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of Early Childhood

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Watching the Babies:

The Why, What, and How of Observation as Assessment



Using Concrete Manipulatives in Mathematical Instruction



The Power of Secret Stories



Response to Intervention and Authentic Assessment



Southern Early Childhood Association

Editor - Mari Cortez, Ph.D.

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Dimensions of Early Childhood

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The Power of Secret Stories: Constructing Mental Patterns During the Reading-Writing Process

Children's young brains take in information in a totally different way than adult brains. Secret Stories are a new, innovative way to teach children the grammar rules of English in a way that is tailored to their growing minds.

**Meredith Krisell &
Shelly Counsell**

The brain is a complex organ with an intellectual capacity that is unique to humans. As educators, we would be wise to study the brain's many attributes and how it functions to help guide, inform, and improve teaching practice. Learners' brains are particularly sensitive to certain kinds of stimuli- that is social, physical, cognitive, and emotional stimuli (Jensen, 2005). Brain development and cognition is further enhanced with continuous exposure to high quality learning activities and methods, particularly those that help children use mental patterns to make sense of their learning. Secret Stories (Garner, 2012) is a program that calls on brain research to help emerging readers make sense of the English language.

Brain Development and Literacy Acquisition

Garner (2012) specified that the ongoing constructing and reconstructing of certain activities/methods is at the heart of children's knowledge progression. As the human brain grows and develops, children become very adept at using mental patterns to organize information, which enables the brain to complete higher order mental tasks and activities such as reading comprehension. Organizing data using in this way offers children the significant, pertinent, and reasonable networks needed to efficiently store and access data as needed. After all, there are no universal letter-sound relationships that apply across all languages. Hence, children must learn the letter-sound rules specific to their native languages.

Brain Plasticity

Sparks (2012) demonstrated that even beginning readers can comprehend and appreciate basic concepts

related to brain plasticity. According to Sparks, young children's "brains are malleable and will change as they practice something" (p. 17). Helping young children to understand how their brain works encourages them to appreciate the role that mistakes (and learning to correct them) play within the learning process. Teachers can use brain exercises to relay the importance of getting ready to learn a new concept or preparing to take an assessment. Crossing the midline is one such activity that stimulates both the left and right hemispheres of the brain and as such they use both sides of the body together. Most people have one hemisphere that is more dominant than the other and it is essential that lateralization (localization of function or activity on one side of the body in preference to the other) is established. If it is not established, a person may have difficulties in various areas that include writing, reading, language development, and organization skills.

Human brains, according to Willis (2008), are considered "plastic" in the sense that brains can "change in both growth and reduction of the nerve fibers that connect neurons to one another (dendrites) in response to learning and conscious manipulation of information or from neglect of stimulation" (p. 35). By definition, young children's brains are flexible and will alter as they learn and use new information. The need for appropriate repetition and continuous practice are key components when educating young children. Ensuring that children receive the necessary allowance of time to learn according to their individual rates of development has long been a central tenet in early childhood education (as the term developmentally appropriate practice indicates) and the unchallenged assumption that adequate time is always guaranteed, cannot be taken for granted.



Photo by Krisell and Counsel

Children learn differently than adults, and understanding how to teach them is the key to early literacy.

Garner (2010) pointed out that traditional teaching and schooling emphasized what she refers to as “conscious learning” that is all too frequently hurried, inactive, and results in repeatedly shallow, superficial achievement (e.g., memorization of isolated facts). This alarming trend is evident in the expanse of literacy-skill training. As noted by Jensen (2008), “research shows that more than 99 percent of learning occurs at the non-conscious level-visual cues, sounds, experiences, and feelings” (p. 107). Brain research confirms that teachers can bind the power of learning with instructional practice. Similarly, Garner (2010) argues that learning is painless and spontaneous when it takes place at the unconscious level. The flow of learning happens logically, irrespective of a student’s academic performance rank, linguistic background, ability, talent, or level of involvement.

The Brain and Visual Tracking

Vision and visual processing plays a critical, influential role that directly impacts early learning and development. Frey and Fisher (2010) recognized that not all visual material is the same. As a general rule, illustrations are easier to recall and are a considerably more effective way to store and retrieve information. How exactly is visual information stored and retrieved? By understanding the neural basis of reading, teachers can better select instructional routines and cognitive strategies that promote reading and language acquisition.

