

>> My name is William Van Cleave. And I'm an educational consultant in private practice. I was asked to develop this webinar as part of my work as a writing consultant for PaTTAN. Several years ago, I was asked to work on the MTSS Writing Committee and initially served on a subcommittee concerned with micro-level skills, including handwriting and spelling. During presentations of our product, participants engaged in substantive discussion around the areas of handwriting and spelling. As I moved towards developing content for the Effective Core Writing Instruction, it became obvious that stand-alone webinars on handwriting and spelling would be useful. This webinar addresses spelling at the K through two grade levels and can be used as an extender to be a sentence-level Effective Core Writing Instruction training I developed or as a stand-alone. The mission of the Pennsylvania Training and Technical Assistance Network, or PaTTAN, is to support the efforts and initiatives of the Bureau of Special Education and to build the capacity of local educational agencies to serve students who receive special education services. Our goal for each child is to ensure Individualized Education Program, IEP, teams begin with the general education setting with the use of Supplementary Aids and Services before considering a more restrictive environment. And this is the blurb we wrote to announce this webinar, just want to read over it briefly. As districts, schools and individual teachers make decisions about spelling instruction in schools, it is increasingly important to understand what the research tells us about this valuable component of K-through-two instruction. Armed with the most up-to-date research, this webinar is equal parts valuable foundational research and best teaching practices. Participants will understand why spelling instruction is important and how best to instruct students in its use. Our agenda today includes the following major points. We're going to put spelling into context, at first, into an overarching framework. We're going to look at working memory, which is so vital when we're looking at the many components of the writing process. We're going to examine phonological awareness and its effect on spelling, orthography and spelling. And also, we're going to look at the notion of English as a morphophonemic language. Finally, we're going to look at some recommendations for teaching and learning. The Pennsylvania Core standards mention spelling in two areas: 1.1 talks about Foundational Skills. Students gain a working knowledge of concepts of print, alphabetic principle and other basic conventions, and then, in 1.4, Writing, demonstrate a grade-appropriate command of the conventions of standard English grammar, usage, capitalization, punctuation and spelling. As part of the MTSS work, we developed a scope and sequence, four of us did. And we've been tweaking it over the last year, year and a half. And this scope and sequence is an offered scope and sequence. It is not recommended, necessarily, but it's a sample one. And I think there's some vital data on it that would be useful to educators. It's available from PaTTAN. And it's also on the Web site for download. This is just what the front page looks like. And this might tie in well with your work with writing, particularly at the micro level. But it also includes macro-level skills. So using that scope and sequence, we made some connections. Under the conventions, we have spelling. A, able to apply phonetic patterns to spell words correctly, B, use conventional spelling for high frequency and other studied words and C, spell grade-appropriate words correctly. Now we're going to begin talking about working memory. Writing is the act of dealing with an excessive number of simultaneous demands or constraints. Viewed this way, a writer in the act is a thinker on full-time cognitive overload. I really like this quote because I think it really shows and focuses in on the notion of the demands on our working memory that writers face. Today, obviously, we're looking at spelling. Spelling is one of those demands. And unfortunately, because there are so many writing demands, those students who struggle with spelling are going to have difficulty, even more difficulty, with spelling when they go to write something like a paragraph or an essay because they have so many things working in that working-

memory area that are competing for space, if you will. And that's what really causes this full-time overload that the quote mentions. Transcriptions skills, overall, we're going to look at right now. And transcription skills, including spelling, mechanics and handwriting, are not connected with intelligence. And I think that's really important, not only for teachers to know, but also for their students to understand. So you can be a really poor speller and actually have a really high IQ. And you can actually be a pretty decent speller and have low-average or lower IQ. So there's really no equation between IQ and spelling. But difficulty with these skills, these transcription skills, interferes with working memory, preventing a student from putting her thoughts on paper effectively. So even though spelling is not an IQ-related skill, it still impacts the other skills that do require IQ because the student is required to devote working memory to the act of spelling when, if she were a comfortable speller, she could actually commit that working memory to some other task like organizing ideas or developing an argument, etc. Transcription skills distinguish speaking from writing and make writing a more difficult process for most. And I think that, in a way, goes without saying. But I kind of want people in this webinar to think about this. The only thing that separates speakers from writers, really, is spelling, mechanics and handwriting. One essential reason for automatizing these transcription processes, then, is that it frees working memory for the higher-level writing skills. Now one thing we're looking for or hoping for in our students is automaticity in terms of transcription skills, and particularly for spelling, here. Typical writers composes in bursts of writing activity broken by long production pauses. And what that means is if you watch one of your students write, he or she will think for a period of time and then kind of blurt out, in writing, but blurt out two, three, maybe even four sentences and then stop. And once again, there will be some thinking time, what's processing, what's already been written, thinking about what's going to be written in the future. And then again, there'll be a burst. In typically developing children, bursts can be constrained