

THE WAY TO GO!
KINESTHETIC APPROACH TO HANDWRITING
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Functional handwriting must be taught more efficiently, thoroughly and permanently to all school children. This includes the great number of subtly delayed students who have trouble mastering a functional level of graphic skill to function in school and life. Developmental delays such as incomplete bilateral integration, organizational, memory, analytical and perceptual motor output skills should be accommodated for with specific compensatory teaching techniques. Employing compensatory procedures, all students should be expected to learn to write legibly in an integrated classroom.

It is evident today that many students fail to naturally advance from visual motor learning techniques taught in traditional writing curricula, to the automatic/kinesthetic level of motor competence required for cursive script. They become “stuck” in drawing letters taught in visual motor programs. When writing output demands increase about mid-third grade, the written work of these students will deteriorate. The visual system will no longer be efficient enough to monitor the fingers as they manipulate the pencil to form sentences and paragraphs. The typical solution to “slow down” will improve legibility but functional speed will be compromised.

Cursive handwriting is a kinesthetic skill. Therefore the ideal way to teach handwriting is with kinesthetic teaching strategies. Direct kinesthetic steps to teaching handwriting leaves nothing to chance in developing writing skill to its highest level. From the first teaching session, kinesthetic skills are practiced, integrated and evaluated as each letter is mastered. Kinesthesia, the sensibility of body position, movement, and weight is enhanced when a movement is repeated to the automatic level with vision averted.

The 26 lower case letters in our alphabet can be reduced to four movement groups determined by their lead-in stroke. The four lead-in strokes can be visually associated with common objects in the child’s world. Kinesthetic reinforcement focuses on the “feel of the motion” from the skin, joints, and tendon receptors, and muscles to position, direct or correct letter progression. Teaching steps require the student to simultaneously visualize and verbalize the line progression for entire letter as he writes it in the air with eyes open and later closed. When able to visualize, verbalize and move his pointed fingers through the letter sequence in the air, he repeats the same progression on practice paper. The verbalization for each letter is the “motor plan”. The initial letter of each group must be **over learned** to the automatic/kinesthetic level so it can be modified for the remaining letters in the group. Practice of any letter within a group will reinforce mastery of the entire group. This makes kinesthetic motor learning very efficient.

Essentially all second graders can master the lower case alphabet in six weeks if they practice thirty minutes each school day. Permanent integration of the lower case is usually achieved in 2-3 months. During the interim period before capitals are taught, manuscript capitals should be used in combination with lower case cursive letters for all classroom work. In this way, novice writers will be less likely to mix upper and lower case letters. When a student has achieved kinesthetic mastery of the lower case alphabet, he should undertake learning the capitals grouped for kinesthetic efficiency as well.

Essentially all children learn to write more expeditiously using kinesthetic techniques. However these techniques are an added blessing to students with inadequate memory for configuration and perceptual motor problems, including integration of the diagonal, part-to-whole integration, crossing the midline confusion, and spacing problems. Kinesthetic techniques limit visual demands to the initial analysis of the line progression for each letter. Visual monitoring of writing should be limited to the placement of words on the writing line, accurate retraces and spacing of words. Motor learning at the automatic/kinesthetic level will gradually become more proficient without reduction in quality because it “feels” right and the writer feels secure. Kinesthetic motor learning is most permanent as it effortlessly moves to the level of implicit memory.

Kinesthetic learning techniques are intriguing to practice. Averting vision reduces stress while increasing enjoyment. Youngsters are enlivened to become skilled at penmanship. Kinesthesia eliminates the drudgery of learning this much needed but neglected skill.

BEAUTIFUL but NON-FUNCTIONAL HANDWRITING

“Speed’em Up Techniques”

(for the student who has not developed kinesthesia)

OBSERVATION: Well formed letters that are meticulously written. Writing speed 2-5 times slower than classmates.

PARENT REPORT: “My bright child’s hand cannot keep pace with his thinking. It is the ONLY difficulty he has with school work.”

TEACHER COMPLAINT: “Child has good ideas but can’t get them down on paper”. When asked to hurry up, the writing becomes totally illegible. “He cannot even read his own class notes.”

