

# CHILDREN OF THE CODE

## Reading-Shame ... Mind-Shame

*“Like most scholars, until awakened by the Children of the Code project, I took intake through reading as much for granted as eating and drinking. Very few of us have paid sufficient attention to the specific emotions triggered in children as they begin to read. Yet any impediment to the mastery of reading must trigger shame, the emotion that stops all useful thought. So painful does shame become in the public arena of the schoolroom that our children swiftly divide into two streams and two futures purely on the basis of their response to the shame that accompanies their struggle to learn to read.”* **Dr. Donald L. Nathanson, Executive Director, The Silvan S. Tomkins Institute, Clinical Professor of Psychiatry, Jefferson Medical College**



For most of our children, learning to read occurs at a time when they are developing the cognitive processes that will underlie how well they are able to learn. Many, if not most, children feel ashamed of themselves as they struggle to learn to read. Shame dissipates and diminishes cognitive processing capabilities. **The more shame a child feels when learning to read, the less the child is able to read.** Additionally, when children experience chronic shame in conjunction with their mental performance, they are at serious risk of losing confidence in their very ability to learn. Because they didn't learn to read well, over ninety million adults are living life sentences of low self-esteem and low income.

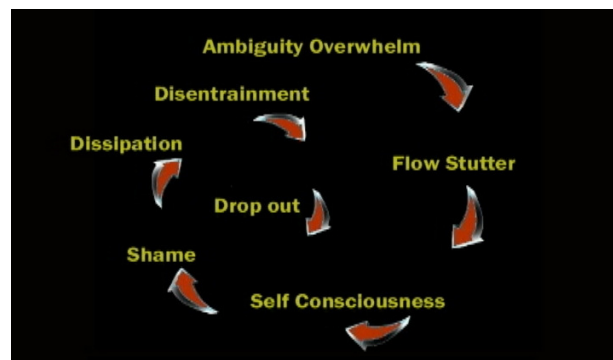
*The first casualty is self esteem: they soon grow ashamed...* **National Institute of Child Health and Human Development**



Concurrently streaming and interacting with the cognitive processes, reading also involves affects. Affects drive our feelings and direct our cognitive processes into and away from becoming more complex emotions. One of the basic affects is shame. Shame interrupts our stream of consciousness and calls attention to what we are doing. It interrupts and impedes the directional thrust of unconscious working attention and calls self-awareness to something we are doing 'wrong'. Shame is a bio-semantic learning prompt.

The physiology of shame, like the other affects, has been evolving for millions of years. Languageless animals and infant humans display shame. The deep hard wiring of the human affect system evolved long before oral language, let alone written language.

**Shame didn't evolve to provide us a way to be self-consciously correcting the kind of unnaturally ambiguous, unconscious processing involved in reading. We can't be self-conscious participants in the decoding & disambiguating aspects of reading, they must happen unconsciously-automatically faster than we can consciously participate in.** Thus, while shame



triggered self-consciousness may be a helpful prompt to pick up a book and try again and it is helpful at the conscious level of evaluating what we are comprehending, with respect to the unconscious processes involved in learning to read (decoding, disambiguating and assembling) shame misdirects, disentrains and confuses them. Once shame starts to associate with learning to read a dark spiral begins.



When shame comes in it disrupts the very cognitive processes involved in reading - it makes worse what triggered it. **The more shame the less cognition entrains to reading related processing, the less cognitive entrainment in reading the worse the reading, the worse the reading the more shame.** Add to this that humans tend to develop emotional reflexes to avoid doing things that illicit shame, and it becomes clear: shame is catastrophic to the unconscious processes involved in reading. If shame scripts interlink with decoding reflexes, reading will become a painfully frustrating experience that the child will not want to

engage in.

Learning to read is an unnaturally ambiguous, unconscious processing challenge unprecedented in the evolutionary history of our brains. It requires the development of faster than volitional processing reflexes in order to decode, disambiguate and assemble a word stream for consciousness to comprehend. This process is dramatically complicated by the confusion in the code. Most of our children are feeling ashamed of themselves because they can't learn through the code's confusion. These cognitive processes involved in reading cannot function well when mixed with self-conscious shame.

If we want to help people learn to read we need to reduce the ambiguity in the code and the shame in their experience of the confusion.

