Landmark Study Finds Better Path to Reading Success

This study proves what exemplary teachers have been doing correctly for years.

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In a landmark study two Canadian researchers in developmental psychology, Gene Ouellette and Monique Sénéchal (2017), have mapped the powerful beginning reading-writing connection, moved us closer to being successful teachers of reading in first grade, and cleared up decades of confusion. It's important because reading scores in first grade have flatlined for decades—especially in the United States. This study can move us forward.

As far back as 1982 Marie Clay, the late world-renowned expert in developmental and clinical child psychology who founded Reading Recovery, issued a call for educators to find the writing connection in learning to read (Clay, 1982). Could teachers and parents capitalize on the potential for beginning writing to complement learning to read? Should we be encouraging pencil and paper activity from the very beginning?

Ouellette and Sénéchal have mapped out the way. Counterintuitively, it turns out that allowing and encouraging children's early "invented spelling"—a much maligned and controversial practice in some quarters—is the key.

What is Invented Spelling?

Before children become conventional readers and spellers at the very beginnings of learning to read—often in preschool, kindergarten, or the beginning of first grade—they use self-directed and spontaneous attempts to represent words in print. If teachers and parents engage beginners in pencil and paper activity by having them draw their picture and write their story or information, beginners will naturally over time "invent" spellings. The emerging spellings demonstrate what the child knows about the sounds in words, along with how he or she thinks letters represent these sounds. As I have written before, one can literally "see" the child's development—that is, monitor the child's progress in the process of breaking the complex English code—by

looking at his or her spelling (Gentry, 2006, 2000). This doesn't vitiate the need for teaching correct spellings beginning as early as kindergarten. But what researchers, including myself, and exemplary teachers have found over the last 30+ years of research and practice is that the act of inventing a spelling greatly increases the child's chances of breaking the code and learning to read by the end of first grade.

When inventing a spelling, the child is engaged in mental reflection and practice with words, not just memorizing. This strategy strengthens neuronal pathways so as the reader/writer becomes more sophisticated with invented spelling, she or he is developing a repertoire of more and more correctly spelled words at the same time. These words are stored in the word form area of the brain where the child can retrieve them automatically as sight words for reading and eventually as correctly spelled words for writing.

Well-educated, exemplary beginning reading teachers know how to provide a conventional model enabling the inventive speller to fluently read back his or her own writing in conventional English without stifling the child's creativity or desire to make meaning (Feldgus, Cardonick, & Gentry, 2017). Having the child read back his or her own writing in conventional English written by the teacher integrates the child's invented spelling into a reading and fluency lesson.

The human brain generally gets better at whatever it practices—including invented spelling. Reflection about how to spell a word allows the child to *actively* practice making decisions, rather than *passively* memorizing. This active practice likely results in synaptic changes in the child's brain by strengthening neuronal pathways for long term-retention of spellings to be retrieved for reading and writing.

Eventually a parent or teacher can read what the child has invented. For example, can you read these kindergarten samples?

R U DF?

I KN RIT!

MI MOTR BOT GOZ FST.

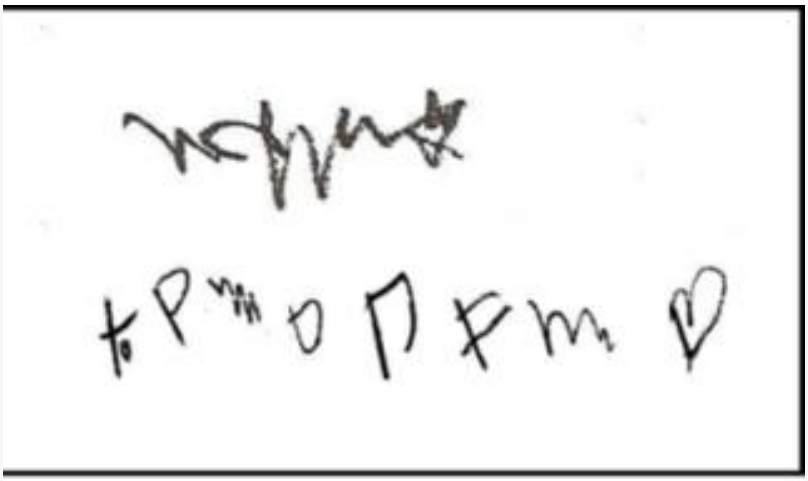
REKO WINT UNDR DA CUVRS.

