Snow cave reading assessment of reading and pre-reading skills

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ASSESSMENT OF PRE-READING AND READING SKILLS By Susan R. Johnson, MD, FAAP 11/7/2017

If parents tell me that their child is “already” reading, then I look at HOW the child is reading. Usually children less than 7 years of age, as well as many older children, teenagers, and many adults, read using only the right side of their brain (by sight memory). These sight readers usually look at the first and last letters of a word, the word’s overall length and shape, and then take a guess at the word’s identity. When the left side of the brain is used for reading (specifically the left parietal lobe), then children will sound-out each word, phonetically, and therefore easily note spelling errors. Phonetic-based reading represents true reading and it occurs when a child can simultaneously sound-out words on the left side of their brain, while creating internal pictures and scenes in the frontal area of their right brain. Phonetic-based reading requires full development of children’s proprioceptive pathways (i.e. spatial awareness) and their bilateral integration pathways (i.e. the connections between the right and left sides of their brain), as well as, the ability to smoothly track with their eyes and converge both eyes, symmetrically. Children that are getting ready to phonetically read will be able to easily discern shapes drawn firmly on both sides of their back, stand in stillness on each foot with their eyes closed (for at least 8 to 10 seconds), skip with a cross-lateral pattern (i.e. opposite arm and leg, swinging), jump rope by themselves with 2 jumps for every single swing of their rope (forwards and backwards), cross their midline, and effortlessly discern each sound within a word (i.e. phonemic awareness).

I. ASSESSMENT OF RIGHT VS LEFT BRAIN, READING SKILLS:

a) If the child is just beginning to read, then have the child read, out-loud, the following misspelled sentences to you:

DGOS LVOE BNOES, CTAS HVAE TIALS, GAOTS LKIE GARSS Next, have the child read, out-loud, the correctly spelled sentences to you:

DOGS LOVE BONES, CATS HAVE TAILS, GOATS LIKE GRASS

Now, ask the child if the two sentences are the same or different in any way.
Most young children, that are only **reading by sight** (i.e. the spatial recognition of a word), will say that the misspelled sentences are exactly the same as the correctly spelled sentences, and they will not notice any differences in the spelling. If these **sight readers** have practiced spelling individual words, then they will notice some of the misspelled words, while still fluently reading them. Children that **phonetically read**, will immediately notice ALL of the misspelled words, because they are stringing-sounds together in order to sound-out each word. These **phonetic readers** will understandably struggle a little, while reading the misspelled sentences.

b) If the child has been reading for a while, then have the child read the following two paragraphs out-loud, starting with the misspelled paragraph. **Sight readers** will fluently read both versions and often

will not notice many of the misspelled words. Sight readers will also read with a monotone and run sentences together. **Phonetic readers** will usually struggle more with the misspelled paragraph, and they will immediately note all of the misspelled words. If the phonetic readers are simultaneously creating inner pictures while reading, then they will read with inflection (modulating their pitch) and naturally pause at the end of each sentence.

Six byos wnet on a vcaatoin tegohter. They wnet fsihing in a bule baot.
One boy cughat a big fsih. The ohters did not ctach a tihng. They decdied to go hmoe.

Six boys went on a vacation together. They went fishing in a blue boat.
One boy caught a big fish. The others did not catch a thing. They decided to go home.

c) After the child reads the second paragraph (that is correctly spelled), ask the child if he or she saw any pictures or a movie inside of his or her mind while reading. Have the child share those pictures or images with you. If the child is predominately **sight reading**, he or she will not be able to simultaneously create many internal pictures. (Note: Sometimes a child can be reading phonetically, but if the bilateral integration pathways have not fully developed, then these children, also, cannot form many inner pictures, simultaneously, while reading.)

d) If you are seeing older children (at least 4th or 5th grade), teenagers, or adults, then have them read, out-loud, the correctly spelled version of “Building a Snow Cave”. After they read the story to you, then ask them to share with you any pictures, if any, that they saw in their mind. Next, read “Building a Snow Cave”, out-loud, to them, while they just listen. Now, ask them to describe any inner pictures or scenes that they saw in their mind. If children and adults are predominately, **phonetically reading**, then they will have created almost the same number and quality of inner pictures when they read, “Building a Snow Cave” for themselves, as compared to, when you read the story to them. Children and adults, that are predominately **sight reading**, will create far more inner pictures when you read, “Building a Snow Cave” to them, as compared to, when they read the story, for themselves.