LEARNING PROBLEM: Writing has not been mastered to the automatic kinesthetic level. The writer became “stuck” using the visual/motor strategies initially taught (possibly because his speed was too slow for the motor pattern to become kinesthetic). Visual guidance of the writing fingers becomes far too inefficient when output volume increases during mid-third to fourth grade. The student falls behind in his assignments when paragraphs or pages of written work are required. Note taking in the classroom will become problematic as well.

Dx based on evaluation of the following writing samples

The child should write a timed lower case connected cursive alphabet with eyes open.

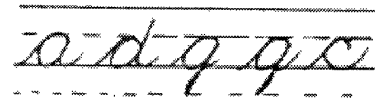
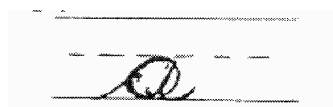
The child should write a timed lower case connected cursive alphabet with eyes closed.

- Identify the “Think Breaks” in both samples. These are darker (graphite lumps) interruptions seen in the connector(s) preceding the letter(s) that are not automatically written. These are clues as to where the child has to pause to motor plan. You will probably see the same pauses in both samples.
- With vision averted, assess the child’s ability to visualize the letters and write them using his kinesthetic sense.
- Compare the samples for variations/similarities in appearance. Do like letter comparisons. Note time for each.
- Which sample flows better? If sample (B) is better, a visual evaluation may be indicated.

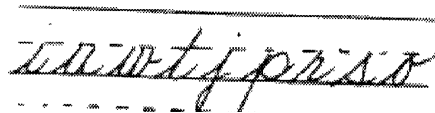
Rx: Kinesthetic reinforcement of letters by groups

- Determine the group(s) where sluggish letter or unknown letter (s) are found using the groupings below:

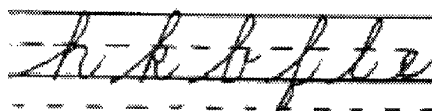
a, d, g, q & c lead-ins can be related to clock face



i, u, w, t, j, p, r, s & o lead-ins should swoop up {R} like a kite string



h, k, b, f, l & e lead-in should swoop upward to the {R} curve {L} to the top line before descending



n, m, v, x, y & z lead-ins curve upward and overhand {R} before curving under hand {L} to the writing line



2. Re-examine the line progression (motor plan) of the initial letter of that/those groups.
3. The child should write the initial letter of each “problem group” using his vision with verbal support. Divided line paper is necessary for students who lack the sense of vertical spacing. Every lower case letter initiates from the writing line. Short letters fill the 1/2 space below the middle marker. The tall letters ascend to fill the upper 1/2 space as well. The seven drop-loop letters descend the full 1/2 space below the writing line. Stopping for a moment at the middle marker below will aid the child in controlling a narrow loop before releasing the stroke at the writing line for the next lead-in.
4. After the child is able to write a letter using vision with verbal support of the line progression, he should close his eyes and visualize the letter. Then using verbal support (talk to your hand) for the line progression, he should practice the letter 15 times on scrap paper before checking results. He should move the pencil energetically while keeping his hand under control. He should evaluate the 15 repetitions of the letter for accuracy and circle all letters that are correct and star the very best one. If the letter formation is correct, he will have developed his own kinesthetic pattern to reinforce a functional level. Do not let him proceed to the next letter until his formation is errorless.
5. Once the initial letter of a “slow group(s)” is mastered without vision at a functional speed, bring the remaining letters up to speed in the group sequences illustrated in “Loops & Other Groups”. (1-800-228-0752) The Psychological Corp.
6. The goal for a mid-fourth grader should be to write a lower case alphabet in 24-30 seconds with ease. (Mid-fifth 20-26; mid-sixth 16-22 seconds).

Capital letters should be taught after the lower case is mastered at the kinesthetic level. Capitals are used less frequently so automatic writing of them is less essential.

Motivational Tips

Have the student practice while “watching TV--- It takes one eye for each and tends to extend the practice period. Practice should be done on worthless scrap paper such as old paper bags from the local grocery store. Process, NOT product is the goal of this intervention.

Once the child is using his kinesthetic sense he will automatically speed up with practice and quality will improve as well.
HAVE FAITH AND FUN AND GIVE HIM/HER THE SAME!

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