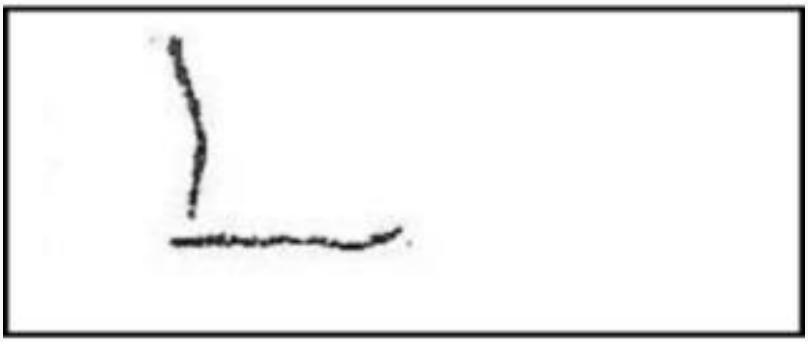
1 NIT I WZ N MI BAD AN DA TUTH FARI CAM!*

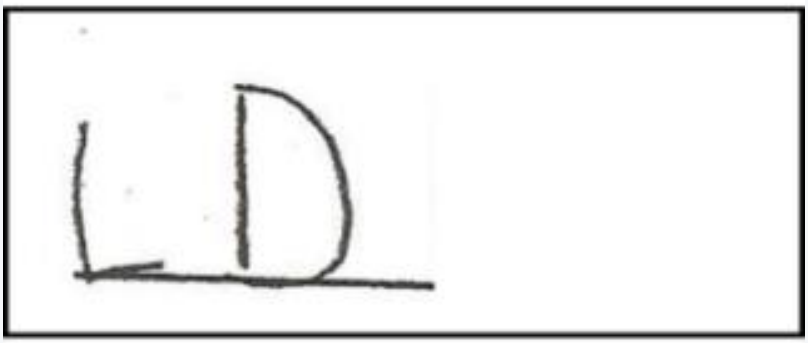
*(Are you deaf?) (I can write!) (My motorboat goes fast.) (Rico went under the covers.) (One night I was in my bed and the tooth fairy came.)

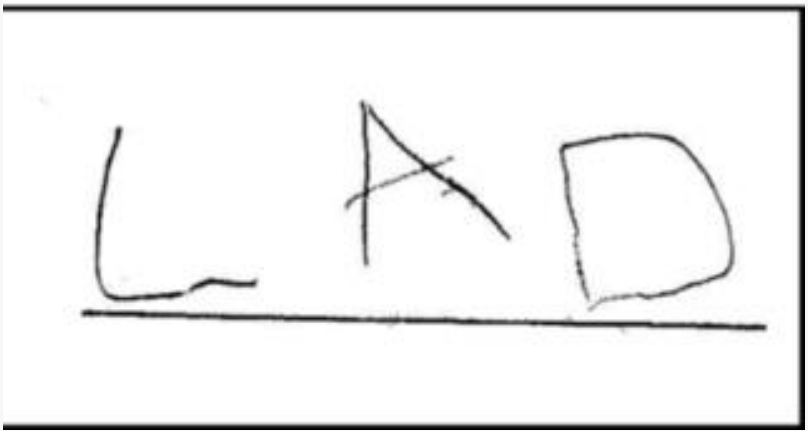
Importantly, invented spelling outcomes and likely neural development happen in developmental phases (Ehri. 1987; Ehri & Wilce,1987; Gentry 2006, 2000). Over time, a word such as *eagle* that a child might wish to write will be presented first as random letters, then as E or EG, then as EGL, then as EGUL, and eventually, given teacher scaffolding and appropriate spelling instruction, as *eagle*. *Lady* will likely follow from random letters to L, to LAD with LA for /lā/ and the letter name D for /dē/, to LADE, which is spelled in chunks such as LA for the /lā/ chunk and DE for the /dē/ chunk.

