Great Minds Think Alike: Parallel Paths to Multisensory Instruction

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Multisensory, Structured Language Education (MSLE)

What is multisensory, structured language education?
• Involves the use of visual, auditory, and kinesthetic-tactile pathways simultaneously to enhance memory and learning
• Links, or associations, are consistently made among these pathways

1997 – National Reading Panel
• Established by Congress
• Goal: Assess the effectiveness of different approaches used to teach students to read

2000 – Report of the National Reading Panel
• A program of phonetic, multisensory, structured language instruction should be used to teach reading skills.

International Dyslexia Association (IDA)
• 1949 – Orton Dyslexia Society was founded at a dinner meeting of approximately 30 people.
• 2010 – Published Knowledge and Practice Standards for Teachers of Reading

www.eida.org

IDA Knowledge and Practice Standards for Teachers of Reading (2010)
• Foundation concepts about oral and written language learning
• Knowledge of language structure
• Knowledge of dyslexia and other learning disorders
• Administration and interpretation of assessments to plan instruction

IDA Knowledge and Practice Standards for Teachers of Reading (2010)
• Structured language teaching of phonology, phonics, and word study
• Fluent, automatic reading
• Vocabulary
• Text Comprehension
• Handwriting, spelling, and written expression
• Ethical standards for the profession
International Multisensory Structured Language Education Council (IMSLEC®)

- 1990 – Began as a committee of the Orton Dyslexia Society (now International Dyslexia Association, or IDA)
- 1995 – Incorporated as an independent accrediting organization

1998 – Approved the first candidates for program accreditation

Now accredits over 30 training courses

DuBard Association Method® was one of the first four programs accredited by IMSLEC® and the first program accredited in Mississippi

www.imslec.org

To meet accreditation requirements, a training program must meet rigorous standards of:

- Instructional contact hours
- Practicum hours
- Supervision of trainees

Content of Instruction:

- Phonology and phonological awareness
- Sound-symbol association
- Syllable instruction
- Morphology
- Syntax
- Semantics

Principles of Instruction:

- Simultaneous and multisensory
- Systematic and cumulative
- Synthetic and analytic
- Direct instruction
- Diagnostic teaching to automaticity

Academic Language Therapy Association (ALTA)

- 1986 – ALTA was incorporated
- Purpose: Establish, maintain, and promote standards of education practice and professional conduct for Certified Academic Language Therapists
Academic Language Therapy Association (ALTA)

*Academic Language Therapy: An educational, structured, comprehensive, phonetic, multisensory approach for the remediation of dyslexia and/or written language disorders

www.altaread.org

ACADEMIC LANGUAGE THERAPY ASSOCIATION (ALTA)

Certifies individuals who have completed 200 instructional hours and 700 practicum hours in a course accredited by IMSLEC® or a commensurate Orton-Gillingham-based course

National exam that measures competency for nine standards

ACADEMIC LANGUAGE THERAPY ASSOCIATION (ALTA)

Language and the Brain

1860s

• Broca’s Area

Language and the Brain

1860s

• Broca’s Area

Pierre Paul Broca

• 1860s – Performed autopsy on a 51-year-old man who had lost the use of productive speech

• Found lesions on the frontal lobe

• Encountered others with the same symptoms and lesions

• Aphasia

Language and the Brain

Karl Wernicke

• 1874 – Published book that described patients with brain injuries who had language difficulties

• Lesions on left temporal lobe, posterior to Broca’s area

• Speech function not affected, but speech was meaningless; also had difficulty understanding language

• Aphasia
Karl Wernicke
- 1885 – Began to use the term **word-deafness**: comprehension of speech, ability to repeat speech, and ability to write from dictation were impaired
- Said to be able to speak spontaneously, read, write
- Hearing acuity: Normal to near-normal

Adolph Kussmaul
- 1877 – First coined the term **word-blindness**: patient who could no longer make sense of written language following a disease that affected the left angular gyrus
- Adequate mental ability and no physical disabilities, but who could not learn to read

Dr. James Hinshelwood and Dr. W. Pringle Morgan
- 1896 – Reported cases of word-blindness in their patients

Dr. James Kerr
- 1896 – Used the term word-blindness in a prize essay

Dr. E. Bosworth McCready
- 1911 – