

# Improving Spelling through Visual Memory

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Several years ago I had the opportunity to research and design a spelling series for Christian elementary schools. One of the profound findings in research is that the skills of spelling consist of about 40% phonics, 40% visual memory and 20% semantics, or meaning. In fact, most poor spellers over utilize phonics and “spell it like it sounds.” The skill that is missing is the one we employ when we’ve written something then said to ourselves, “That doesn’t look right.”

What we are actually doing is comparing our production to a mental image (MOI) of the word in our brains. This skill tells us if the i goes before e, whether the middle letter is doubled, if I need to drop the e after judge, etc. The process is related to visual memory—an essential process for school success.

Take for example, copying a teacher’s paragraph from the board. First, we must identify a sequence of letters or words, grasp them into visual memory, transfer our eyes to our paper, remember what to write, remember where to return on the board for the next segment, grasp it, transfer our eyes to the paper, remember where to place the next segment, and repeat the process until the task is finished. And you thought this was the easy, uncomplicated part of school!

Because visual memory is an essential component of spelling, I have worked with many parents to improve students’ spelling by working on the visual memory aspects of the process. Here are some of my suggestions to be freely shared with other parents.

1. Place the spelling words on flash cards.
  - a) Select from the list of spelling words for the week, a high-frequency spelling list such as *Dolch*, or words the student frequently misspells in daily assignments.
  - b) Use print for students through third grade, use cursive writing otherwise.
  - c) Place 8 to 20 cards (depending on age) in a plastic bag; place bags in a kitchen drawer.
2. Mount a chalkboard (about 3 by 5 feet) on a wall in the kitchen.

Answers to your questions:

- a) in the kitchen, because this is where you spend lots of usable time and the process is easier to manage; if the wall is not possible, use an easel
- b) a chalkboard, not a white board—it’s messier but it provides physical resistance which deepens the memory trace
- c) a large enough board to extend just above the head to the waist and about a half-foot beyond each shoulder of the student
- d) use two colors of chalk; a light one—white or yellow—and a dark one for corrections (Color enhances visual memory.)

3. Initiate the process. Plan to practice every day about 15-20 minutes or until you have exhausted the time you have available, or yourselves, whichever comes first. Here are the steps:

- 1) Choose a card—any will do as long as it is a word the student needs to spell.
- 2) Gain the student's attention and hold the card before him about two seconds then lay it on the counter.
  - If the student hesitates, give him one more two-second view.
  - Do not make the word visible during the process. The goal is to challenge the youngster to visually grasp the information and hold it in memory while working, not to copy from the surface of the card.
  - If the student still doesn't get it, ask what he remembers and review that information. Direct the student to look once more and focus on the part he couldn't remember.
  - If he still doesn't get it, that word is too difficult at this stage. Put that card away and choose an easier word.
- 3) Send the student to the chalkboard to write the word. In the meantime, you can continue cooking or other kitchen chores, but don't watch.
  - If the student hesitates again, let her return to you for one more two-second look.
  - If the student still cannot write most of the letters, just change to words with fewer letters until you see increased ability.
- 4) When the student finishes writing the word, he should turn around and say "check time." Don't look or give any feedback. Hold up the card, now at a distance, again for two seconds, then place it face down.
- 5) The student checks the word; proofreading is always her responsibility.
  - If it is correct and the student says, "Correct," check it. Then direct him to erase the word and return to you for the next card to be flashed and the process to be repeated. (See notes later.)
  - If the student recognizes an error, give him the opportunity to correct it, then verify it as you hold up the card once more.
  - If the student says it is correct when it is really wrong, ask her to come and get the card. She then takes the card to the board and matches letter to letter to find the mistake.

- To correct the mistake, the student does not erase. Rather he takes a dark color of chalk and marks over the letters that are incorrect. The dark color and heavy mark-overs will create a stronger impression in visual memory as to which parts of the word must be more carefully remembered.
- After correction, the student says, "Check time." If other corrections are needed, direct him to proof the word again.
- When you are satisfied with the correction, indicate your approval and direct the student to erase the board and return to you with the card. Take the card, gain the student's attention, and flash the card (yes, the same one) for two seconds. Put the card down and send the student to spell the word on the board.
- Repeat the process just as you did it the first time until the student has success spelling the word and you are ready to go to the next word drawn from the bag.
- Save the cards. After the student experiences some success, incorporate the words into three or four phrases. Add these phrase cards into your pack. This is the goal—to move from single words to phrases, e.g., wanted to go, all the people, can't go there, this huge one, etc.
- Don't use negative feedback. Just work the system. When you are working at the right level, you will begin to see progress.
- Occasionally, you can add in other skills, such as:
  - reading the word
  - using the word in a spoken sentence
  - practice writing certain letters several times for correct formation
  - writing other words in the same pattern, e.g.,
    - take, make, bake, lake, rake
    - ring, rang, rung (but wrong)
    - mail, sail, tail, rail, nail
    - door, floor
    - should, would, could (If you can spell one, you can spell all.)
    - sorrow, borrow, tomorrow
  - writing other forms of the word, e.g., do, don't; did, didn't; child, children; stay, station; move, motion; thank, thankful, thankfulness; pose, position, compose, disposition.
  - writing the word in a sentence, either her own or one you dictate
- Provide and discuss visual cues for remembering how to spell more difficult words. For example:
  - bird → bird (replace dot with bird shape)
  - stationary vs. stationery (attach to meaning)
 

stay	pen
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- capitol vs. capital  
     dome           all others  
     (of the building)
- principle vs. principal  
     rule            all others
- reception → receive  
   deception → deceive  
   conception → conceive  
     No need to remember i before e .... These are always  
     a form of "cept," a syllable that means "take in."

4. Continue the process. Hopefully, you can have three to five sessions a week. Here are a few more suggestions to make the process more effective.

- Spelling aloud is almost a useless skill, especially if the manner of testing is in written form and we want transfer to daily writing. Therefore, all practice of spelling words should be in written form. Even in the car on the way to school, consider using a small chalkboard or "magic" slate for spelling practice.
- After a word has been correctly written on the board, help the student see the sound-letter relationships, how we can know its spelling from other words that are similar, its meaning, use, how it can be changed by adding prefixes and suffixes, etc.
- Writing dictated sentences with some of the words is an effective means of improving handwriting and spelling. Doing it on a chalkboard gets it up perpendicular to the eyes and uses large muscle masses. Both aid in developing better fine-muscle coordination and in enhancing memory.
- Play a variety of games that require visual imagery and memory.
  - puzzles
  - Memory, Battleship, etc.
  - Use Memory cards, one set to each partner, with a visual block (screen) between them. One partner aligns four cards and then reveals them for two seconds. After the view is blocked, the partner matches the array. The screen is lifted to check accuracy and play continues.
  - Play the same game with colored blocks, shapes, numerals and letters.
  - Complete workshops for what's missing, hidden pictures, finish the picture, mazes, codes and word searches.
  - Play Hangman, work crossword puzzles or Sudoku.

Generally, parents report good success following these suggestions as they see improvements in spelling, writing, and in other areas in which visual memory are essential—such as rapid word recognition in reading. I trust your student will experience similar success.

## Graded Sight Word List Adapted from Dolch

Level A	Level B	Level C	Level D	Level E		Level F	Level G	Level H
a	big	and	all	about	live	as	always	cone
can	but	are	am	after	long	ate	away	drink
go	come	at	any	again	made	been	because	full
going	did	be	bet	an	many	before	black	green
help	do	fly	bring	around	myself	better	buy	round
I	find	for	don't	ask	new	blue	carry	wash
not	funny	little	he	both	of	fast	clean	
to	get	make	how	brown	once	first	cold	
we	good	may	jump	by	only	from	done	
will	have	me	much	call	or	grow	eight	
you	here	my	on	came	our	hole	fall	
	in	no	one	could	over	just	far	
	into	red	play	cut	ran	must	hurt	
	is	some	please	does	say	never	light	
	it	tell	put	down	sleep	off	own	
	its	that	read	draw	so	old	pick	
	like	this	run	eat	soon	open	ride	
	look	where	she	every	start	pretty	seven	
	now	with	show	five	their	pull	shall	
	out	work	sing	found	them	right	sit	
	see	yes	stop	four	then	under	six	
	take	your	thank	gave	these	use	small	
	the		there	give	three	warm	ten	
	think		they	goes	two	wish	those	
	too		today	got	up	yellow	together	
	want		try	had	upon		white	
	what		why	has	us			
	would			her	very			
				him	walk			
				his	was			
				hot	well			
				if	went			
				keep	were			
				kind	when			
				know	which			
				laugh	who			
				let				