by transcription bottlenecks in processing, such as slow handwriting or spelling. So this is a really, really impactful quote because it ... I like this bottleneck image because what it suggests is this kid is ready to sort of blurt out language on paper. But the spelling constraints will cause that blurt to not happen as effectively as it might in a kid without spelling difficulties or in a young child who, in fact, you know, is still learning to spell. Automaticity occurs without voluntary control and interferes minimally with other processes. So that's what we're really looking for. We're looking for spelling that is so automatic and comfortable that it really doesn't take demands on the working-memory piece. And that leaves that working memory able to commit to the other higher-level writing skills. So take a look at this quote for a minute. And just pause and reflect. And think about what might happen if you saw this quote. How would you perceive the writer? So in thinking about that quote, let's look at how spelling impacts writing. Spelling errors can change the message. So you can actually misconvey what you intend through poor spelling. Poor spelling negatively impacts perceptions about a child's competence as a writer. And I think that's one of the effects that most of us would experience when reading a quote on the preceding slide, or the passage on the preceding slide. You look at that. And you make certain judgments about the skills of the writer. Poor spelling interferes with composing. So again, that's our bottleneck piece. It's actually getting in the way of the higher-level composing skills. Early problems with spelling can constrain a child's development as a writer. So not only is spelling important, automaticity in spelling, important to relieve working memory, but spelling also, if you don't learn to spell in these early years, if spelling is a problem, you're not going to develop your other writing skills as well as you would if you did not struggle with spelling. Spelling also impacts reading. So I think this quote is really, really important in recognizing that, as education moves increasingly to technology, some people, educators, politicians, etc., have come under the false assumption that, since we've got

the computer, spelling instruction's no longer necessary. And this isn't actually true because we're going to need that spelling to develop our reading, our writing skills and to, once again, decrease this bottlenecking. And that's whether we're on the keyboard or by hand. So the keyboarding isn't really going to distract from that. This is one of many of those poems that plays to the notion that a spell checker can be deceptive in terms of its ability. So this is filled with words that are different versions of words, not things that we intend. I have a spelling checker. It came with my PC. It plainly marks, for my review, mistakes I cannot see. I ran this poem through it. You're sure real glad to know it's very polished in its way. My checker told me so. And this is almost laughable how many errors are made in what seems to be a correctly spelled passage, if you will. What the research says is that we'll want to spell at approximately a fifth-to-sixth-grade level in order to use the spelling checker effectively. Brain research shows common and unique brain activation during tasks requiring storage and processing of phonological word forms, that's heard and spoken words, orthographic word forms, that's viewed and written words, that's our spelling pattern, if you will, and morphological word forms, that's bases and affixes in both oral and written words and evidence for cross-code integration of these three word forms in response to spelling instruction. And what this means is that we're going to need to understand the language at a phonological level, at an orthographic level and at a morphological level to be an effective speller. This is a lot of groundwork to lay. It's going to develop things like reading skills. It's going to develop vocabulary, etc. So you're going to get multiple impacts in working in the language this way. Phonological factors is one way we can determine spelling. Spelling is sometimes determined by a direct sound/symbol correspondence, which is often called the alphabetic principle. Phonological awareness is an umbrella term that includes any manipulation of the components of oral language. These are spoken sounds, words, etc. Phonemic awareness is one form of phonological awareness and, therefore, falls under its umbrella. Phonemic awareness involves the understanding that words and syllables are made up of individual speech sounds. And those speech sounds are actually called phonemes. Cat, for example, is a simple example. It has three phonemes, /k/, /a/, /t/. Children need to be able to manipulate phonemes as a precursor to reading and spelling. And the "Put Reading First" document, which is a meta-analysis, provided these reasons why phonemic awareness is significant or important. Phonemic awareness instruction is important because it improves children's word reading and reading comprehension. It is important because it helps children learn to spell, is most effective when children are taught to manipulate phonemes by using letters of the alphabet. So though phonemic awareness and phonological awareness, actually, is working with sounds, when you link those sounds to actual letters, the impact is more significant. Phonemic awareness is also most effective when instruction focuses on only one or two, rather than several types, of phoneme manipulation. And this webinar actually mentions a number of effective phonemic and phonological awareness activities. But the research indicates that you only want to focus on one or two at a time. And I think that that's sort of shaken up some of the way we've instructed in phonemic awareness since this research came out. So here's some phonemic awareness activities, some samples. One is to repeat a phoneme. So the teacher says "/b/." And the student merely repeats "/b/." Another is rhyme. Teacher says "hat." Student says "hat," repeating what the teacher said and then says another one, bat for example. Blending, the teacher says "/h/, /a/, /t/. Say it fast." And the student says "hat." Segmenting, teacher says, "The word is hat. Stretch and say the sounds." And the student would say, "/h/, /a/, /t/." So you can see that blending is putting sounds together to form a word. And segmenting is taking a word part into its sounds. Counting phonemes is another great phonemic-awareness activity. The teacher says, "The word is hat. How many sounds are in hat?" And there are some examples. Hat has three phonemes.