On the surface, reading may seem almost mystical or overly simplistic as the reader focuses on a single written word, and the brain processes the visual letter sequence and configuration in order to supply (recall) the word’s diction and meaning (Dehaene, 2009). However, a child’s

recognition and recall of a single written word is quite complex.

Young children’s brains are flexible.

Lyons (2003) concluded that the synchronization of left-to-right movement of the eyes when following words on a page while attending to stories is a significant, essential skill children must master as they learn to read and write. Their brains are ready, eager, and capable of cultivating these competencies. In other words, the brain develops into what can best be described as a “natural pattern seeker and synthesizer” (p.22) during highly engaging cognitive

processing activities like reading. As young children read, they enthusiastically hunt for patterns to classify, consolidate, manufacture data, program into memory and then reclaim what is understood.

Mental Imagery

Zull (2011) described mental pictures as “electrical patterns on the surface of our brain” (p. 117). Multiple pictures in multiple combinations form meaningful patterns or schemas of understanding (organized patterns of interrelated information). The human brain is continuously constructing patterns of information based on the stimuli perceived and gathered from the immediate surroundings (Garner, 2012). As more data is collected, analyzed, and synthesized with the old data, information systems or schemas are continuously expanded, or completely new patterns of information are constructed, in an ongoing, spiraling fashion. Every time the brain constructs a new pattern, that pattern has to be successfully incorporated and integrated into the already existing system of patterns (and overall schemas of mental relationships). As the brain develops, young children become increasingly skilled in their ability to construct prolonged and intricate pattern systems.

Secret Stories: Bridging Non-conscious and Conscious Learning with Emergent Readers

Garner (2012) uses the construct “non-conscious” on several occasions in her book, “The Secret Stories.” For Garner, non-conscious refers to how children’s are unaware of (or conscious attending to) specific information as it is mentally pro-

Figure 1: The “Sneaky y” Secret Story Poster



cessed. Furthermore, she noted that in order for children to successfully transfer skill-based, academic content that was consciously learned to that which can be effortlessly (non-consciously) acquired requires a specific instructional context. This type of learning can best be described as deep learning in which students become energetic and insightful as they process information. “The Secret Stories,” a method created by Katie Garner (2012), provides systematic, visual images used to help emerging readers to mentally construct letter-sound relationships. Secret Stories can underscore and complement any existing reading and writing curricula and instructional practices across the elementary grade levels (PreK-5) and can even extend into the higher-grade levels, if needed.

*The brain is a
natural
pattern-seeker.*

The Secret Stories provide effective phonics models (or cues) used by students to construct patterns of meaning (letter-sound associations) that young children must recall and apply as they read. Garner created Secret Stories to help explain the English spelling rules within meaningful, relevant contexts that young

children can easily understand. In the example of the sneaky “y” secret story, the secret is that the “y” character grew tired of always saying, “y-y-y.” The “y” discovered that other letter characters (the long vowels) could say their names, so the “y” decided to steal the superpowers from the vowels “e” and “i.” The letter “y” knew “he” would not be noticed at the end of a word. As a result, the letter “y” could use these superpowers whenever needed, as in the words “mommy,” “daddy,” “my,” and “July.” If the letter “y” is at the beginning of a word, the letter “y” behaves and uses the “regular y-consonant” sound. The letter “y” does not want anyone to know that “he” is sneaky (see Figure 1).

By helping emergent readers to embed arbitrary phonemic rules into meaningful frameworks (stories that serve as pattern systems), these pattern skills emerge from the non-conscious into the conscious (accessible) schemas of knowledge and understanding. In other words, children can recall the stories when they encounter the letter patterns in their reading more easily than having to recall the decontextualized rules.

During interactive writing activities, children in kindergarten and first grade who struggle or are considered emergent readers and writers, can employ the “sneaky y” secret story to support and guide how to spell words as they write. For

example, a kindergarten teacher can introduce the “sneaky y” secret story to help children read, and later write about the nursery rhymes, “Humpty Dumpty” (see Figure 2). In this instance, the teacher told the “sneaky y” story and demonstrated how it was used at the end of words, like “Humpty Dumpty,” according to whether the “sneaky y” chose to wear the “e” or “i” cape. Children working

in small group settings can likewise apply the “sneaky y” secret story to steal the “e” or “i” cape to use at the end of high frequency words, like the word “my” (see Figure 3).

