Help Your Child's Memory

All About® Reading
All About® Spelling

Help Your Child's Memory

Hi, my name is Marie Rippel and I'm the author of the *All About® Reading* and *All About® Spelling* programs. Thanks for downloading my free e-book on helping your child's memory!

There is a common misconception about memory and how it affects learning. You may believe that a "good memory" is something that your child either has or doesn't have. If that were the case, it would follow that there is little you can do to help your child become a better learner.

But you *can* help your child with his memory. In this e-book, I'll share with you techniques and methods that will help you strengthen your child's memory and help him achieve learning that sticks.

As you read through this e-book, feel free to jot down any questions you may have. You can email us at support@allaboutlearningpress.com, or call us at 715-477-1976. No question is too big or too small! We're here to help.

Make learning a joy!

Marie Rippel

Marie Rippel
Founder, All About® Learning Press, Inc.

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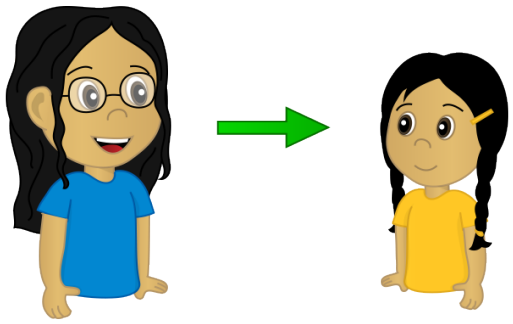
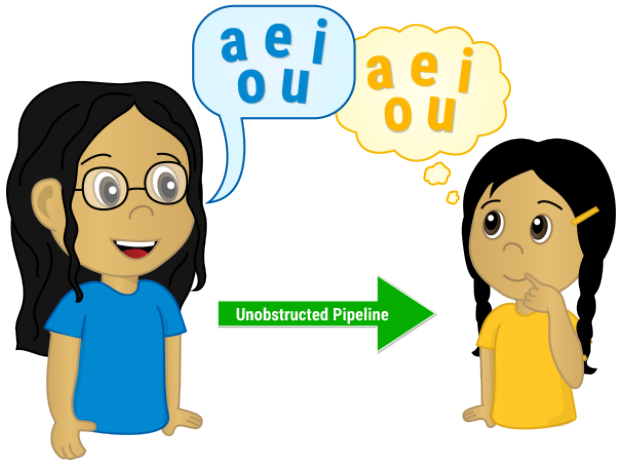
1 Understand the Funnel Concept

When explaining new concepts and teaching your child, it's easy to assume that there is an unobstructed pipeline between the two of you.



You explain something—like the concept that "every word has a vowel"—and you expect that your child will automatically file that little nugget of information away and remember it in the future. You assume that since you taught it, your child will "get it" and your work will be done.



For many parents, that picture is as far from reality as it can be. As nice as such a scenario sounds, it simply isn't always the case in real life. You may often feel that your child just isn't "getting it," or that the lesson went right over your child's head.

When you teach, there are three possible outcomes.

No learning—When nothing at all sticks.

Fragmented learning—When your child remembers some information, but just bits and pieces of the lesson.

Meaningful learning—When your child remembers and is able to use or apply the information that you taught.

Obviously, meaningful learning is the ideal goal, but if your child is struggling with reading or spelling, then this type of learning is probably not occurring as often as you would like.

But there is a solution to the problem.

A quick look at how the brain works will illuminate the path to a solution. Research shows that there are three types of memory.

Sensory memory—This is where we store our first impressions of sights, sounds, and touch. Sensory memory is unlimited and we can store vast amounts of sensory input.

Long-term memory—This is where we store information for longer periods of time, anywhere from thirty seconds to a lifetime. Long-term memory is unlimited in capacity. When you teach, you want your child to store the information you introduce in her long-term memory.

Short-term memory—This can be divided into immediate memory and working memory. It is a temporary holding place for new information that comes in through sensory memory. Short-term memory then pays attention to some of that input and integrates it into long-term memory.

Unlike sensory memory and long-term memory, short-term memory is quite limited in capacity. A classic 1950s study conducted by psychologist George Miller found that anywhere from five to nine items could be held in short-term memory at a time. Since then, additional studies have shown that the capacity of short-term memory is more like three to four "chunks" of information. For example, we remember phone numbers in groupings: the first three numbers and then the last four numbers.

Over the last 50 years, educators have acknowledged the limitations of short-term memory, yet do not often attempt to integrate this understanding into their lesson plans.

It's time to rethink the concept of an "unobstructed pipeline." Instead of picturing information passing from parent to child through an unobstructed pipeline, it's more accurate to picture the information entering the wide opening of a funnel and passing through the narrow opening at the other end.