Phone, although it has five letters, only has three phonemes, /f/, /o/, /n/. Blend, the word blend, actually has five phonemes, /b/, /l/, /e/, /n/, /d/. And meat, though it has four letters, only has three phonemes, /m/, /e/, /t/. These kinds of phoneme manipulation activities are really good for sound-symbol relationships for spelling eventually, etc. These are the precursors to reading and also to spelling. Here's some more phonemic awareness activities. You can isolate a phoneme. So the teacher says, "Name the first sound in sip." Student says, "Sip, /s/." Omit the phoneme. Teacher says, "Say sip without the /s/." Student says, "Sip /ip/." Replace the phoneme. Teacher says, "Say sip." The student says "sip." Teacher says, "Change the /s/ to /h/." Student says "hip." Add a phoneme. Teacher says, "Say rain." Student says "rain." Teacher says, "Add /b/ to the beginning of rain." Student says "brain." And the activities on this slide can be done initial, medial or final sounds. So these are obviously initial sounds. But you can play around with medial or final sounds. Medial are typically the most difficult because, often, that involves vowel-sound manipulation. Phonological awareness, now remember this is our umbrella term. It includes phonemic awareness. But it also includes manipulation of words and syllables, sentence sounds, etc. Blending syllables in a compound word, teacher says, "/sun/ /set/, say it fast." The student says "sunset." Omit a syllable in a compound word. Teacher says, "Say sunset." Student says "sunset." Teacher says, "Now say it without the sun." The student says "set." Omit a syllable, but this is with segmented syllable, a little trickier because this isn't going to be actual words when we break it apart. teacher says, "Say magnet." Student says "magnet." Teacher says, "Now say it without the mag." The student says "net." Count the words. Teacher says, "Repeat this sentence. And then tell me how many words are in it. The man went to the store." And the student repeats, "The man went to the store," and then says "six." And remember the student won't have these words or these sentences in front of him during these activities. Phonological awareness activities involve sounds rather than letters and, therefore, could be conducted in the dark. Studies indicate that spending 10 to 15 minutes per day on phonemic awareness activities with all young children improves both spelling and reading and helps to decrease the impact of learning difficulties in those who struggle. So I mentioned briefly, earlier, the alphabetic principle. And I want to make sure I highlight it now. The alphabetic principle is the understanding that sounds can be represented by letters and that letters represent sounds. So here's a simple example for you. If I hear "/b/," I am probably going to write "b." And I'd be correct when I'd do that. But if I see b on the page, it is also pronounced /b/. So that's the alphabetic principle. And in English, some of the language is what we call one-to-one correspondence. And what that means is that sounds are represented by single letters and single letters are represented by single sounds. And this b, /b/ example is a good one. Teachers need to understand the alphabetic principle, which we just discussed. They also need to be able to articulate and teach students to articulate the phonemes clearly and accurately. And that's actually trickier than most people think. Elementary teachers, if they mispronounce these sounds, they're going to have difficulty with helping these kids learn to read and spell. So there's a big difference between /b/, /a/, /t/, which will blend nicely to the word bat and /b/, /a/, /t/, which is more likely to make something like "batuh." It's going to be much more difficult on the student. Also, though, teachers are going to need to be able to recognize and correct errors in the pronunciation and spelling that they hear in their students. And this is kind of tricky, actually. I know teachers, I've heard teachers, who actually pronounce the sounds correctly. But they don't catch the mispronunciations that their students make. So if you say "/b/" and the child repeats "buh," there is a chance for some explicit instruction and correction. And sometimes, teachers overlook this. So teachers need to not only know how to pronounce the sounds themselves, but also to recognize deficits in the pronunciations of their students. So now we're moving into a knowledge of

phonics. This is different from the alphabetic principle. One thing the te ... These are just some samples. But one thing that teachers are going to want to know at this level is the different kinds of syllables. And there are six kinds of syllables, open, closed and silent-e, the vowel team, vowel-r, which is sometimes called r-controlled and consonant-le. They're also going to want to know syllable-division patterns, splitting between the consonants is that vc/cv, splitting after the first vowel, splitting after the medial consonant. And you can see two examples. Napkin is an example of vc/cv. And robot is an example of v/cv. And that helps with pronunciation, if you know the syllable types. So now we're going to look at a little error work. These are examples of misspellings based on phonology. They are phonological errors. So the attempt the child made on the first one is bled. He actually meant blend. But he wrote bled. And here's some strategies we might use. We might segment the sounds. So if the student takes the real word, /b/, /l/, /e/, /n/, /d/ and matches it up with his attempt, he may notice that the n is