprehension. In the last three years, we've done a series of experiments with my team and it's been replicated by Denton's team, that if we take children who are very slow readers and now I'm not talking about first graders, I'm talking about second, third, fourth, fifth graders, children who are very slow readers, and can increase the rate at which they read by quite a bit, like at least 20 words per minute, then even without teaching comprehension, we get a significant gain in their reading comprehension. And that's a generalized gain. So getting five words faster doesn't seem to make much difference, but a nice boost in fluency does make a difference. And that's what I mean by a causal impact.

But it's not the only thing. What we've found is, yes, we can teach children to be more fluent, and if we can get them to be a lot more fluent, they comprehend better. But fluency practice does not improve children's decoding ability and we've replicated that finding three times. It does not improve children's vocabulary, and we've replicated that four times. So, although we want you to work on fluency, we don't want you to drop all this other stuff in favor of fluency. We want you to add it to what you're working on currently.

Now, some of us were shocked with this third point, that silent reading does not improve fluency. Some teachers say, "Well, how can that be? We need to teach children to read silently." Researchers agree with you, absolutely, yes, you need children to read silently, but not if your goal is to improve their fluency. Reading silently is excellent for practice, it's excellent for comprehension, it's excellent to find answers to the questions that are your assignment for today. There are many excellent reasons to read silently. Ultimately, children who can read silently comfortably can also read for pleasure, which is just a great boon in life. But if you have children who are slow readers, we really need to have them practice reading aloud so that we hear the mistakes they make. Because activities like rereading text do not have an effect unless someone is correcting the mistakes. Children need feedback on their fluency in order to improve.

It's also not a quick fix. In our research with children who are in fourth grade and older, we're finding that we can teach the alphabetic principle to these older children who are almost non-readers in about two weeks flat, and that's two weeks of about five to seven minutes. Fluency doesn't work that way. It takes a long period of time to see growth. And when we're working with disfluent children, we

need to practice at least three days a week for more than seven weeks before we see a significant gain at all. So it takes long-term practice to get better at it.

Now there are three features that are important when we have children practice. Rereading and partner reading are techniques. Rereading probably has more research behind it than any other single approach. The problem with rereading as a strategy is it's one-to-one, and not all of us have one-to-one time to work with kids. If you do, rereading is a great strategy. You take a piece of text, maybe about 200 words, have children read it aloud to the person who's listening. The person who's listening corrects the mistakes, helps with the hard words if children pause. You document how long it takes and then you have them reread that same piece of text until their rate improves by 25% and their errors drop by half. And if you can do that for about 10, 15 minutes a day with kids, it almost always works toward improving their reading fluency. But because it's one-to-one, it can be difficult to manage.

Partner reading also has a long history. Fuchs' team and Greenwood's team both had excellent strategies. One's class-wide peer tutoring. The other is called PALS, peer assisted learning strategies. They're both excellent, strong research behind them both. And the nice thing there is you can buddy up the children. The third thing that our research team has added is that we need to control the difficulty level of the text. If the child is reading with an adult, the text can be a bit hard. You can have text in the 85% to 90% accuracy range and children make real nice gains. In fact, the older kids make stronger gains in the 85% to 90% than they do in reading really easy text. The problem is that if you're partnering children with other children, that's way too hard, and you should be aiming for accuracy above 90% correct if the partner is another child. So, you have to balance those things, one against the other.

Now, when we had children read with adults, some school systems say well, we can't do that because it's so expensive. Well, the training is almost effortless. We've trained the adults to do our tutoring in less than an hour. You just have them -- the child read aloud to an adult, and the adult's job is to correct the mistakes and do a fluency timing once a day. So it's really very easy to train if you have adults who can be used for that purpose. I know that different school districts have different rules. Some of our rural districts use parent volunteers. In some districts, that's not allowed if it's instructional because of various union features and those kinds of things. So you can see who's available to help. Teaching assistants make excellent adults to be reading aloud.

And if you're working with a group and you're finding just one or two children is extremely disfluent, then you can have that adult read for 15 minutes with each of those children. Only takes an hour -- a half-hour of time. And you get a very big return for that in both rate of reading and in reading comprehension. Yes?