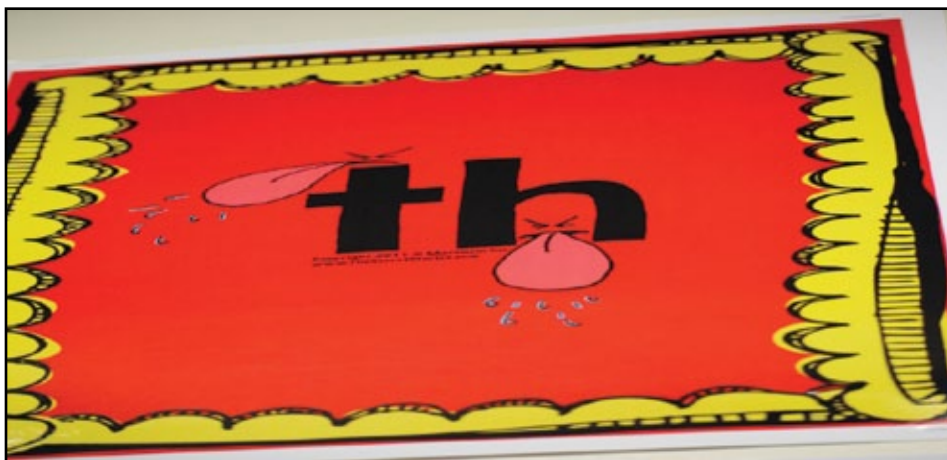
In the case of “th,” the “t” and “h” letter characters (according to Secret Stories) do not like each other at all, yet they often appear together in written words. Whenever the “t”

and “h” are side-by-side within a written word, the letter characters always stick their tongue out at each other (Garner, 2001), thus making the “th” sound (see Figure 4). This secret story is particularly helpful to emergent readers as well as Dual Language Learners (DLLs), who tend to pronounce the /f/ sound for the /th/ sound. During small group writing instruction, kindergarten and first grade children can apply the “th” secret story to support and guide their writing (see Figure 5). Children who tend to confuse the /f/ sound with the /th/ sound can likewise benefit from using the “th” secret story during independent writing (see Figure 6).

Figures 2 & 3: “Sneaky y” Secret Story Applications During Writing Activities



Figure 4: The “th” Secret Story Poster



Children learn spelling better as stories than boring rules.

Willis (2008) found that procedures, activities, and materials (like those used with Secret Stories) can be utilized to help learners process instructional material and information in a gradual progression from external short-term working memory into stored memory as children construct mental patterns and relationships that subsequently increase their overall abilities, skills, and proficiency needed to stay focused throughout the learning process. Every time the brain constructs a new pattern, that pattern has to be successfully incorporated and integrated into the already existing system of patterns (and overall schemas of mental relationships). As the brain develops, young children become increasingly

skilled in their ability to construct prolonged and intricate pattern systems (Copples & Bredekamp, 2009).

Using Secret Stories in Meaningful Contexts

The Secret Stories, based on Garner's experience, are "most effectively introduced when offered 'in context' of the existing daily curriculum and activities and NOT as a designated 'phonics-lesson' for the purpose of teaching isolated skills" (Garner, 2012, p. 22). In other words, phonics rules are largely meaningless when taught without a meaningful context. Secret Stories provide emergent readers with a meaningful context needed to help them construct letter-sound relationships.

"Mommy e" is one example of a Secret Story that emergent readers can use to better understand and apply the "silent e rule" as they read and write. The "Mommy e" character tells all the vowel characters to say their name. The "Mommy e" closes her mouth and does not make a sound. Mommy "e" does her job when she is one or two letters away from the vowels, but sometimes the vowels do not hear the "Mommy e" (as in the word "have"). During independent writing, first graders can apply the "Mommy e" secret story to help spell the words "like" and "slide" (see Figure 8).

Conclusion

Armstrong (2003) observed that most of the research on the brain, particularly in relation to reading and writing tends to disregard or neglect the impact that emotions play in learning and developing important reading and writing skills. Armstrong insists there is a "small but emergent literature that links