e) Give the older child or adult a series of words to read, both forwards (left to right) and then immediately backwards (right to left). **Phonetic readers** will quickly and easily read a word like TRAMS, left to right, and then almost as easily read that word backwards, right to left, and say SMART. Even reading the word DRAWER will be read very easily, right to left, as REWARD. In contrast, **Sight readers** may quickly read the word SMART, left to right, but won’t be able to quickly and easily read the word (by sight memory), right to left. Eventually the sight reader may realize that they need to shift to another way of reading and attempt to sound-out the word, right to left, but they will struggle to do this and there will be a long pause.

II. IN SUMMARY:

Fluent, right-brain, **sight readers** read by spatially recognizing words, and therefore struggle with spelling, punctuation, capitalization, grammar, and deeply comprehending what they read, especially math word problems and science. Sometimes **sight readers** notice a word is misspelled, but it is because the word looks funny to them, visually, not because they are sounding-out the word. Because they do not deeply comprehend what they read and because they do not create an inner movie when they read, they often do not remember a story or book a day or two after reading it. Therefore, **sight**

readers often miss the details when reading and sometimes will just make-up details based on some words they remember reading. This is why writing book reports can be so challenging, and why these children often plagiarize when writing.

In addition, **sight readers** can only read words, fluently, left to right, since they only memorized the word, spatially, in that direction. **Sight readers** also have tremendous difficulties reading books like Tale of Two Cities or Huckleberry Finn , because these books are written in a dialect, where the first and last letters of a given word and the words overall shape and length may vary from the word the child has previously memorized. **Sight readers** usually struggle to sound-out long words that they do not know, and instead may quickly guess at the word, by sight, reading the word "Congregationalists" as "congratulations". Because **sight readers** cannot, simultaneously, create many inner pictures in their mind while reading, they prefer listening to books on tape or having someone else read a book to them. If they do read books for themselves, **sight readers** often prefer books that contain a lot of pictures, such as comic books and graphic novels. Otherwise, **sight readers** will not like to read.

Fluent, left-brain, **phonetic readers**, easily string sounds together to form words and easily sound-out words they do not know. They quickly realize when words are misspelled, since they are sounding-out the word to figure out its identity. They also can easily hear all the separate

sounds within a word (i.e. phonemic awareness) and can easily sound-out words just as quickly left to right as right to left (e.g. trams vs smart, warts vs straw, star vs rats). All they need to know is where to begin reading the word, and then they can string the sounds together going in any direction. **Phonetic readers** can more easily spell and learn capitalization, grammar, and punctuation rules. They can also more easily figure out when to us the words like "accept" vs "except", "bring" versus "take", and "their" vs "there" or "they're". **Phonetic-based readers** (assuming their bilateral integration pathways are also fully developed), will always create a movie in their mind, while reading, and therefore can more deeply comprehend and remember what they read. They also will more easily understand math word problems and science problems that they read.

Phonetic readers will love to read and enjoy reading chapter books and even books without any pictures, since they are creating their own pictures within their mind. **Phonetic readers** will also more easily understand the deeper meaning behind poems, since it is the images and pictures that one creates from reading the words of the poem, rather than the actual words themselves, that provide the deeper meaning of the poem. In addition, books written in a dialect, such as in Tale of Two Cities and Huckleberry Finn, are more easily read by **phonetic readers**, because they are sounding-out each word and therefore can figure-out what familiar English word best corresponds to the word written in a dialect (ex. "You's de bes' fren Jims ever had, en you's de only fren ole Jims got now").

Finally, it is important to realize that many children that predominately and fluently **read by sight** may also be able to SLOWLY sound-out a word, phonetically (that they have never seen before), yet, when they read quickly and fluently, they go back to reading by sight. When parents and teachers hear children slowly sound-out a word, then they assume that child must be always reading, phonetically. Once again, the difference is that **phonetic-based readers** create lots of inner pictures while reading, as compared to sight readers, who cannot create many inner pictures at that same time they are reading.

Sight readers may create a few images, if they pause after reading a word or pause after reading a sentence, but these limited pictures are made as a second step.

