



## ORTON-GILLINGHAM-BASED AND/OR MULTISENSORY STRUCTURED LANGUAGE APPROACHES

The principles of instruction and content of a multisensory structured language program are essential for effective teaching methodologies. The International Dyslexia Association (IDA) actively promotes effective teaching approaches and related clinical educational intervention strategies for dyslexics.

### CONTENT: What Is Taught

- **Phonology and Phonological Awareness:** Phonology is the study of sounds and how they work within their environment. A phoneme is the smallest unit of sound in a given language that can be recognized as being distinct from other sounds in the language. Phonological awareness is the understanding of the internal linguistic structure of words. An important aspect of phonological awareness is phonemic awareness or the ability to segment words into their component sounds.
- **Sound-Symbol Association:** This is the knowledge of the various sounds in the English language and their correspondence to the letters and combinations of letters which represent those sounds. Sound-symbol association must be taught (and mastered) in two directions: visual to auditory and auditory to visual. Additionally, students must master the blending of sounds and letters into words as well as the segmenting of whole words into the individual sounds.
- **Syllable Instruction:** A syllable is a unit of oral or written language with one vowel sound. Instruction must include teaching of

the six basic syllable types in the English language: closed, vowel-consonant-e, open, consonant-le, r-controlled, and diphthong. Syllable division rules must be directly taught in relation to word structure.

- **Morphology:** Morphology is the study of how morphemes are combined from words. A morpheme is the smallest unit of meaning in the language. The curriculum must include the study of base words, roots, prefixes, and suffixes.
- **Syntax:** Syntax is the set of principles that dictate the sequence and function of words in a sentence in order to convey meaning. This includes grammar, sentence variation, and the mechanics of language.
- **Semantics:** Semantics is that aspect of language concerned with meaning. The curriculum (from the beginning) must include instruction in the comprehension of written language.

### PRINCIPLES OF INSTRUCTION: How It's Taught

- **Simultaneous, Multisensory (VAKT):** Teaching is done using all learning pathways in the brain (visual/auditory, kinesthetic-tactile) simultaneously in order to enhance memory and learning.
- **Systematic and Cumulative:** Multisensory language instruction requires that the organization of material follows the logical order of the language. The sequence must begin with the easiest and most basic elements and progress methodically to more difficult

material. Each step must also be based on those already learned. Concepts taught must be systematically reviewed to strengthen memory.

- **Direct Instruction:** The inferential learning of any concept cannot be taken for granted. Multisensory language instruction requires the direct teaching of all concepts with continuous student-teacher interaction.
- **Diagnostic Teaching:** The teacher must be adept at prescriptive or individualized teaching. The teaching plan is based on careful and continuous assessment of the individual's needs. The content presented must be mastered to the degree of automaticity.

- **Synthetic and Analytic Instruction:** Multisensory, structured language programs include both synthetic and analytic instruction. Synthetic instruction presents the parts of the language and then teaches how the parts work together to form a whole. Analytic instruction presents the whole and teaches how this can be broken down into its component parts.

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## MULTISENSORY TEACHING

### **What is meant by multisensory teaching?**

Multisensory teaching is simultaneously visual, auditory, and kinesthetic-tactile to enhance memory and learning. Links are consistently made between the visual (*what we see*), auditory (*what we hear*), and kinesthetic-tactile (*what we feel*) pathways in learning to read and spell.

Margaret Byrd Rawson, a former President of The Orton Dyslexia Society (the precursor to The International Dyslexia Association), said it well:

*“Dyslexic students need a different approach to learning language from that employed in most classrooms. They need to be taught, slowly and thoroughly, the basic elements of their language -- the sounds and the letters which represent them -- and how to put these together and take them apart. They have to have lots of practice in having their writing hands, eyes, ears, and voices working together for the conscious organization and retention of their learning.”*

Teachers who use this approach teach children to link the sounds of the letters with the written symbol. Children also link the sound and symbol with how it feels to form the letter or letters. As students learn a new letter or pattern (such as *s* or *th*), they carefully trace, copy, and write the letter(s) while saying the corresponding sound. The sound may be made by the teacher and the letter name(s) given by the student. Students then read and spell words, phrases, and sentences using these patterns. Teachers and their students rely on all three pathways for learning rather

than focusing on a “sight-word” or memory method, a “tracing method,” or a “phonetic method” alone.

### **When and where was multisensory teaching introduced for children with dyslexia?**

Dr. Samuel Torrey Orton and his colleagues began using multisensory techniques in the mid-1920's at the mobile mental health clinic he directed in Iowa. Orton was influenced by the kinesthetic method described by Grace Fernald and Helen Keller. He suggested that kinesthetic-tactile reinforcement of visual and auditory associations could correct the tendency of reversing letters and transposing the sequence of letters while reading and writing. Students who reverse *b* and *d* are taught to use consistent, different strokes in forming each letter. For example, students make the vertical line before drawing the circle in printing the letter *b*; they form the circle before drawing the vertical line in printing the letter *d*.

Anna Gillingham and Bessie Stillman based their original 1936 teaching manual for the “alphabetic method” on Dr. Orton's theories. They combined multisensory techniques with teaching the structure of written English, including the sounds (phonemes), meaning units (morphemes such as prefixes, suffixes, and roots) and common spelling rules. The phrase “Orton-Gillingham approach” refers to the structured, sequential, multisensory techniques established by Dr. Orton and Ms. Gillingham and their colleagues.

## What is the rationale behind multisensory teaching?

Children with dyslexia often exhibit weaknesses in auditory and/or visual processing. They may have weak phonemic awareness, meaning they are unaware of the role sounds play in words. They have difficulty rhyming words, blending sounds to make words, or segmenting words into sounds. They may also have difficulty acquiring a sight vocabulary. That is, dyslexic children do not learn the sight words expected in the primary grades. In general, they do not pick up the alphabetic code or system.

When taught by a multisensory approach, children have the advantage of learning alphabetic patterns and words by utilizing all three pathways. Orton suggested that teaching the “fundamentals of phonic association with letter forms both visually presented and reproduced in writing, until the correct associations were built up” would benefit students of all ages.

## Is there solid evidence that multisensory teaching is effective for children with dyslexia?

There is a growing body of evidence supporting multisensory teaching. Current research, much of it supported by the National Institute of Child Health and Human Development (NICHD), converges on the efficacy of explicit structured language teaching for children with dyslexia. Young children in structured, sequential, multisensory intervention programs, who were also trained in phonemic awareness, made significant gains in decoding skills. These multisensory approaches used direct, explicit teaching of letter-sound relationships, syllable patterns, and meaning word parts. Studies in

clinical settings showed similar results for a wide range of ages and abilities.

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## Related Reading:

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