## INITIAL PEDAGOGY FOR TEACHING READING

First a recap on reading:

- How well children learn to read profoundly influences their cognitive and emotional development and their educational and economic opportunities.
- Reading is a radically unnatural and artificial brain process that creates streams of speech or thought according to the information and instructions contained in a code. Reading is a technology – our ability to read is an *artificial* form of intelligence.
- Initially, in order to learn to read well, the brain must generate streams of words at a rate similar to the rate the reader is accustomed to talking and thinking in.
- The timing of the interactions between the processing layers involved in reading is critical. Decoding processes must feed comprehension processes within a narrow range of rate or comprehension will break down.
- The code is extremely confusing (from the struggling child's point of view).
- The ambiguity in the code is the result of ignorance, historical accidents and accumulated negligence.
- It takes time for the brain to work through the ambiguity in the code.
- There is a direct connection between the time it takes the brain to work through the ambiguity in the code and the articulation stutters we hear and witness in developing readers.
- There is a direct, inverse relationship between comprehension and the use of memory and attention resources to work out the ambiguity in the code. The greater the resources used to process through the ambiguities in the code, the less the resources available to comprehension processing.
- The cognitive capacities necessary for reading are diminished when a reader experiences shame while reading.

- To help children learn to read, our grounding intentions must be to reduce the ambiguity they experience and reduce the shame they feel when they get frustrated.

Our single greatest concern about the process of learning to read is what it tacitly teaches children about themselves, about their own minds.

For the most part, up until the time children learn to read, their natural 'compass' for learning is oriented to following their own inner revelations. Everything they do undulates with feelings of ambivalence and their remarkable learning power comes from their growing ability to swim in the stream of it – from their ability to disambiguate their differentiations in the flow of their experiencing. Children learn to walk by moving towards reducing the ambivalence they feel in their sense of falling. The same process of processing orients their learning in all real-time, all-at-once, 'natural' situations.

When children begin to learn to read they encounter a radically different environment than their many millions-of-years-in-the-evolving organisms ever evolved to learn in. Here, their compass is not equipped to guide them and, as they have no other choice, they learn to subordinate their inside-out compass for the outside-in evaluations of an external authority. In itself this isn't a problem. What is a problem is that in the case of reading, the external authority is overwhelmingly ambiguous.

As previously outlined, our learning to read process is seriously complicated by the highly ambiguous code the children must learn to read with. For the majority of our children, struggling with the ambiguity in the code not only impedes their learning to read it becomes an environment in which they are susceptible to becoming ashamed of their own minds – of feeling 'bad' about themselves because they can't read well enough. As with all human beings, children tend to shrink back from things that make them feel bad about themselves. To continue to allow children to develop such feelings, because they have trouble relating to this messy code, an unnatural human artifact is nothing less than gross negligence.

It is our view that concurrent to the process of learning to read children should learn how to 'relate' to the whole learning to read process.

## THE STORY OF READING

With fable-like storytelling, we must help children understand that learning to read is like driving a car or running a dishwasher, its about learning to use a human invented machine - it is not a natural process. A cartoonish history of writing is helpful, one in which cave men learn to make scratches on sticks to make 'receipts' – where clay pots hold tokens of agreements and later flatten to have little word-pictures scratched into them – where paper and pen take over for clay and scratching sticks and where the pictures become symbols of the sounds of words rather than simply images of the things words refer to.

Along the storyline we should help children understand what a 'code' is, how our machines are run by codes, how spies use secret codes, how our bodies depend on biological codes and that reading is a process of learning to 'decode' a code. Most importantly, we should help children realize that this code of ours is confusing, that way back in the days before Robin Hood a way of talking and a way of writing were forced to fit together. That, there were many mistakes in the way they were put together – mistakes that make learning to read unnaturally difficult.

All this may seem too much for little children but its not. By helping them have a sense of what it is they are learning to do, especially in understanding that if it's hard for them it doesn't mean there is something wrong with them, we provide them a way to 'contextualize' their frustrations in learning to read where they belong. Rather than blaming themselves for their frustrations they can attribute their struggle to the somewhat 'messed up code'.

## FIRST THINGS FIRST: SYNC UP

Our first step and greatest priority in coaching reading is to learn our way into 'sync' with struggling readers and see/sense/listen in on the cognitive and affective processing going on within them as they struggle with learning to read. We will later learn to 'cue in the code and cue out the shame'. But first, above all things we must learn to 'sync up'. Once we are able to understand and empathize with children, intimately in the flow of their reading, we have the 'coordinates' we need to be relevantly and compassionately helpful.

### **A: Correlate Processing Stutters with Code Ambiguity**

We need to become first person witnesses of the correspondence between letter-sound ambiguities in the text being read and reading flow stutters in the voice and face of the reader. This is critical. If you don't get the correspondence in the first-person, if this remains a 'theory' for you, you will not be able to proceed. Before going on to do anything else, you must first learn to 'drop into sync' with the reader.