Free Poster!

Remind yourself to respect your child's funnel with this free printable poster! Download it now by following the web address below.

http://bit.ly/Respect-Funnel

The funnel concept explains why a child may retain nothing from a lesson or may achieve only fragmented learning. With so much information to share with your child, it's tempting to teach too many things at once—but the limits of short-term memory can prevent this information from being permanently retained.

Although you pour a lot of information into the top of the funnel, your child's memory can only attend to a certain amount of the new information. Your child's memory becomes overloaded and either dumps the new information entirely or is only able to store fragmented pieces of the information. At this point, you lose control over what actually makes it through the funnel.

Since only a small amount of new information can make it through the funnel at a time, it's important to be selective.

Carefully choose new information that will make the biggest difference for your child.

To apply this concept in a practical way, let's take a look at a common spelling test that focuses on the sound of long I.

Name _____ List D-5: Long I sound

Spelling List 5

1. item	item	item
2. ideas	ideas	ideas
3. timed	timed	timed
4. pie	pie	pie
5. cry	cry	cry
6. cried	cried	cried
7. try	try	try
8. tried	tried	tried
9. frying	frying	frying
10. light	light	light
11. I'm	I'm	im
12. buying	buying	buying
13. highest	highest	frying
14. fight	fight	fight
15. lives	lives	lives
16. why	why	why
17. violin	violin	violin
18. shines	shines	shines
19. kindness	kindness	kindness
20. polite	polite	polite
Bonus Word		
★ rhyming	rhyming	riming

Level D

This list includes the following information:

- long I spelled Y, as in *cry*
- long I spelled with an I in an open syllable, as in *item*
- the letter I sometimes says its long sound when followed by two consonants, as in *kindness*
- long I spelled IGH, as in *light*
- long I spelled IE, as in *pie*
- the letter I can be long when it is followed by a consonant and Silent E, as in *time*

Getting confused yet? Has this list given you information overload? Wait—there's even more!

The authors of this spelling list decided to throw in two more curve balls:

- The word *timed* has suffix ED added, so the child must determine when to keep the Silent E and when to drop it.
- For the word *cried*, the child needs to know she must change the Y to an I before adding a suffix beginning with a vowel.

That's a lot of information for just one spelling list!

Contrast that spelling list with this one:

1. night	5. light
2. right	6. tonight
3. high	7. sight
4. might	8. fight

This is an example of the kind of list used in the *All About Spelling* program. Only one concept is introduced in this spelling list: long I spelled IGH. And that single concept is practiced using multisensory methods—auditory, visual, and kinesthetic.

Now ask yourself: Which list acknowledges and respects the child's short-term memory? Which list is more likely to get through the funnel and result in lasting learning?

Research has shown that when short-term memory isn't overloaded, increased learning can occur. In the case of these two spelling lists, it may look better on paper to be covering twenty words at once, but the truth is that your child will achieve a higher percentage of permanent learning when the limits of short-term memory are respected.

If you avoid presenting your child with more information than he or she can process at one time, the concepts and skills are more likely to be stored in long-term memory. And that means that significant amounts of meaningful learning can occur.

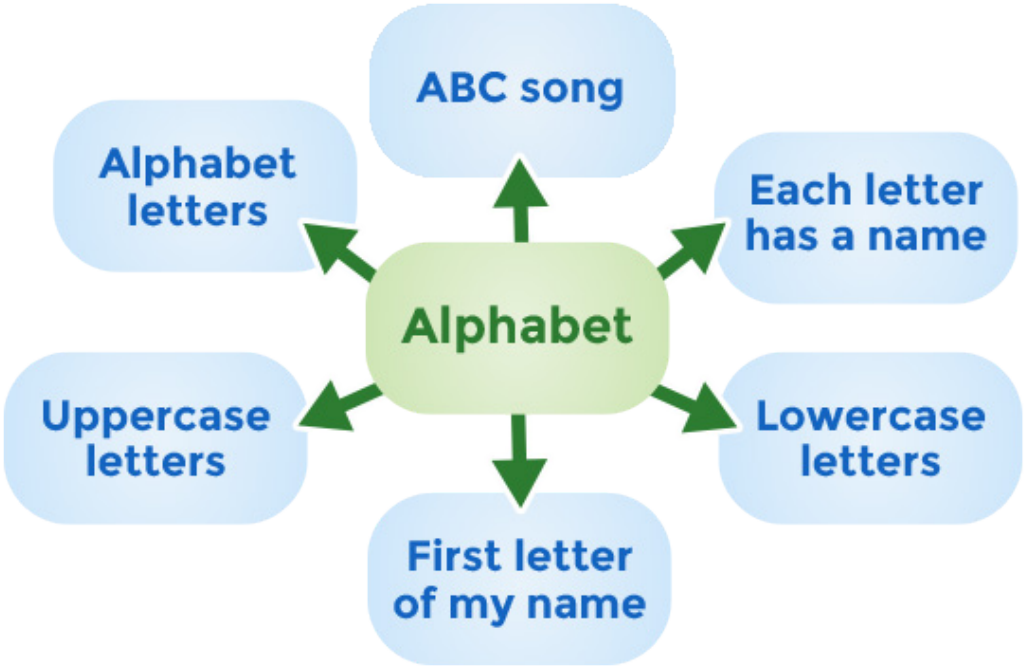
From now on when you're teaching your child, think about teaching through a funnel and consider introducing one main concept at a time. The benefits are limitless!