AUDIENCE MEMBER: [inaudible]

ROLLANDA E. O'CONNOR: It's just -- you just supply. You don't teach decoding at that point. Now it -- if you have a very savvy adult, like a TA for example, versus a parent volunteer, you could have that teaching assistant keep a running track of which words are missed and then the reading teacher or the reading coach can take a look at those words and see if there are relevant patterns that could be taught during the instructional time. But just word supply. That's what makes it so easy for an untrained person

to be an excellent listener. And when I say reading with, I mean that the adult is the listener and the child is the reader. So the child's getting the practice reading. The adult probably already knows how. Question?

AUDIENCE MEMBER: Are they clarifying -- just to clarify [inaudible] the word as soon as they make the error or [inaudible]?

ROLLANDA E. O'CONNOR: As soon as they make the error. It's that notion of the word-wise feedback. That works for decoding, it works for spelling, it works for fluency as well. If the word is corrected immediately, and of course we allow the child to self-correct. If he or she does, that's excellent. But if the child does not immediately self-correct, than the adult supplies it immediately. And then just have the child go back and reread that sentence and keep moving on. Now, repeated reading, continuous reading, there have been a lot of debate about whether continuous reading is as good as repeated reading. What we're finding in our research is that it's a little bit complicated. And we're finding a distinct interaction with the entering skill level of the child. If the child is reading fewer than 40 words per minute, have the child read each page more than once. Our rule of thumb is three times and that's because when we've timed children's rate of reading and also their accuracy, reading a piece of text -- the same piece of text five times, they get much faster the second time than the first time. The third time through, they get faster and they make fewer errors. The fourth and fifth time, they tend to start adding to the story, making it more interesting, give it facts that aren't there. So three times is plenty if you're going to use rewrite -- rereading.

For older students and for students reading above 40 words per minute, we're finding similar gains with continuous reading. That is picking up a novel that the child enjoys, have the child read that novel aloud to someone who's providing feedback for the whole 15 minutes. That older child tends to enjoy it more. And the gains in fluency are just as high. Probably because authors tend to use the same words over and over and over from one page to another. There's so much redundancy in a novel of the words that are on the page that the child is getting some implicit rereading even through continuous reading.

We already went over this. You can use a bit ahead -- I mean, difficult text if the child is reading to an adult. Make it much easier if they're reading to a child. Now, these are the two partner reading approaches that I wanted to show you. And they differ from ways in which we used to -- we were walking into classrooms of teachers who were using partner reading and we saw a phenomenon that was sort of sad, and unfortunately we see this more than not when teachers have not been taught to use one of these effective models. And the model looks like this. I'm a really bad reader. But the teacher has paired me up with Deb because Deb is an excellent reader and Deb is also really nice. And so she's going to be kind to me, and I -- the teacher really appreciates that, and so do I as a poor reader. So the teacher says, "All right, we as a group read through page 17. Now in your partners would you read pages 18 to 25?" So we partner up and Deb reads the first page, gorgeous. I read the next page. Whoa, tough. And I struggle and I struggle. And Deb really is nice and she helps me with the hard words, just as she's been taught to do. That's really very kind. Phew. Finally through with my page. She reads the next one, I start through the next one. Deb begins to notice that her friends are done. And they're going off to all

those fun things. Well, it's time for recess and we're still not done. Well, thank goodness the teacher doesn't hold us back. She does hold me back, but she let's Deb go to recess. But Deb didn't get to do any of that fun stuff that her skilled peers got to do.

So, as a teacher, I say, "Well, that worked pretty well. Deb was really able to help her. I only had to help her with the last two pages. Great, I'll partner them up again." Now Deb gives me the face. And I begin to feel demeaned and unsuccessful, and Deb begins to feel punished. So what both of these procedures do that is different from what this teacher did to Deb and me was they control for time, not pages. The teacher decides fluency is an important goal in and of its own right. I have lots of kids who are disfluent in my class, so we're going to spend 15 minutes a day partner reading. Now I do have a handful of kids who are doing really well, in fact who are more fluent than their age and grade would suggest. I'm going to let them read silently in a book of their choice. So about two-thirds of my kids are going to continue to partner up and work on fluency. I am not going to allow them to choose their own partners because Deb's going to work with her friend and I get left behind. Nobody wants to work with me.