The best pathway to syncing up is to meet a child in the confusion they are experiencing as they are attempting to sound out, out loud or silently, an unrecognized word.

To do this requires effort and discipline. We need to be able to read silently along with the reader while paying attention to the ambiguity in the code they are reading and concurrently paying attention to the child's voice, face and tension. The idea is simple. You want to directly experience the correlation between code ambiguity and mental hesitations (processing stutters). But it's not easy. Your mind is so used to reading that the code's ambiguity is normally invisible to you (just as the code as a whole tends to be). The ambiguity you see through is precisely what the struggling reader is stuttering upon. You need to be reading along with the child and experiencing the code *as the child is*.

One reading specialist who was learning to do this remarked "This is hard, I have never tried to see the code in this way, let alone trying to see it while I am listening to the reader." She went on to say that as she was able to drop into sync and get the correspondence between the reader's stutter and the code ambiguity each stutter corresponded to, the core of the process of reading became clear.

Before trying to do anything else, just get good at tracking. See the code's ambiguities, see and hear the reader's mind stutter when processing them.

### **B: Reading the shame in reading**

Learn to see the signature expressions (face, body, tone...) of shame as it's occurring in relation to reading processing flow. As if holding a strobe light, see the flashes of shame in the flow of expression moving through the reader. Perhaps even more importantly, 'hear the shame' - hear the emotional undulations in the carrier wave of the child's voice.

Several common shame expressions to look for and be aware of:

- Head dropping
- Hand to head
- Deep sigh
- Facial distortions
- Shoulder slump/shameful posture
- Aggravated, frustrated or wavering tone of voice
- Lip biting
- Changing subject/avoiding reading the text

For an example of the deep sigh, frustrated and wavering tone listen to the voice of Sara as she shames herself <http://www.childrenofthecode.org/sara/sara.htm>.

For more on shame and learning to read see: <http://www.childrenofthecode.org/shamestories.htm> and watch the videos at <http://www.childrenofthecode.org/Tour/c3c/index.htm>

Overall, experience the correlation between shame in the flow of reading and overall reading progress.

### **C: Reading the reader's self-talk story**

#### **Background:**

Children are (like you and I) always talking to themselves. There is a nearly continuously running self-talk stream going on within them. This self-talk stream is one of, if not the, most significant environments each one of us is learning in. Within our present concern for learning to read, there are three critical aspects of this stream.

- 1) Reading is like this stream except that rather than being 'self' directed its code directed.
- 2) When they are talking to themselves they can't read – self-talk streaming and reading streaming can't coexist in the conscious awareness of a beginning reader.
- 3) How children talk to themselves about their reading tells us a lot about how they are faring emotionally within the challenge.

By understanding the stories children tell themselves about their experience of reading, both when reflecting on it and most importantly as they are reading, we can get a better understanding of the degree to which shame is an active impediment to their process. In addition to inviting and encouraging children to share their verbatim authentic inner self-talk, we can also ask them questions that will help us understand this inner dialogue.

Develop a shame-scale and keep it in mind thorough out your coaching. If the child is experiencing too much shame we need to develop conversation strategies for helping them manage the shame they describe in the stories.

Once you have learned to track with children at the level of code ambiguity, self-talk story and shame, you are ready to proceed to the next stage:

## **THINGS TO KEEP IN MIND**

### **Motivation**

Many children are at risk of becoming reading averse even though they have only begun to struggle with code related problems. This was highlighted when a teacher asked one of her students if she thought reading was important. The girl clearly didn't think so and when asked: how does reading make you feel? The girl flushed with embarrassment and 'laughed it off' with 'blah...blah....blah'. When children feel shame in reading they try to avoid the shame, which often takes the form of either putting down the importance of reading or putting him or herself down.

We must inspire children to *want* to read and feel less at risk in doing so.

The more children want to read for their own sake the more powerful their learning. Intrinsic motivation is preferred over extrinsic reward motivation whenever possible.

We must help children understand that learning to read is one of the most important things they will ever do in life and that their futures will be shaped by how well they can read... one of the biggest differences between successful people (however they describe success) and unsuccessful people is reading.

We must also help them understand that they may struggle a lot in learning to read. Learning to read is one of the most difficult challenges human beings ever face and there is nothing wrong with them if they struggle learning to read. No other animal on the entire planet can read and humans are still very new to it. Reading is not a natural learning like talking. Reading uses an ancient technology that is very messy and confusing. Learning to read has been very difficult for millions and millions of other people.