2 Make Connections

As your child learns, he adds new information to what he already knows. His brain is continually reorganizing, adapting, and restructuring. You can help with this process. There are several ways you can organize information so your child is more likely to remember it later.

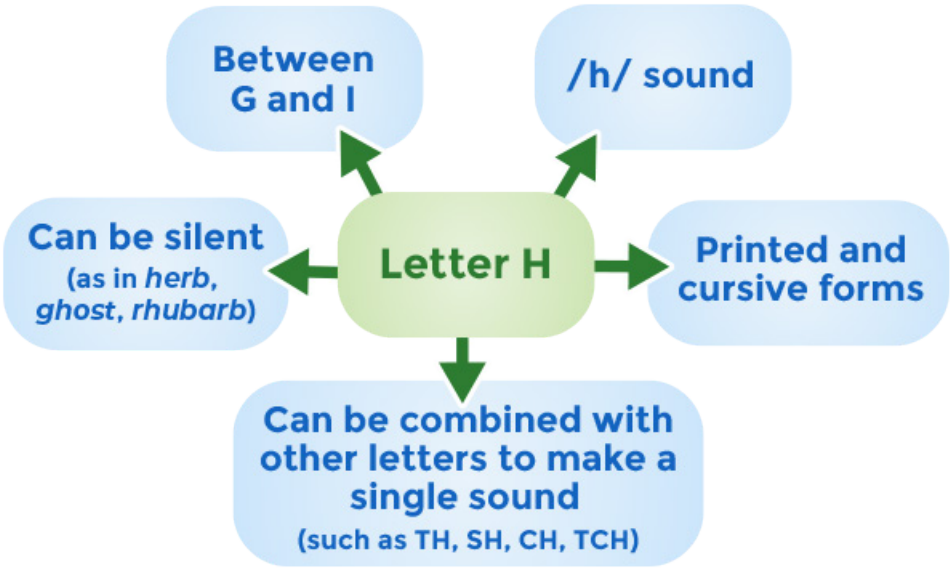
Let's look at schemas.

Knowledge is organized into elaborate networks called *schemas*. A schema is a model of how knowledge is organized and how new information is added. For example, a young child may have the following schema for the alphabet:



Gradually this schema becomes much more complex as the child adds more information to his knowledge base: the sounds of the letters, how to print or write cursive, which letters are vowels, and how to blend letter sounds to read words.

Each letter of the alphabet will have information attached to it. For example, a schema for the letter H might look like this:



The letter H is fairly simple. The schema for vowels will be much more complex because of the wide range of sounds that a vowel can make alone and in conjunction with other letters.

Every bit of information stored in your child's brain is connected to something else.

As your child's brain builds a schema, new information is attached to previously stored information. Although we can't show it through a simple drawing, the number of connections between pieces of information is unlimited since multiple ideas and concepts can be intricately interconnected.

If there is nothing to relate the new information to, there is no way for it to be stored in long-term memory. Instead, it is dropped from short-term memory and completely forgotten. If someone talks to you in Russian and you don't speak Russian, there is nothing for that information to connect to and the information is dropped.

You can help your child build a schema that enables effective recall.

All About Reading and *All About Spelling* help your child build an efficient schema or network of knowledge. Here are the top three ways our programs help organize information:

1. **Make connections to things your child already knows.** For example, one of the first spelling rules your child will learn is that CK is generally used for the sound of /k/ immediately after a short vowel, as in the words *rock*, *snack*, and *pick*. See how the CK comes right after the short vowel in those words?

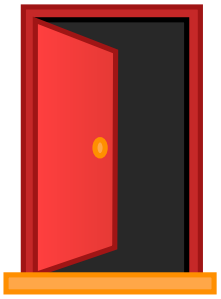
   It just so happens that there are two more phonograms that come only after a short vowel: DGE and TCH. DGE spells the sound of /j/ only after a short vowel, and TCH spells /ch/ only after a short vowel. So when it comes time to teach the usage of DGE and TCH, it is helpful to make a connection to the rule they learned about CK. The rules are so closely related that we should tie them together in your child's brain instead of treating them as separate ideas to be stored randomly.

Watch a Video

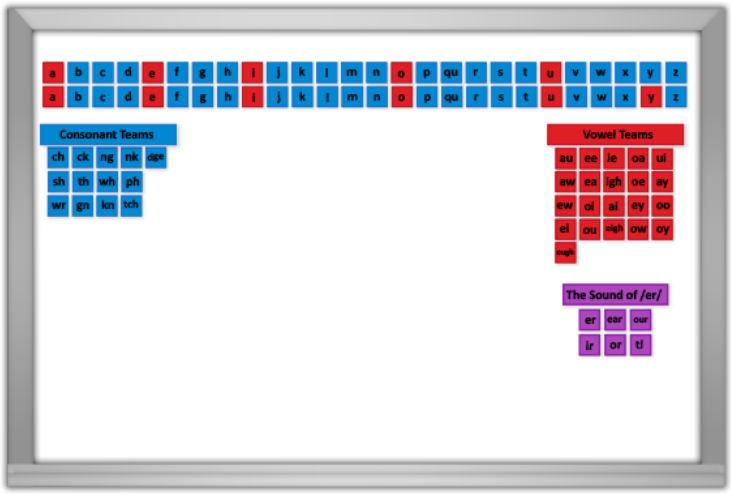
Would you like to see a visual presentation of how schemas are formed? Watch the short video in the link below for a demonstration!

http://bit.ly/Schema-Video

2 **Use analogies.** An analogy is a comparison between two things that are otherwise dissimilar. For example, when we teach syllable types, we compare an "open syllable" with an open door. An open syllable ends in a vowel; there is no consonant closing it in. The word *she* is an open syllable because there is no consonant closing in the vowel E. Likewise, the first syllable in the word *apron* is an open syllable, with no consonant closing in the vowel A. Students label these syllable types with a syllable tag representing an open door. Using analogies is a powerful way to make connections in the brain.



3 **Provide content that has unifying themes.** For example, our color-coded letter tiles (bit.ly/LetterTiles) are grouped according to themes: ways to spell the sound of /er/ are purple, vowel teams are red, consonant teams are blue, and so on.



By helping your child build an organized schema, you'll be helping her build her long-term memory. Each new bit of information will have a logical place to connect to and your teaching will be more effective.

3 The SMI Method

Over and over we hear from frustrated parents and teachers: *My child can't remember anything I'm teaching. There's something wrong with his memory.*

At first that may seem like bad news, but it may not be as bad as you think. Using a multisensory approach can transform your reading and spelling lessons—for both you and your child.

The problem might not be your child's memory; it might be the way you're teaching.

To understand why, let's look at where learning begins.

It would seem logical that learning begins with the brain, but it doesn't; it actually begins with your senses. We can think of our senses as pathways to the brain, and when we teach reading and spelling, we can engage three of these pathways: sight, sound, and touch.

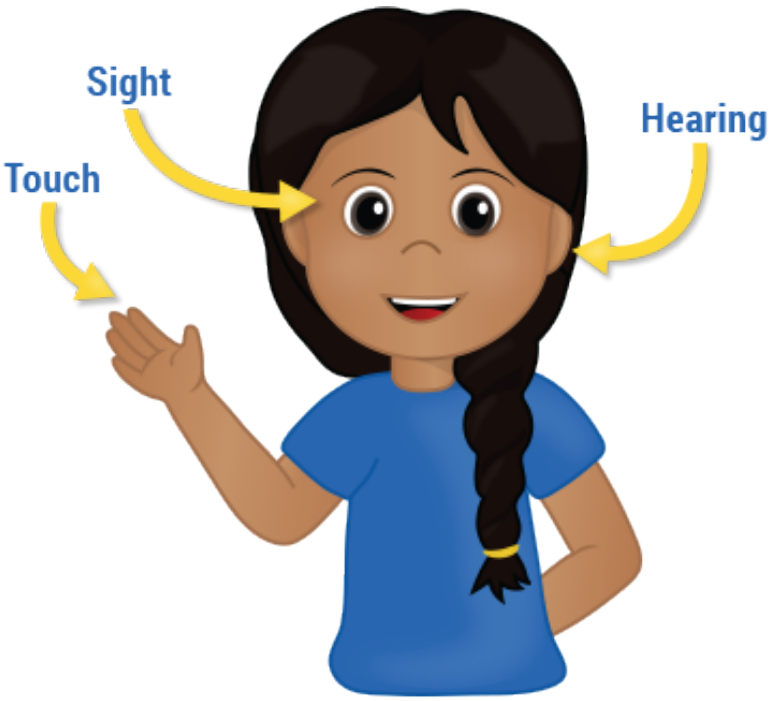
Unfortunately, with most curriculum spelling and reading are taught primarily through the visual pathway, ignoring the other major pathways to the brain. But not only is it possible to activate the auditory and kinesthetic pathways to the brain, doing so is extremely beneficial for most learners.

Engage All Three Pathways

Multisensory teaching is a big improvement over teaching through a single pathway to the brain, but the real power comes when you combine all three pathways *at the same time*. This is called Simultaneous Multisensory Instruction—the *SMI method*.

Think of your eyes, ears, and hands as information receptors for your brain.

Your senses gather information and send it to your brain for processing. Your brain decides whether to pay attention to the information; if it does, the information is stored in your short-term memory for further processing. The more receptors you involve, the better the chance that the information will be retained by the brain.



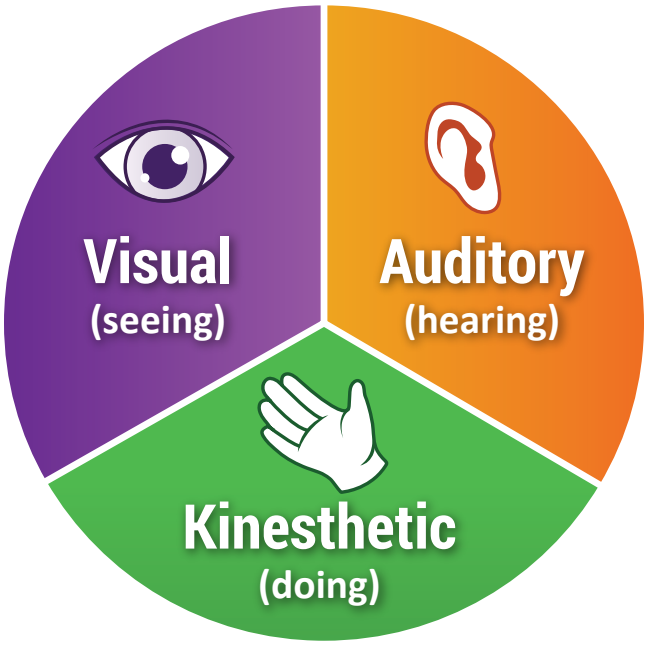
Multisensory learning is powerful!

Interestingly, when children are taught using all three pathways to the brain—visual, auditory, and kinesthetic—they learn more than when they are taught through only one pathway.[1] The more senses we involve, the more learning occurs. So even if your child tends to prefer visual learning, it is still important to teach through all three pathways.

By the way, when you use multisensory teaching, it isn't necessary to figure out whether your child has a particular learning preference. That's because the best way to teach is to involve *multiple* pathways to the brain rather than target just one pathway.

Simultaneous Multisensory Instruction—or the *SMI method*—is a special subset of multisensory teaching. Instead of involving one pathway at a time, SMI activates two or three pathways to the brain at the same time.

SMI is powerful because, as neuroscientists say, "brain neurons that fire together, wire together."[2]



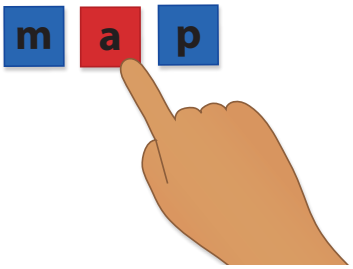
When we teach using multiple senses simultaneously, the neurons in the respective parts of the brain fire at the same time and wire together to create neural networks. These neural networks allow the brain to store and retrieve information much more effectively and efficiently.

When we say that *All About Reading* and *All About Spelling* are multisensory programs, it is this highly effective approach that we are referring to.

Learning Preferences

Here's something to be aware of: when you teach, you may be ignoring one or more learning pathways because of your own personal preference. For example, if you prefer to learn by discussing ideas, you may tend to present your lessons using auditory methods, minimizing visual and kinesthetic teaching methods. You may not even realize that you are doing it. But keep in mind that all three pathways to the brain should be engaged in every lesson, simultaneously whenever possible.

To show you how the SMI method is used in practice, here's an example from the *All About Spelling* program: When the student learns a new phonogram, he writes the letter or letter combination as he says the sound. This simple activity simultaneously engages the visual, auditory, and kinesthetic pathways to the brain, which helps the new learning really stick.



Here's another example of the SMI method, this time from the *All About Reading* program: When blending, the child touches one phonogram tile a time, saying the sound as he touches the tile. Again, this simple activity simultaneously engages all three pathways: visual (seeing the phonogram), auditory (saying the sound), and kinesthetic (touching one tile at a time). This activity also reinforces the skills of directionality, phonics, and blending, and leads to long-term retention.

Be prepared to see your child's memory problem improve dramatically.

After you use these multisensory methods with your child, you will never want to go back to standard teaching. You will get hooked on seeing results and on having your hard work pay off. You might even forget that you once thought your child had a memory problem because you finally found a way to make the information stick in your child's brain.

That's the power of multisensory teaching and the SMI method!

[1] Farkus, R.D. (2003). Effects of traditional versus learning-styles instructional methods on middle school students. *The Journal of Educational Research*, 97(1), 42-51.

[2] Sousa, D.A. (2017). *How the brain learns*. Thousand Oaks, CA: Corwin, a Sage Publishing Company.

4 Make Learning Stick

Have you ever taught something to your child one day only to have him completely forget it the next?

That is one of the most frustrating things as a teacher, isn't it?

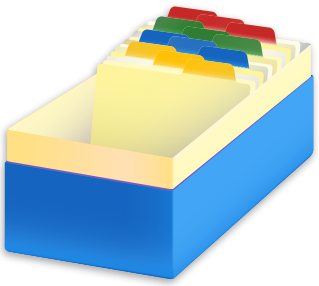
One of your main goals is to make reading and spelling "stick" in your child's brain, and this section will give you solid techniques for doing just that.

Let's get technical for a moment.

This will be quick, but it is important to understand the basic differences between short-term and long-term memory.

Short-term memory is a system for temporarily storing, managing, and recalling the information necessary to carry out particular tasks. It keeps track of things like where you parked your car an hour ago or what you plan on having for dinner tonight. For your kids, facts stored in short-term memory might include the spelling for the word *stationery* or the new grammar rule they learned this morning.

Long-term memory, on the other hand, is a system for *permanently* storing, managing, and retrieving information for later use. Long-term memory helps us remember and recall things like proper spelling, punctuation rules, and vocabulary words. Items of information stored as long-term memory may be available for a lifetime. And that is what you want for your child—*permanently ingrained learning*.



If you want to make learning stick, you must include review in your lessons.

Parents and teachers often lament, "I taught this same information to Joey last month, and now he's forgotten it." They wonder what is wrong. They don't realize that presenting the material once or twice isn't enough. It's not their fault—they just honestly don't know how critically important it is to review. Review is an area that isn't stressed nearly enough by educators or curriculum developers.

But the truth is, to make sure that your child really knows the material, you have to have consistent and direct review. You can't leave it up to chance and hope that your teaching will stick in his brain. As his teacher, you must take responsibility and ensure that your child remembers important information.

Review Tips

Looking for some great ways to add reading and spelling review to your routine? Check out the links below for some fun ideas!

http://bit.ly/Reading-Review

http://bit.ly/Spelling-Review

And to do that, you need a plan.

Without a plan, you are probably settling for short-term learning without even realizing it. Short-term learning is damaging for several reasons. Not only is it a waste of time, but it also sets up a cycle of intense frustration for both you and your child.

When your child forgets a lesson soon after you present it, you feel like you are spinning your wheels and not getting anywhere. You might even begin to wonder if your child has a learning disability. But even worse than that, when he can't remember his lessons, your child probably feels like something is wrong with *him*. Depending on his personality, he may internalize the frustration or he may act out. Either way, it becomes harder for both of you to sit through lessons that you know aren't going to stick.

There *is* a way out of this no-win situation, though.

We're here to make it easy for you.

Seven important review strategies are built right into the *All About Reading* and *All About Spelling* programs.

1 **First, we make sure your child understands the main point of the lesson.** Your child doesn't need to guess—it's crystal clear what the goal of the lesson is. For example, when your child is learning how to add suffixes to base words, he'll learn what suffixes and base words are and the difference between consonant suffixes and vowel suffixes.

Using letter tiles and suffix tiles (and our clear, scripted lesson plans), you'll demonstrate exactly how suffixes are added to words. The wording of every lesson has been tested and polished to make sure that the teaching is understandable. After all, the lesson must be understood before it can be reviewed.

2 **Next, review is built right into the lessons.** At the beginning of every lesson, you are prompted to do a quick review of previously taught material.

The built-in review ensures that you remember to do it and won't be tempted to skip over it.

3 **Multisensory methods are used during review time.** Since children learn best using sight, sound, and touch, it's important to use a variety of methods to review material. Reading and spelling concepts are reviewed in multiple ways: with word analysis activities, flashcards, recitation, games, and practical applications like problem-solving, dictation, writing, and conversation. And we use the SMI method (simultaneous multisensory instruction, which we discussed in section 3 of this e-book) for even more powerful review sessions.

Free Download!

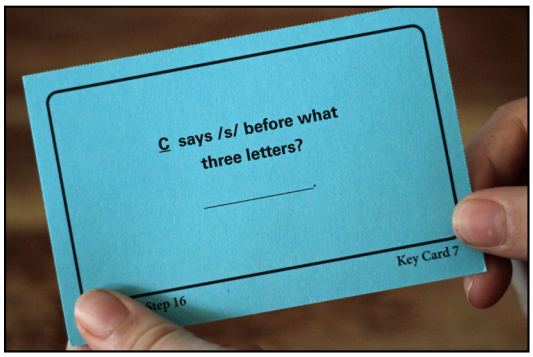
Looking for a fun multisensory activity? Practice phonograms with our free "Swatting Phonograms" game! Download this free printable by following the web address below.

http://bit.ly/Swatting-Phonograms

4 **Review is more frequent when a new concept is first taught.** Timing is important. If you teach a new idea but then don't revisit it for a while, the chances that your child will forget it are much greater. That's why we make sure that new material is reviewed daily at first. We keep it interesting with a variety of techniques like the Review Box, Fluency Practice sheets, Word Banks, and activity sheets. As your child shows mastery, we review less frequently, making room for other new concepts. Revisiting information this way pushes it into long-term memory and keeps it there.

It's also important to note that sometimes it appears that your student understands a concept when you first demonstrate it, but it may not be burned into long-term memory—so we don't stop the review too soon. You want your child to be able to access the information years from now, not just a week from now, so concepts are reviewed at intervals and continued until the material has been completely mastered.

5 **Certain concepts are reviewed using the same words until they are completely mastered.** For example, when learning a spelling rule, we use the same wording each time we review it: C says /s/ before E, I, or Y.

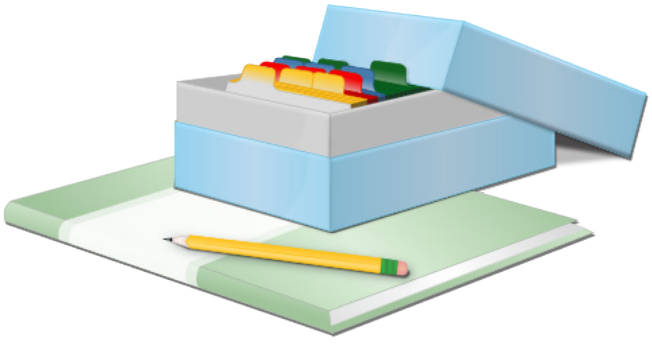


Let that wording get ingrained in your child's long-term memory so he can access it later when needed.

6 **Review is customized for each child.** Review is not a one-size-fits-all endeavor. Your child may need more or less review on a specific topic than the next child. If a concept has been mastered, you file it behind the "Mastered" divider in the Review Box and move on. If more practice is needed, you file it behind the "Review" divider. The system is as simple as can be, yet very powerful for making learning stick.

7 **Concepts are never "retired."** We don't just "teach it and forget it." After something has been taught, the lessons have your child apply his new knowledge to keep it fresh in his mind. Spelling words are used in dictation activities, and reading words are encountered in activities and short stories.

These review strategies are seamlessly woven into the entire reading and spelling programs. You don't have to consciously remember to do them because they are built right into the curriculum. You can sit back, relax, and enjoy watching your child make consistent progress!



After putting these methods into practice, you won't be able to deny that long-term learning is the way to go!

5 Improve Working Memory

Though it may seem like long-term memory is of greater importance than short-term memory, in this section we'll look at why one particular type of short-term memory—working memory—is such a critical part of the learning process.

Have you ever been introduced to someone only to realize five minutes later that you can't recall her name?

Or maybe you've experienced this one: you suddenly remember that you need to add something to your shopping list, but by the time you find a pen, you can't remember what you were going to write.

Have you ever been frustrated by your child's inability to remember a short list of tasks you've asked him to accomplish?

These examples demonstrate the potential shortcomings of the working memory. Inevitably, we all face these issues from time to time. But for a child with more significant memory challenges, these issues can have a dramatic impact on the learning process.

Is there hope? *YES!* But let's first consider several important questions.

The Importance of Working Memory

Working memory is one of the most important indicators of how easily a child can learn. In fact, research has shown that working memory is actually a much better indicator than IQ is of how easily a person can learn.