So the teacher will control the partners and the teacher will decide for that third of the class or however many they are who need no fluency practice which kids are going to read silently. Once we partnered up, in the modeled reading -- and this is the Fuchs-Vanderbilt model, peer assisted learning strategies, we're partnered up. How it was initially designed was that the higher reader would read for five minutes and the lower reader would follow along. That has since in the last two years been changed to page by page. The problem was that in five minutes the lowest skilled readers sometimes couldn't keep up, couldn't follow along that long, and basically just listened and didn't get the word practice that happens if the child truly is following along.

So, the way it is working right now is a slight change and that's -- it's done page by page. So the teacher sets the timer for 15 minutes. The higher skilled reader reads the first page. The lower skilled reader follows along. At the end of the page, they switch roles, the lower skilled reader reads the same page. So they've had that nice model of the fluent reader, they've heard it, they've been exposed to the hard words, they know pretty much what it's about because they're using their oral language and they've just heard a nice, fluent read aloud of the text. And it helps them do better than they would have had they read first in a cold read.

So if you choose this model, you choose to match your lower skilled reader with a reader who's a bit better. And then you assign a material for that pair which is at the appropriate level for the lower skilled reader. Now, the sentence by sentence was designed by Greenwood's team through classified peer tutoring and it actually was the parent of PALS. It was designed first and is still being used nationally in many classrooms. And what they noticed was that, when they paired up children, that it was very easy for them to get off task. I don't think that happens in Pennsylvania, so you don't have to worry about it. But nevertheless, I'll just show you how it works.

You pair up children from a similar level of reading ability. So if you do reading groups, you can just pair up within group. So if I were a general class teacher and I had three reading groups, I would pair

up within each group and I could have them all working on a different level of material. And it works this way. On each day, one or the other of the partners is the leader.

They read first. Now, I'm not going to set my timer for 15 minutes, I'm only going to set it for 7. And the children are going to read sentence by sentence until the timer goes off. So, she reads the first sentence, the second sentence, the third sentence, the fourth, the fifth, the sixth. They're not repeating anything, they're just getting as far as they can continuously until the timer goes off. Then they go back to the beginning. Whoever read first now reads second. Sentence by sentence as far as they can get until the timer goes off again. That means they actually are getting two full reads through that section, but you don't have a higher and a lower skill, so it's more egalitarian.

The other problem is this youngster is always off task. We all know it, right? When we read sentence by sentence, she doesn't have time to get off task because it is almost always her turn. So if you have children -- in California we call them squirrelly, but I know you have no squirrels in Pennsylvania either. So if you have -- if you're trying the first model and you have some misbehavior because children are not attending, then just switching to this model could help improve behavior. To my knowledge, these two have not been pitted against each other. I think they should be because what we suspect is children will learn different things aside from fluency from each of these models. If children do the page by page, they get an extended model of fluent reading. If children read sentence by sentence, they get a sense of sentence sense, and some teachers have reported, although we haven't been measuring it, that their writing ability improves because they know -- now know what a sentence is, they hear it all the time. But we don't know this for sure. Regardless, these two models have more research behind them than anything else but repeated reading. And so they're well worth your time if you can't do fluency practice one-on-one.

So these are all features that you can go over on your own, and I've mentioned them in my preface anyway. They're mainly just check-sheets in case you couldn't write it all down, to go back. We need to make sure that children are reading a text that is not too difficult, so that's a very important part. And also that if you have children who don't need fluency practice, because you've paired up all the children within your groups, it's fine for those fast, fluent readers to be doing something else. And reading silently reduces the noise level within your classroom. I assume that most of you know how to measure fluency, so we don't need to go into that part. The one thing that we're finding in our research sites is do any of you have flat-liners? What we're finding is that if we go back 20 years and document two things, document not only the words they read correctly in a minute, but also document their accuracy, what we've found when we're giving good fluency practice to children on an ongoing rate, that most of those children who appear to be flat in terms of rate are actually improving in accuracy, which is just as important for comprehension. So before you throw the baby out with the bathwater, see if they are improving in accuracy. That's important too.