**We must learn to illicit a strong sense of the importance of reading while reducing the child's susceptibility to self-blame and shame in relation to their experience of reading by reframing how they contextualize the challenge of reading.**

### **Reflex Strategies**

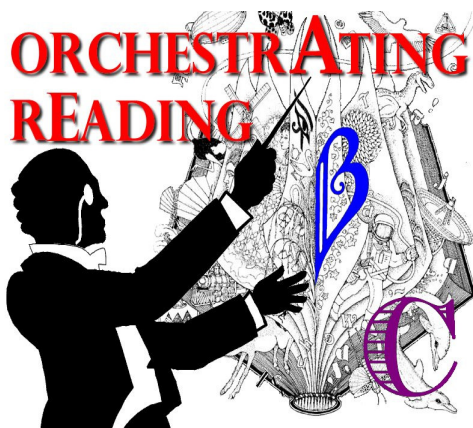
It is quite common to use a number of strategies to help children when they got stuck decoding a word. Sometimes coaching the child to remember a rule (which vowel is talking....) or engaging in 'guessing games' seems to make a lot of sense. By guessing we mean using outside the word(s) references (pictures, other stories) as a way at arriving at the word(s) in question without having to work them out by decoding the code.

On the one hand guessing games can result in progress that feels good and therefore supports self-esteem and motivation. But on the other hand, guessing can lead to the child developing unconscious reflexes that want to 'guess' their way through the confusion. Becoming prone to guessing is dangerous to developing good reading.

There is no question that many strategies can be used to help developing readers. Many techniques like rhyming and creative association can be wonderful for helping the child's auditory processing differentiate phonemic distinctions. Anything that helps speed up the frequency of processing phonemic distinctions will contribute to reading improvement. However, while many of these techniques can help the child's facility with oral language in a way that results in improved reading, the activity of reading itself depends on the development of unconscious reflexes that 'process the code'. If children come to feel and think that guessing is a viable alternative to processing the code, the resulting impulse to guess can become fragmenting and dissipating of the impulse to work the code.

As reading coaches we need to become mindful of the 'strategies' exhibited by the developing reading 'reflexes' of the child. How well these reflexes form is a key to how well the child will learn to read.

### **Orchestrating Reading:**



**Demonstrate the correlation between cueing a reduction in letter-sound ambiguity and measurable reading improvement.**

Orchestrating Reading is the first step in applying what you have learned to actually coaching a child in learning to read. It's a training step for both you and the child that draws your attention into sync with the reader's attention in the flow of working out the letter sound confusions.

This isn't easy. It's everything we talked about before in Step 1 of correlating code ambiguity with articulation stutters (read silently along with the reader while paying attention to the ambiguity in the code they are reading and concurrently paying attention to the child's voice, face and

tension) but with the addition of actually 'cueing' the child's mind, in the flow of their reading. The main idea is that we want to meet the child's mind in the flow and right when they are actually

experiencing confusion, give them a hint, a 'cue', that helps them 'get' which of a letters' possible sounds it is actually making in the word they are reading.

Begin by using a pencil in much the same way an orchestra conductor uses a wand - moving it up and down, in circles and left and right. Use the pencil tip to guide the child's eye in reading and move at a pace that is comfortable for him or her. When you sense their flow stutter, move the pencil tip just above the letters she was reading and tap the letter when it is supposed to sound like its letter name. Move the pencil tip in a circle when it's one of the letters other sounds and down when it is silent. Move it left when it's blended with the letters before it and right when it's blended with the letters after it. Move it up and down to 'slice' words apart into sub sections. Once understood, these simple signals and method of cueing will reduce the ambiguity and bring about an ease and acceleration in the flow of reading. Experiment with this. The main thing we accomplish here is to develop a dialogue channel that is coordinated at the level of the ambiguities the child is struggling with.

Let us know how you are doing at this point. As you practice this please create a learning journal and share what you are learning as you tune into using the cues. Please share the journal with us so we may learn together. As previously requested, please don't share this information or approach with anyone else just yet. We want to develop this through research and trials. We don't want people jumping to the end and trying this unless they are committed to their own first-person learning and to dialogue with us.

We are working on a number of resources that will make this more accessible as we proceed. This is just the first step.

**Related videos:**

**Reading-Shame:** <http://www.childrenofthecode.org/Tour/c3c/index.htm>

**Mind-Shame:** <http://www.learningstewards.org/mind-shame/>

**Artificial Confusion:** <http://www.childrenofthecode.org/Tour/c3/confusion.htm>

**Paradigm Inertia:** [http://www.youtube.com/watch?v=cOX5VuVb3\\_Y](http://www.youtube.com/watch?v=cOX5VuVb3_Y)