Figure 5: Small Group Writing Using the "th" Secret Story

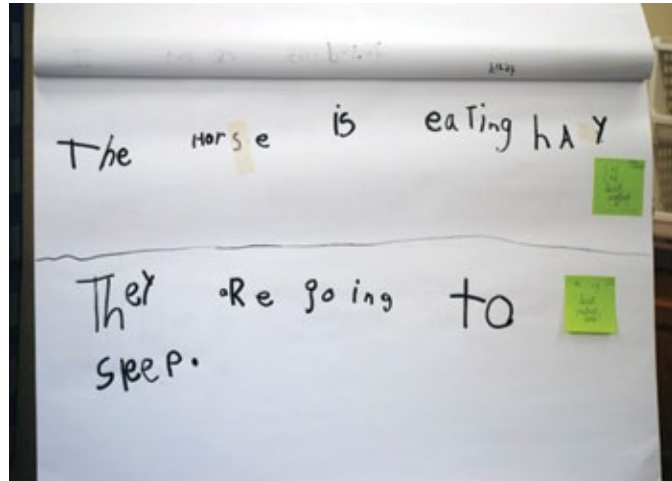


Figure 6: Independent Writing Using the "th" Secret Story

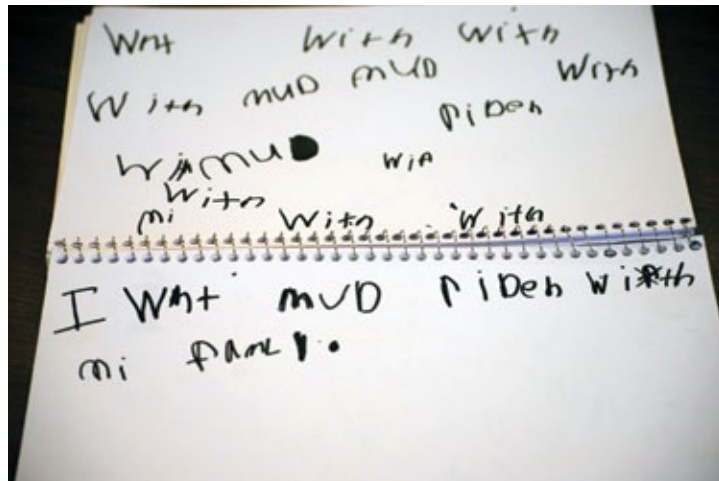


Figure 7: "Mommy e" Secret Story Poster



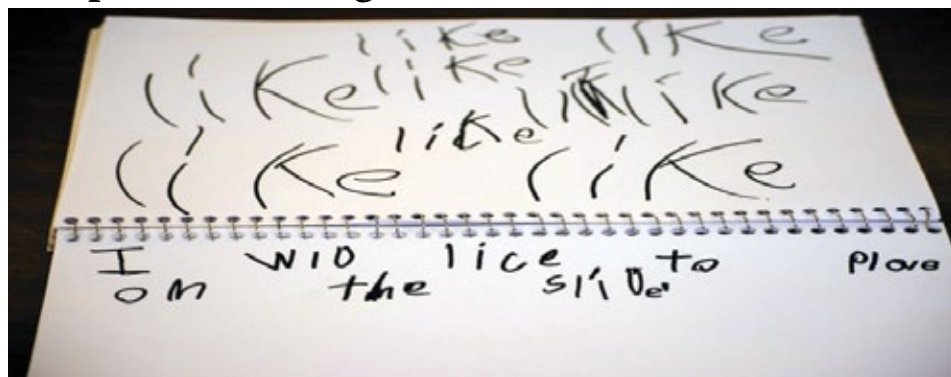
reading and writing to areas of the brain that process emotions” (p.83). Using emotions to inspire, motivate, and help children regulate learning in ways that personally connect to children’s lives can be powerful. Background knowledge can serve as an extremely important starting point for teaching students new material.

Teachers need to consider all aspects of how the brain constructs meanings when teaching new material and information. Traditional instruction focuses on conscious learning that is all too frequently hurried, inactive, and results in repeatedly shallow achievement of arbitrary, intangible material (Garner, 2010). Nowhere is this alarming trend more apparent than in the expanse of literacy-skill training. Nearly 100 % of knowledge happens at the involuntary stage- prompts that are graphic, reverberations, occurrences, and sensitivity (Jensen, 2008). The flow of learning happens logically, irrespective of a student’s rank, linguistic background, ability, talent, or involvement, and free from diversified teaching that is mandatory (Garner, 2010). Zull (2002) indicated that, “learning is best when it truly matters in a person’s life” (p.226). Connecting learning activities to children’s real life experiences enhance the significance of the activities (and strategies) used, and in this instance with the Secret Stories, can increase children’s overall reading ability, confidence, and success.

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Figure 8: “Mommy e” Application During Independent Writing



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