Now, as we move into third grade, we're going to continue. We're going to go back and pretest the struggling reader on things like phonemic awareness and alphabetic principle, letter sounds, letter patterns, all of things we've been working with so far. But we're also going to move into several elaborated strategies for reading multi-syllable words. And one of the easiest is the notion that every

syllable has at least one vowel. So if we have children look at that 25 cent word and start by underlining the vowel letters, see if any of those vowel letters are teamed up, that gives them the sense for how many beats they're looking for, how many syllables they're looking for. That in and of itself improves decoding ability and it's much easier to teach than the 47 rules of syllabication, especially to a struggling reader.

We'll also be teaching the morphemes, also teaching them the rules for combining morphemes. Though morphemes are just the meaningful parts of words. So the phonemes are meaningless isolated speech sounds, the morphemes are the parts of the word that carry the meaning. So, recoloring. How many syllables? Recoloring. How many of those syllables carry meaning? Does Re carry meaning? Yes, it means do it again. Co? Color. Okay, so now we have a second morpheme. Ing? Yes, in the act of. Okay. So, it's the meaningful parts, and those are useful for decoding and spelling as well. So, to teach -- every syllable has at least one vowel. As I mentioned, you just have children first underline the vowel letters within the word. Here we see three vowel letters. Are any of those vowel letters teamed up? Teamed up would be like A-I going together, O-U going together. Okay. In cloudless, yes, you see the O-U going together, but in unable you don't see anything teamed up, so if there are three vowel letters, how many syllables are we looking for? Three, that's right. And you already know the first one because that's one of those high frequency morphemes that were in our first set. those four prefixes. So you already know that one. It makes a word that a child might not attempt if you hadn't taught U-N as one of those high frequency prefixes, or you hadn't taught -- we're looking now for three sounds within the word. We have Un, what's left? Okay. The same thing for cloudless. You see the O-U goes together and it's teamed. So how many syllables are we looking for in this word? That's right. Do you see a prefix or a suffix that you recognize? Less, okay, so let's look at what's left. If you've taught O-U goes together and it makes Ow, now the whole thing is decodable.

So what we're doing is building on these easier skills. So you might not start with three syllable words for a child who's an extremely poor reader, but you can quickly build up this point if you take advantage of the two letter pairs, take advantage of those high frequency shortlists of affixes that we were examining earlier. The last thing you'd consider as you're moving into rule-based multi-syllable words is the notion about dropping an E. And I'll show you how that works. When do you drop the E? When the next part begins with a vowel. When do you drop an E?

AUDIENCE: When the next part begins with a vowel.

ROLLANDA E. O'CONNOR: That's right. Does make end in E?

AUDIENCE: Yes.

ROLLANDA E. O'CONNOR: Does the next part start with a vowel?

AUDIENCE: Yes.

ROLLANDA E. O'CONNOR: Will you drop the E?

AUDIENCE: Yes.

ROLLANDA E. O'CONNOR: Good, write making. Does like end in E?

AUDIENCE: Yes.

ROLLANDA E. O'CONNOR: Does the next part begin with a vowel?

AUDIENCE: Yes.

ROLLANDA E. O'CONNOR: So will you drop the E?

AUDIENCE: Yes.

ROLLANDA E. O'CONNOR: Write liked. End in E?

AUDIENCE: Yes.

ROLLANDA E. O'CONNOR: Start with a vowel?

AUDIENCE: No.

ROLLANDA E. O'CONNOR: So will you drop the E?

AUDIENCE: No.

ROLLANDA E. O'CONNOR: Write useful. End with an E?

AUDIENCE: No.

ROLLANDA E. O'CONNOR: The rule doesn't apply. Write backed. Notice how I am intermixing from the very first day. Now, when you teach with a rule, whether you're teaching the silent E rule, whether you're teaching when do you drop the E from a word, what you're going to need to do is keep with the rule for many consecutive days until your children have it. This is not the way our curricula are built. They teach one thing and then they drop it, and maybe pick it up or test it later.

