

Physical Instruction for Symbolic Language Fluency

We have always known that the Peterson method of instruction produced exceptional results in handwriting skill development. Samples from several thousand classroom teachers, reviewed during each school year, have demonstrated success every year since our inception in 1908. Thanks to technology and, in large part, Dr. Hans-Leo Teulings, we now understand the scientific reasons for the consistent success! However, there are many schools that have abandoned organized handwriting instruction - usually to expand time for more reading/language instruction. It is ironic.

During my 20 odd years of classroom work I have encountered the same request from literally thousands of teachers who believe that time spent on developing handwriting skills improves student abilities all across the curriculum. The frustration they feel with current curriculum trends that ignore handwriting instruction, is very real and constant. **They ask for support because their feelings don't carry much weight in curriculum meetings.**

Neuroscience is demonstrating powerful connections between reading and handwriting, skills that have been considered to be unrelated by far too many educators. Coincidentally, the science is also validating the Peterson method of handwriting instruction.

The following series of excerpts, primarily referenced from Endangered Minds, 1991, by Dr. Jane Healy, provide some powerful scientific evidence for the recognition of handwriting pattern instruction as a potent, physical adjunct to reading and language skill improvement.

Excerpt 1 (From Endangered Minds)

Dr. Jerre Levy to Dr. Healy:

"I suspect that the normal human brains are built to be challenged and it is only in the face of an adequate challenge that normal bihemispheric brain operations are engaged."

Dr. Levy goes on to say:

"...children need a linguistic (auditory) environment that is coordinated with the visual environment they are experiencing."

The above discussion revolved around the relative impact on brain development by television watching as opposed to physical play.

Excerpt 2 (From Endangered Minds)

Dr. Healy writes, "Authorities now suspect that the ability to activate and coordinate the work of both hemispheres may be even more important than developing individual systems in either side."

Handwriting instruction using the Peterson method creates precisely the type of physical experience - involving linguistic coordination with the visual picture - that experts say can engage bihemispheric brain operation. We are building pathways in the brain and **there is undeniable evidence to support this claim.**

Excerpt 3 (From Science Magazine, Aug. 1997)

P. E. T. scans demonstrate changes in the brain resulting from motor training. Subjects were exposed to the training of a movement sequence as guided by a robot arm. The scan revealed that one area of the brain was involved at the initial exposure. A bit more than five hours passed before subject #1 could receive a "second lesson." At the outset of lesson two the scan showed several areas of the brain were now involved with the activity, and the subjects proficiency with control of the movement sequence had greatly improved.

Are we also looking at some potential reasons for the fact that the 1971 reading-score summit has not been surpassed? Few, if any, entities other than Peterson Directed Handwriting have been aware of a steady, often precipitous decline in handwriting skills and instruction. Has anyone else collected and processed several hundred thousand handwriting samples each year from elementary school students? Our diagnostic evaluation is also a form of action research over a considerable span of time (since 1908).

Our experience shows the constant redesign of curriculum has consistently removed time for handwriting instruction from our schools. This fact shows on paper in our diagnostic department, as fewer kids each year - in grade one classes - learn to produce symbols smoothly and space them into word groups with any sort of fluency. **First grade teachers send notes with the samples apologizing for the poor papers. They explain that time for handwriting instruction has once again been reduced to expand the "reading/language block."**

Every year I receive requests for samples from a long list of schools. They are asking for "Language Arts" materials. A phone call to the curriculum office for clarification results in a negative response in 9 out of 10 cases - "No, we are looking for language arts programs, not handwriting."

Excerpt 4 (From Endangered Minds)

Pictures of blood flow in the brain as children are reading shows multiple areas (of the brain) are involved in the process. Good readers are definitely using both right and left hemispheres as well as prefrontal systems. (Segalowitz, S. to Dr. Healy)

Excerpt 5 (From Endangered Minds)

Brains of people forced to learn how to read differently due to deafness show divergent use of the two hemispheres. It is not surprising to find the right (visual) being used instead of the left (auditory). (Neville, H. 1982) It is important to note that deaf readers rarely process beyond a fourth grade reading level despite intelligence and instruction. (Healy, J.)

Excerpt 6 (From Endangered Minds)

Instruction tailored to boost hemispheric cooperation by focusing activities on the hemisphere that is least involved has proven to improve reading in dyslexics. (Bakker, D.) (Bakker, D. and Vinke, J. 1984).

Excerpt 7 (From Brain Topics: A Handbook for Teachers and Parents, Chapter 3.)