missing. Or he might also pronounce what he's written, /b/, /l/, /e/, /d/. And that's bled, not blend. And the student may be able to recognize that he's missed a letter. Phoneme-grapheme mapping involves similar practices. Also, we might, later on, practice with the n blend, /nd/. Maybe he's not hearing that. And he might work with send and blind and mend and mind to work on that so he could hear it and see it in other words that are similar. Perhaps he wrote lept for left. And if you make left and lept with your mouth, there's not a lot of difference between those two pronunciations. So it's not an unlikely misspelling. So the student meant left. He might segment the sounds, phoneme-grapheme map again. Work with auditory discrimination. And what that means is I might say "/p/." And the child would tap the p. I might say "/f/." And the child would tap the f. I could also tap the f and have the child say "/f/," tap the p and have the child say "/p/." So we're working on distinguishing between these two obviously confused consonant sounds. And so we've done there the discrimination error and also dictating. Okay. So perhaps the child wrote combation. And that's actually pretty likely. When we see these multi-syllabic words, particular in young spellers and struggling spellers, they'll often have a correct spelling. But they will omit a syllable. So combation, actually, is not a horrible guess for combination. He's missing the syllable "in," which is one of the medial syllables. And all of the letters he's written are correct. Unfortunately, he's left two out. So one thing to do is to segment the syllables. So he might say and tap "com, bin, a, tion." And at that point, he's going to recognize, hopefully, that the spelling he's made does not correspond with what he actually meant to write. You can also use column spelling. I really like this one. So you would draw column lines down the page. And he would put a syllable in each column as he's spelling. So he would write com and say it. He would write bin and say it. He would write a and say it. And then he would finally write tion and say it. And he'll catch all those syllables. It's a rare kid who omits a syllable when he's doing spelling in columns like that. You can also practice with dictating other multi-syllabic words. So I might do elation or condensation. I might even slip away from -tion and do something like adventure or nature. So these kinds of activities could help reinforce catching all the syllables, if you will, helping students not omit syllables.

Orthographic patterns is another spelling concept that we need to work on. Spelling can sometimes be determined by a generalization or a rule. So there are patterns that guide the spellings of our words. Here are just some examples. Long a can be spelled a, i or a, y. A, i, though, is always going to be used in the beginning or middle of a word, whereas a, y is commonly an end-of-word spelling. Knowing that would help the student, if he hears the a sound, determine which one to use. /f/, the sound, because notice the f is in those bars, /f/ in fun and cliff, same sound but quite different spellings. One has one f. One has two. F is the most common spelling. But you'll see a double f directly after a short vowel in one-syllable words. So something like cliff has that "i" sound. And immediately following it, you would

choose two fs. The third example is /ou/. And the two common spellings of /ou/ are o,u and o,w. And once again, there's a pattern you can learn to help you choose between them. O, u is usually used in the beginning or middle of a word like out and loud. O, w could be at the end of the word like now and cow, brow. But it can also be used before a final l or n like down or clown or howl or fowl, the bird, rather than something bad or negative. The spelling errors on these words are orthographic rather than phonological. They really focus on pattern. Knowing the sound won't lead you to the spelling. It might lead you to one possible spelling. But it won't help you choose amongst the spelling options. So we're going to rely on orthography here, rather than phonology. So here are a couple of other patterns. Baking, bake plus ing, we're going to write baking, b, a, k, i, n, g, rather than, there's a mistake there, rather than bakeing, b, a, k, e, i, n, g, and likeness as opposed to likness, if you will. And we're going to drop the e in a base word before adding a vowel, suffixed. Tapping, we're going to write t, a, p, i, n, g rather than t, a, p, i, n, g. We're going to write bending, not bend with two ds. And we're going to write cooked with one k rather than two. In a one-syllable word ending in consonant-vowel-consonant, double that final consonant before adding a vowel suffix. The spelling errors in these words are orthographic rather than phonological. That's really important for what we're thinking about. Here's some mistakes. The child might write ruling with an e, looks really bad to us. But a child who's struggling to spell or just learning to spell might not recognize the poorness of this choice, if you will. The student actually meant ruling, r, u, l, i, n, g. I would instruct in the silent-e spelling rule, which we just mentioned. Drop the e before a vowel suffix. I would have the student sort consonant and vowel suffixes. And these are suffixes that begin with either consonants or vowels. I would have the student practice crossing off the e in silent-e words when adding vowel suffixes. And I might also have student participate in dictation for automization. So I would dictate some words that drop the e, some words that keep the e to help cement this concept. Perhaps the student wrote the word live as l, i, v. And that actually sounds good. We have a closed syllable. We have a short i. What we know about live, though, and other words that end in a /v/ sound is that we don't end words in v when they're in English. So we would instruct that v never ends an English word. We would practice discriminating between correct and incorrect spellings. We would teach the student other pattern-related words like move and give and have. We would also have students participate in dictation for automization. So here's kind of a summary of a couple of things we just talked about. Spelling by location, a, i, a, y, k versus ck, a final v plus e, spelling by rule, perhaps the 1-1-1 doubling rule or the silent-e rule or even the y spelling rule. Spelling in English, a morphophonemic language, relies on both meaning and sound. Morph meaning. And phone means sound. So we're moving into this morphology piece, the meaning part of our spelling. And that's going to be really useful because sometimes, the way a word sounds isn't reflected in its spelling. But usually, the meaning part is reflected in the spelling, in fact, almost always. So we're going to look at some examples. And I'll show you what I mean. Morphological structures, spelling can sometimes be determined by morphology, the study of roots and affixes. Morphology is typically the best indicator of a word's correct spelling. And Louisa Moats actually said, "Meaning trumps spelling." So we're going to look for meaning to guide our spelling. And this is why. The invention of the printing press, spellings remained fixed and constant over time, even as pronunciations have changed. So when the printing press was invented, all of a sudden, spelling became quite standardized. And even though we've changed the way we say words, their spellings remain consistent because we have multiple copies, all printed from the same source. So wherever you are, speaking English, you're going to have the written word be the same. And you're going to modify it. Now there are slight differences between British English and American English. But in general, the spellings have remained unchanged for a

considerable length of time whereas our pronunciations have shifted. And even thinking about something like dialects in American English, that can actually serve as a good example. We pronounce words differently depending on where we live in the United States. But the spellings don't reflect those pronunciations. Instead, the spellings reflect the meanings or the morphemes, the meaning parts. I'm going to show you some examples. So the word two, for example, in this first chart, is phonologically related to words like boo, moon and snoop. Unfortunately, those words would not help with the spelling of two. What I'd rather use or rely on would be words like twice, twin and twenty. So all of those are morphologically related. They all have to do with two. And twice, twin and twenty, you can actually hear the w, the /w/ sound versus in two, where it's not heard or represented. So if I can link two, in my brain, to twice, twin and twenty, I've got a chance of spelling it correctly. It should kind of, if the phonology reflected, it should probably be pronounced "twoh." That would be more in keeping. But unfortunately, it's not for our student spellers. And look at a word like sign. Sign has a silent g. It's kind of odd. And kids certainly aren't going to hear that when they go to spell it. But if I can think about words like signature and signal instead of words like line, fine and pine, I'm likely to spell that word correctly. Signature and signal are morphologically connected to the word sign. In other words, they all have a shared meaning. And that's really useful for our thinking about this word because if I can think about signal, I've got a chance at spelling sign correctly. In these examples, then, morphology, not phonology, will assist with spelling. The silent w in two and the silent g in sign can be heard in their morphologically related sister words. Here are a couple of others. This is e, d. So the first row, if you will, shows what a child might attempt when spelling these words. I've seen jumped, jumpt a number of times in my career. Bloomed might be written without its e. Dented is more likely to be correct because you can actually hear the e or a version of it. It's kind of a schwa vowel. If I spelled using morphology instead of phonology, in other words, if instead of hearing jumped and spelling it like I hear it or like it sounds, I can think about morphology, in other words, that the past tense, e, d, is added to the base word, jump plus e, d, I've got a shot at spelling that word correctly. So I need to think about the fact that jumped is kind of the yesterday version of jump. And since it's the yesterday version, I'm going to add the past-tense suffix, -ed. That's going to be a much wiser choice in terms of determining a correct spelling than to go by phonology. Bloomed, same exact thing. I'm going to think, "Yesterday, it bloomed." That's going to be an -ed suffix rather than just the sound /d/, which would be spelled d. And dented, as I said, actually matches up relatively well. In each example, suffix -ed forms the past tense. The three are pronounced differently, however. And only in dented to you hear the e, d as a separate syllable, morphology rather than phonology, determines spelling in the first two examples. So here are some errors that will kind of reverse that and let you look at it the other way. Stompt is a phonological attempt at the word stomped. It's not morphological. The child wasn't thinking about suffix -ed reflecting past tense. So the student meant stomped. And you might ask some questions like these: "What would you add to stomp to put it in the past tense?" or "What is the suffix we add to verbs to put them in the past tense?" Something in line with these, although there are others, would help the kid, would elicit from the student the correct -ed suffix. Rinew, you can kind of hear that /i/ sound, rinew. Some people say "renew." But rinew is phonological. It's a morphological error because the student isn't thinking about the prefix re-. If the student knew the prefix re-, which means again, you might prompt her something like this: "What prefix means again?" And the student would say "Re." Well, how about renew, which obviously means to make new again? If you make something new again, you renew it. And that would be a second possible prompt to get the student to think morphologically rather than phonologically in the spelling. Good teachers of spelling develop a knowledge of the

phonology, orthography and morphology of English. Good teachers of spelling also learn best practices in teaching students in these areas. Good teachers of spelling become confident in identifying phonological, orthographic and morphological errors in student spelling and writing. And that's actually relatively difficult because each of these groups, the phonology, the orthography and the morphology, they require considerable background knowledge on the part of the teacher. And when a student makes an error, to be able to target which area the student's error is in is difficult, takes some knowledge, but also is really useful because then, you can help the kid not just correct the word, but learn how to correct the word or why the word needs to be corrected. And that, hopefully, would influence the student's future spelling attempts. Also, we're going to connect intervention to errors. So we're going to use that knowledge of phonology, of orthography and of morphology to intervene on the student's behalf. And we're going to do that from tracking student errors and figuring out what kinds of errors there are. Good teachers of spelling also teach often to the whole class, in small groups and with individual students. This includes teaching more basic writing skills. So we're going to want to work on our instruction, our spelling instruction, in the whole class. And that might be introducing a concept, for example, something like the double f I mentioned or e, d as a suffix. Then we're going to go on to work in small groups with kids cementing this through the activities like spelling dictation and suffix differentiation, in the case of e, d, things like that. And then individual students might need more intensive remediation, particularly if they're struggling. We're also going to want to model, explain and provide guided assistance when teaching. So I'm going to show them how to do it. That's modeling. I'm going to explain why I made the choices I did, why I spelled the word the way I did, the technique I'm using, etc. And I'm also going to guide them to do it. So I'm not going to just spell the word correctly and say, "You guys do this," because what that's going to end up with is just kids copying correct spellings down multiple times for reinforcement. And while a little bit of reinforced spelling practice isn't a bad idea, doing that as our sole instruction isn't really going to be useful. So that providing guided assistance, where we're talking about the spelling, where kids are spelling words and we're talking through that process as they're doing it, that's in sort of the we-do mode of gradual release. And that's going to be really important for our students. Students need to develop a knowledge of the phonology, orthography and morphology of English. So I've mentioned, on several occasions, that teachers need to have a knowledge of these things. But in addition to teachers having this knowledge, students are really going to need this knowledge as well. Students need to be taught how to spell words they frequently use when writing. So one way to choose spelling words is to look at students' errors when they write and to choose words based on those errors. And that's going to be really effective because we want students to learn words they're going to spell in their own writing. We want students to learn spelling words based on their writing because those are the words they are actually going to be practicing with. And the last thing we want is for students to be writing words multiple times incorrectly. We also want students to learn how to generate plausible spellings for unknown words. So we want students to actually recognize, make educated guesses. So a lot of this piece is teaching students to make a logical attempt rather than to make a random guess, to think, not to guess. And also, we want them to know how to check and correct any spelling miscues that occur. Part of that may be using a spelling checker in some situations. But then it also might be, "Hey, if I point out this word to you and you've misspelled it, what are some other alternatives? Or how do I go through and process that error to see about a correction?" Here's some good practices. One is to use phoneme-grapheme mapping. And this is where you say a word. And the student uses box letters to spell out. Actually, I'm going to show you an example of this in a minute. Use multi-sensory teaching techniques, including S.O.S. spelling. And S.O.S.

stands for simultaneous oral spelling. Cluster words by pattern. What that means is we're going to look at words that share some structure in common. For example, we might learn a bunch of a, i words together. Provide frequent practice. So if you're devote ... Do something like devoting a day to spelling, that's not as good as developing or devoting a portion of each day to spelling. So 10 or 15 minutes a day on spelling is much more useful than an hour of spelling on Monday with no spelling to follow. Teach word analysis, including phonology, orthography and morphology. So we're going to teach our students these different categories. The terms are less important than the concepts. We're going to teach them sound-symbol relationships, the alphabetic principle. We're going to teach them orthography, spelling patterns that will guide our choices and also morphology, these meaning parts. So that's things like the e, d that we mentioned. Okay. So this is the example of phoneme-grapheme mapping. And this will work better because I have a model for you. Phoneme-grapheme mapping and S.O.S. spelling, here's an example. The teacher provides student with a whiteboard with three boxes drawn on it and says "/chat/." And those boxes, actually, were developed by a man named Elkonin, Elkonin boxes, you might have heard of. The student would segment the sounds, /ch/, /a/, /t/. The student repeats "/ch/" and as she writes c,h in the first box. So this is that simultaneous oral spelling. I say "/ch/" while I'm writing c, h. The student repeats "/a/" as she writes a in the second box. and then the student repeats "/t/" as she writes t in the third box. Cluster word by pattern. Some examples, if you want to teach stay, then you might also teach bay, ray, away, etc. If you want to teach jumped, you might also teach looked, danced, soaked, etc. Why would I do that? Well, I'm on teach stay with these others because a, y is the most common spelling of long a at the end of a word. It makes sense to teach other words that prove this. And I want to teach jumped with other /t/-ed words like looked and ranked because that represents or indicates the past tense. It's pronounced as "t." And it's right after an unvoiced sound. But it makes sense to teach this other words that have that unvoiced sound, like /k/ and /s/ and /p/. And then that stimulates that /t/ sound. But it's still going to be spelled e, d because we're still functioning in the past tense. Here are a couple of morphology and orthography. So unkind, if you want to teach unkind, it might make sense to teach undo and unable and unclean. Un- is a very common Anglo-Saxon prefix. It's good for little kids like K through two kids. It means not. It makes sense to teach un- words together to group them by pronunciation. Un-, we're going to spell that u, n, but also to group them by meanings since all of these words have to do with not. Undo means to not do or unable means not able. Unlike means not like or not similar. So that's a really useful pattern, both for pronunciation, again, spelling, but also, for the meaning. Baking is an example of that silent-e spelling rule I mentioned earlier. And I might want to teach some other dropped-e words like baker, shaking, hoping, famous, lazy. And I might want to do some that keep the e because they don't have vowel suffixes, like noiseless and wholesome. So I want to teach baking in the context of other words that follow the same pattern. So I'm not teaching baking by rote memory. Instead, I'm teaching baking with words that follow the same pattern. So I'm teaching a concept rather than a rote memory activity. In sum, we should provide frequent practice in word analysis at the phological, orthographic and morphological levels. If you do so, you will make your students better at spelling, at vocabulary, at comprehension, at writing and, as a result of all of that, at thinking. So here's some questions you want to think about going forward. Is spelling currently taught in grades K through two in your school? And I would actually argue that it should be taught going forward as well. But our focus here is K through two. Is there a consistent and pervasive understanding of the importance of spelling as it relates to the development and improvement of writing skills? So at the administration level as well as at the teacher level, do the faculty recognize the importance of spelling and how it's going to work? In other words, do

they have the knowledge that's in this webinar and further training in phonology and orthography and morphology to guide their student instruction? It's one thing to say the teachers are teaching spelling. It's another to say do they have both the background and the recognition of the importance of what they're teaching? Teachers teach what they know. So we need to know a lot about spelling. And we need to use that to guide our instruction. How much time is allocated to spelling instruction? So I mentioned earlier that more frequent time, more frequent occurrences of spelling instruction, are better than big, long chunks of time devoted to spelling. But you'll want to think about, in terms of planning your scheduling, how much time is committed to spelling, how that instruction's linking to the other educational practices, etc., really, really important for what we're thinking about. So it's one thing to know it's important. It's another thing to make sure that you're actually allotting effective quantity of time for that instruction. Is there appropriate professional development in the teaching of spelling? One of the most important things that research is saying is the absolute essential nature of professional development. Once again, teachers teach what they know. So if the school says, "We're all going to teach spelling," the teachers who know spelling, who know about it, who know its effective practices, they're going to teach it more effectively, obviously, than the