When we're working with struggling readers, you want to keep with the rule that you're teaching for about two consecutive weeks. Now very short, this only takes about five minutes. But we're going to do it Monday, Tuesday, Wednesday, Thursday, Friday. We're going to come back and do it Monday, Tuesday, Wednesday, Thursday, Friday until you see children doing it very consistently on their own. By teaching them a rule like this, you also teach them that it's not just you drop the E when you're adding Ing, which is how it's usually taught. Then you have to teach it again with E-D. And kids have no clue why you don't drop it when you get to Ful, or Ness, or Less. But rather, you're teaching them rule that applies across the whole. It's one generalization and it applies across many, many instances of words.

So in all, when we think about working with children in K4 who are having reading difficulties, our job is to determine where the child falls on that reading continuum. Where is it that they are having difficulty? What can we shore up once we find the seat of that blockage in their reading development

while still keeping them as strong as possible across other areas? Many of the things we have worked on in the last 15 minutes to a half hour in terms of multi-syllable word strategies you can use with a very poor reader as long as you also have that child as a pocket child to shore up the things that they didn't learn along the way. So, questions in our last three, four minutes? Yes.

AUDIENCE MEMBER: I know this is more word recognition, but I have a three year old, and at the daycare that she goes to they're learning their letters. And I've seen different centers do different things when they introduce the capitals, they introduce the lowercase, or they do both at the same time. Are there studies that say one might work better [inaudible]?

ROLLANDA E. O'CONNOR: Developmentally, most children learn -- if they're preliterate or if it's before kindergarten, more children learn the uppercase than the lowercase. And that's because if you look at signs, if you look at logos, the uppercase is used more often. So that's probably why the preschool is taking advantage of that. It's getting them into the notion of letters.

Also, the most salient letter for any individual child is the first letter of his or her name, which is an uppercase letter. I think anything that children learn in preschool is just bonus and it's great that they're introducing some letters and playing with letters, and that's a good thing whether they're uppercase, lowercase, just to get them into the act. Yes?

AUDIENCE MEMBER: [inaudible].

ROLLANDA E. O'CONNOR: She's asking about multisensory instruction and whether I would see that as a separate kind of activity. First, multisensory instruction has a good -- has good research support behind it. And, in fact, multisensory instruction is more effective than almost any other technique in isolation. So it folds right together. If you think about what we were doing with teaching children to blend, we showed them pictures. We had them name words. We had them say them slowly. We had them say them fast. They were listening, they were looking, they were speaking, they were feeling the sound of the phonemes in the mouth. That is multisensory.

So there are programs that are labeled multisensory and then there's the notion of multisensoryness. And the notion of multisensoryness is important in any instructional activity. I try not to comment on any particular program because they tend to go this way and that way. And in my experience, when we teach teachers to use the most effective practice, they're the ones who don't go in and out. They're with us for the long haul. So rather than concentrate on curricula, we concentrate on principles of excellent instruction and what is newest and most robust in terms of research findings. Yes?

AUDIENCE MEMBER: Sight word practice that you were giving like -- because my son can do the sight words [inaudible] but when he reads it all falls apart.

ROLLANDA E. O'CONNOR: Yes. You know, we have --

AUDIENCE MEMBER: [inaudible] transfer of skill and I -- will that help him transfer, like because he's looking at it for a longer period of time? Are there other activities that do, because when you're flashing those flash cards, he can do them like this, but when he's reading a text, it all falls apart.

ROLLANDA E. O'CONNOR: Her question is about the transfer from sight words practiced in isolation to practice in running text, and being able to retain what they've learned on the word card list. I don't have an answer to that, but I can tell you that we just started an experiment a week ago Monday that we're using a single-subject design for a group of seven children who have that very problem. And what we are trying, and I can't tell whether this'll work yet, is we do the sight word instruction and then whichever words they are learning as sight words we immediately build into sentences.

And so, we're not treating the sight word instruction as different from what they're going to be doing in text. We're integrating it with running sentences, and in our sentences we're including at least three of the sight words that they're learning that day. And having them -- for every one minute of sight word practice, they read a sentence in which those words are integrated. And then one more minute of sight words and then a new sentence has those words embedded within it, because our thinking is that the children might not get that these are the same words they are going to be reading in running text, and so we're trying to make the integration of those words in running text as overt as possible. I don't know yet if it'll work, but I certainly recognize the problem and I imagine we all do.