Here are *lady* samples from the 2017 study:









Source: By Gene Ouellette with permission

With explicit grade-by-grade spelling instruction, along with vigorous reading and writing, the child will master *lady* and plant it in his or her brain for eternity. This representation of the spelling *lady* in the brain will literally be "re-presented" in the person's mind when the reader needs to match the print on the page to recognize the word for reading or when the writer needs to spell the word for writing. It takes about 250 milliseconds for the spelling representation to connect to sound and meaning in the brain and pop up in the mind's eye automatically.

When early invented spelling is modeled by a knowledgeable beginning reading teacher and taught in five developmental evidenced-based phases followed by proper feedback along with research-based grade by grade systematic and explicit spelling instruction, children build a dictionary of words in their brains that they can easily retrieve for reading and writing. Thus, both reading and writing words—decoding and encoding respectively—become automatic, leaving the child's brain free for making meaning. It's the key to comprehension (along with vocabulary and background knowledge). It is this automaticity in retrieving words that allows us to think about what we are reading or writing.

Over the years detractors, albeit with good intentions, have touted invented spelling as being nonacademic, harmful to traditional values, and a deterrent to conventional spelling. They think it's best to teach accurate spelling as soon as possible. The Ouellette and Sénéchal study has set the record straight.

The researchers report that "…fears that allowing children to 'invent' their own spelling may prevent them from learning conventionally correct spelling can be alleviated." Rather, the researchers point out, it appears to be just the opposite. The meticulously designed and methodically sound study found "a direct path from kindergarten invented spelling to Grade 1 conventional spelling." Ouellette and Sénéchal state, "invented spelling attempts do not set children on a path where they will not learn to spell correctly."

Ouellette and Sénéchal conclude that invented spelling is engaging and analytical and it facilitates literacy growth. It integrates phonological and orthographic growth. In their words it is "…developmentally appropriate and falls naturally within a child's zone of proximal development (Vygotsky, 1962); children are not being asked to memorize or reproduce a spelling that may be beyond their current level of development but rather they are creating a

spelling that reflects, and potentially increases, their current knowledge" (2017, p. 86).

In the final analysis, here's what's most important: Ouellette and Sénéchal found a direct line from invented spelling leading to improved reading scores at the end of first grade. In their carefully crafted longitudinal study, they found invented spelling to be "a unique predictor of growth in early reading skills, over and above children's alphabet knowledge and phonological awareness." Now that's a huge finding! For two decades we have been perseverating on phonological awareness and alphabet knowledge alone.

The end of first grade is when the child's reading brain should work essentially like yours and mine, allowing the child to read easy chapter books and informational texts independently, proficiently, and fluently with joy and comprehension. It's when beginning literacy learners have enough brain power and spellings stored in their brains to write joyfully and expressively albeit with a few misspellings. If we add grade-by-grade explicit spelling instruction—along with vocabulary, background knowledge, and motivation—it's when children are on the way to academic success, career readiness, and personal fulfillment.

Don't underestimate the importance of the 2017 Ouellette and Sénéchal study or of two important studies that preceded it (Ouellette and Sénéchal, 2013, 2008). I've been heralding this message for more than thirty years: invented spelling paves the way to literacy.

Dr. J. Richard Gentry is the author of *Raising Confident Readers, How to Teach Your Child to Read and Write–From Baby to Age 7*. Follow him on Facebook, Twitter, and LinkedIn and find out more information about his work on his website.

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