The literature about the brain is growing at such a rapid rate that anyone is challenged to keep pace. "For example, at the National Library of Medicine, nearly 100,000 publications in the archives contain the term "brain." This is more than double the number of such articles five years ago."

Excerpt 8 (From Brain Topics: A Handbook for Teachers and Parents, Chapter 3.)

One giant educational miscue of the last two decades is that of the left brain/right brain dichotomy. Parents, teachers and administrators are making assertions about deficiencies in right or left brain capabilities.

Teacher training sessions on left brain/right brain concepts were all the rage for a time. The unfortunate result is a myth that the left hemisphere acts alone to control rational thought and language skills while the right side handles holistic thinking and art projects.

Excerpt 9 (From Endangered Minds)

It is time for educators to accept the idea that the brain also has other parts, front and back with bottom and top that all work together. According to Dr. Jerre Levy, biopsychologist at the University of Chicago, "The entire brain must work together for our well-being. This is particularly true for reading and other cognitive functions that are extremely complex activities involving many areas of the brain."

We need to recognize the fact that a myriad of science has demonstrated that learning experiences can change the physical structure of the brain. The brain *learns* how to coordinate the activities of its various structures by opening pathways for communication - and pupil abilities improve as a result.

If your school does not currently include handwriting process training as a physical adjunct to your language arts curriculum, I hope that this information will help you to rally support for change.

The Peterson Method - Simple, Sound and Successful!

A Directed Lesson - Not Trace and Copy

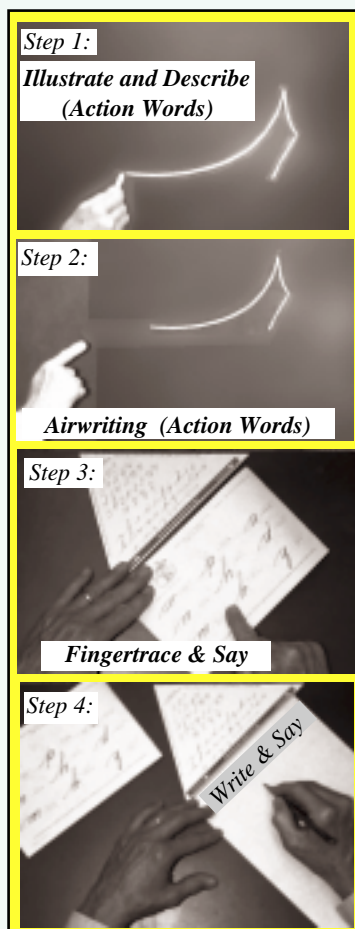
Teacher control and direction of the lesson is the key to teaching rhythmic patterns that will transfer. Imagine you are leading an aerobics exercise group. Everyone makes the same move at the same time.

In this context it becomes clear that pupils must know what the moves are and also the correct sequence. Communication of these cognitive facts, along with the rhythm of the moves, is easy using the *We Write To Read* pupil books and a four step lesson sequence that is simple and quick.

Chant the color/rhythm, chant the Action Words or count! A little rhythm practice each day offers opportunity to develop fluent rhythm patterns for good writing--and all other symbolic language skills.

Explain the reasons why you ask students to practice a specific way. Help students set specific "goals" for practice.

See the Regular Lesson Procedure for more detail.



Here are some of the most important factors in teaching handwriting as a process of language:

1. Concentrate on teaching *lowercase letters*:
 - a. Help students learn the *exact starting point, stroke sequence* and *stop points* used for letters.
 - b. Show students how the individual strokes of small letters follow *left-to-right sequences in rhythmic "beats."*
 - c. Use a descriptive "language of movement." Teach **pupils "How To Move"** with the vocal chant to emphasize the letter rhythm. Use the *Action Words* or *Color Rhythm*.
2. Build paper placement skill and the related position of the hand, wrist and arm and correlate with classwork.
3. Use gross motor practice and control the *rhythm process*.
4. Listen to the voices when you move to the Write & Say step. At first you may have trouble getting pupils to chant. Dependence on *Visual Feedback* blocks rhythmic movement causing voices to stop. Eyes-closed trials often bring it out more quickly. Repeat steps 1, 2 & 3 until you get the voices going. If you establish movement skills with the basic strokes, pupils will adapt to the sequences for letter patterns much more easily.
5. Initial trials will not be as precise as the pupil would like. Because your pupils focus on the product, they need extra coaching on position skills and movement to prevent reversion to visual feedback movement and associated position habits. Our objective is to develop a process that will support fluent language tracking! A little practice with correct process will quickly improve control skills for a majority of your pupils.