III. HOW TO PROMOTE FLUENT PHONETIC-BASED READING IN OUR CHILDREN:

*First, wait until children are developmentally and therefore, neurologically, ready to phonetically read (Please reread 1st paragraph). Remember that **phonetic-based reading** (i.e. stringing sounds together to sound-out words) starts to occur around 6 1⁄2 to 8 years of age, in girls, and 71/2 to 9 years of age, in boys, and sometimes later for both boys and girls, if they have a predominant right hemisphere (more artistic and intuitive) and/or have unresolved cranial compressions from the birth process that are still partially blocking the development of their proprioceptive, bilateral integration, and eye movement pathways. When children are getting ready to phonetically read, then they will quickly and effortlessly be able to hear and recite the separate sounds within a word (i.e. have phonemic awareness).

*Only teach children how to **sight read** (i.e. to spatially memorize words that do not follow the spelling rules, such as: from, the, they, there, their, was, etc., only after they can fluently string- sounds together (i.e. phonetically read). By teaching children to sight read in preschool, kindergarten, and sometimes even in the first grade (before they are developmentally ready to phonetically read), we are encouraging children to use sight reading to figure out all the words they see. Even when phonetic reading finally develops in the left side of their brain, children that fluently sight read, using the right side of their brain, will not give the time needed for the left brain to practice sounding-out words. In this case, their fluent reading will remain sight reading.

*Avoid timed fluency tests in school. It only encourages sight reading. Also avoid having children being pressured to read a sentence out-loud, in front of the rest of the class. This also promotes sight reading. Instead form small reading groups where the group of children practice sounding- out each word, together, as they read through a sentence.

*Scramble a word like “Together”, keeping the first and last letters the same (e.g. Tegoheter, Teghoeter, Togtheer, Toghteer, Togehter, and finally Together), and then have all the children sound-out each word in unison, until they arrive at the correctly spelled one. Also have fun reading out-loud, forward-backward words (in unison) such as: warts, trams, pets, pals, mart, parts, sleep etc. In both of these phonetic-based word games, certain spelling rules can be emphasized to help children understand which sound a vowel makes in a given word, including the nonsense words.

*Play word-search games, since they use the left side of the brain because the child needs to pay attention to all of the letters within a word.

*Always read lots of books to your children (young and old) and tell them lots of stories, to develop and strengthen their right brain, picture making capacity.

*Finally, if children have already become fluent sight-readers (i.e. having memorized tens of thousands of words by sight) and cannot easily switch themselves to fluently sounding-out words, phonetically, by the 3rd or 4th grade, then they may need a phonetic-based tutoring program for 1 hour, 2 to 3 times a week, for the next 1 to 1 1/2 years, to slowly switch their reading from fluent sight reading to fluent, phonetic-based reading. In addition, if these children still have unresolved cranial compressions that are partially blocking the development of their proprioceptive, bilateral integration, and eye movement

pathways, and therefore impacting their ability to develop phonemic awareness and phonetic-based reading in the early grades, then they may need Biodynamic Cranial Osteopathic treatments (to resolve their cranial compressions) followed by movement therapies to strengthen proprioception, bilateral integration, sustained eye tracking, and eye convergence before they can develop phonemic awareness and the ability to phonetically read.

Addendum:

MAKING A SNOW CAVE

For those who enjoy cross-country skiing and hiking during the winter months, the following information on building a snow cave may prove invaluable.

Directions:
1. First, find a deep snowdrift or pile of snow.
2. Next, dig a tunnel into the pile of snow, angling it upward several feet.

3. Then, excavate a dome-shaped room at the top of the tunnel, judging the thickness of the roof by watching from the inside for the snow to turn a light blue color. This color tells you that the roof is the correct thickness. If you keep digging then the layer of snow forming the roof might become too thin and the roof might collapse.

4. Smooth the curved ceiling, to remove sharp edges, that could cause moisture to drip onto your gear.

5. Next, carve little shelves or spaces in the walls for candles.
6. Then, use a ski pole or a sharp stick to punch holes in the roof at a 45 degree angle to the floor.

Holes made at this angle will allow fresh air in without allowing moisture to enter the dome.

7. Finally, fashion a door by piling snow on a ground cloth, gathering up the four corners of the cloth, and tying them with a cord. Allow the snow to crystallize into a hard ball that can be pulled with the cloth into the entranceway to block the wind and trap warm air inside the cave.

The cave will probably take two people about two hours to build. Be sure to have a shovel included in your gear, in case a snowdrift blocks the entrance to your snow cave. You can use the shovel to dig an emergency exit through the roof.