What is working memory?

Working memory is the ability to hold information in your brain for a short period of time while you work with or manipulate the information. Working memory is critical for learning to read and spell. For example:

- It helps you sound out unfamiliar words.
- It helps you keep your place in the text, allowing you to look away from the page yet still find your place again.
- It helps you remember the words you just read as you finish the sentence or paragraph, enabling comprehension.
- It makes it possible for you to compose a cohesive paragraph, writing down one sentence while you think of the next.

What are the signs that my child has poor working memory?

A child with poor working memory will struggle with tasks that require him to hold some information in his mind (such as a dictated sentence) while doing something else that is challenging to him (such as spelling the words).

Without some adaptations, he may fail to complete the task because crucial information (in this case, the remainder of the sentence) is dropped from the child's memory and is no longer available to him.

It may appear that the child is not paying attention, but in reality he has simply forgotten what he is supposed to do.

A child with poor working memory may have one or more of the following problems.

- He may have difficulty paying attention to lessons.
- He may seem uncooperative during learning activities.
- He may fail to comprehend what he is reading.
- He can't follow a string of instructions.
- He "spaces out" during lessons.
- He seems forgetful.
- He often misplaces things.
- He struggles to complete multistep activities.
- He often forgets what he was going to say.

What can I do to help build my child's working memory?

As you implement the six ideas below, you will begin to see improvement in your child's working memory.

1. **Avoid information overload.** When too much information is presented in a lesson, your child's working memory becomes overloaded.

   (Remember the Funnel Concept in section 1 of this e-book? Teaching just one concept at a time is generally more effective.)

2. **Eliminate distractions.** When your child is working, try to reduce distractions such as TV or radio in the background, siblings or classmates talking, and toys or other interesting activities nearby.

3. **Make sure your child is comfortable during lessons.** Physical stress (from things like headaches, an uncomfortable chair, hunger, being too hot or too cold, and eye strain due to vision issues or from facing a bright window) can have a negative effect on working memory.

4. **Read aloud every day for at least 20 minutes.** When you read aloud, your child has to recall what you just read and anticipate what is coming next. All the while, he is interpreting the words and comprehending the story.

5. **Do motivating activities with your child that require following instructions, such as crafts or recipes.** He should read one or two simple steps and then complete them. (Depending on your child's reading level, either you can read the instructions or he can.) This will exercise and stretch your child's working memory.

6. **And above all, have patience!** This might be the hardest part! Be encouraging and keep emotional stress to a minimum. If your child is worried about performing properly or disappointing you, that just adds another layer of stress that taxes working memory even more.

All About Reading and *All About Spelling* work well for students with working memory challenges.

All learning involves working memory, and I made sure that the lessons in our programs reduce unnecessary load on the working memory.

An effective working memory is a necessary part of the learning process. But the good news is you can help your child strengthen his working memory! With a bit of extra effort, you and your child will see *big* rewards!

- ✓ **Lessons are short and focused** on just one concept at a time.
- ✓ **When there are activities involved,** we give only one or two instructions at a time, and the scripted verbal instructions are easy to understand.

- ✓ **The lessons follow the same routine each day.** This lessens the demand on working memory because the student knows what to expect, making it easier to focus on the lesson.
- ✓ **The letter tiles are color-coded,** giving the student visual cues as to what category they belong to on the magnet board.
- ✓ **As a mastery-based program,** we make sure that students understand the basics before asking them to move on to a more complex task. For example, before asking a student to comprehend the sentence *The hawk sat on her nest*, we make sure that he is able to easily decode the word *hawk*. Because the child has already mastered the sounds of the phonogram AW, his working memory is freed up to work on comprehension.

Placement Guides

Not sure which level of *All About Reading* or *All About Spelling* your child should begin with? These placement guides will help you figure out the perfect level for your child's current abilities!

http://bit.ly/Placement-Guides

- ✓ **Crucial information is reviewed frequently.** This pushes the information into long-term memory, freeing up working memory space.

6 What's Next?

By reading this e-book, you've gained a new understanding of five ways you can help your child's memory.

Although some of the principles in this e-book may sound complex, *All About Reading* and *All About Spelling* break them down into easy, bite-sized lessons that are both easy for you to teach and easy for your student to learn.

While I originally developed these programs for my own child who had a hard time learning to read and spell, they've gone on to help over 150,000 children master reading and spelling—even those who were previously diagnosed with a learning disorder.

If you have any questions at all, please call us at 715-477-1976 or email us at support@allaboutlearningpress.com. My staff and I are passionate about helping children read and spell, and we would love to help you.

All About® Learning Press
We take the struggle out of language arts