others. Also, they're going to have a greater buy-in for what that spelling instruction might look like and for its value and importance. They're going to be glad, pleased that it's there. And they're going to know what they're doing. A teacher who doesn't know a lot about spelling might resist or, perhaps worse, might not have the background they need. Well, they're not going to have the background they need, I'm sorry, might not commit to effective teaching strategies. They might be teaching spelling but not teaching it well. That's also going to provide some difficulty. So we're really going to want professional development in the teaching of spelling. One thing I've noticed about spelling instruction, as I go into schools and work with faculty, is that faculty members need not just time with each other within a grade, for example, the third-grade teachers' meeting or the kindergarten teachers' meeting for time, but also time across the grades, so a chance for the K teachers to meet with the first-grade and the second-grade teachers to see if first of all, the spelling strategies we're using are systematized because we don't need a method that suits the teacher. We need methods that suit the kids. And one thing is there might be more than one good way to teach a particular concept. But we want to be using the same language, the same examples, the same strategies across grades so that kids are using those strategies as tools. They're not spending as much time learning the strategy as they are learning how to implement it. And that's really going to be important for our instruction. Also, does our district or LEA include spelling in its written ELA curriculum? Is it a component of what's in the established curriculum? That's going to be useful for a couple of reasons. One is teachers entering into the district are going to recognize its significance and that it's a part of what they have to teach. So we've obviously always got turnover. And we have retirements. And we have new teachers coming in. And that's fine. But we want to make sure that part of our school's representation of spelling is that it exists in the actual curriculum. That curriculum piece is also going to help guide administration. So we have new principals and superintendents and assistant superintendents and all of these members of the administration. And if it's established in the curriculum right from the get-go, that administrator's going to know that this is a piece of this school, it's an important piece and how it's being used in the curriculum, what's being covered, how it's being taught. So I want to talk to you briefly about the supplementary materials that are available for you. These were developed by the MTSS Subcommittee on Writing. And I really think you'll find them valuable. Team Worksheet 2, actually, is a worksheet you can receive on the web site. It can also be e-mailed to you. And it's a particular worksheet that asks teams to look at spelling in their schools. It has

good probing questions. And it really fosters an excellent discussion of spelling at the school and district level. So if you're viewing this webinar, participating in this webinar as an administrator, you might think about at least looking at Team Worksheet 2. Watching a webinar is one thing. But thinking about how the knowledge learned impacts teaching and learning, that's going to be much more useful than just viewing the webinar. So this worksheet can kind of stimulate the discussion. And I've actually seen this worksheet used a number of times. And it actually always encourages a really useful, interesting discussion about spelling at the school level. Also, Transcription Skills, Recommendation 3 and this is a single piece of paper. And there are also ones for keyboarding and handwriting. But it's a single piece of paper that establishes the research on spelling, that establishes a core recommendation for spelling and that establishes a little bit of citation information to back it up. This is really useful when trying to talk to administration, trying to talk to new teachers about, "This is what we want to do. We want to teach spelling. But here's some research that backs up what we want to do." We're in research-based educational practices. And that's so vital for going forward in education. But that also means that, when you're doing something, people are going to ask you why you're doing it, "What's the research behind this? What value do you see in it, etc.?" And I think that one sheet on spelling will really help you with some support for best teaching practices in spelling. And remember I began our webinar talking briefly about sample scope and sequence. But that sample scope and sequence is an important document. I really think, not only will it stimulate interesting discussion amongst teachers about what's covered, when it's covered, for how long it's covered, but I also think that it will serve as a sounding board for your ideas about your own scope and sequence about your curriculum, etc. It's really, really good feedback. Then the final slides are the citations and research we used to build this webinar. And these are obviously to prove what we've done and to validate it. But it also might be useful in terms of future research, future thinking about what you're doing and why you're doing it. I just want to show you. This is my contact information. Again, my name is William Van Cleave. And I'm an educational consultant in private practice. and my e-mail address is wvancleave@wvced.com. And my web address is wvced.com. And you can go there and get other information about me. Feel free to contact me with spelling questions if you like. You can also contact PaTTAN officials within the PaTTAN network. And that's also great. I hope you've enjoyed this webinar. I had a lot of enjoyment sharing this knowledge with you. And best of luck in your teaching practices regarding spelling. Thanks very much.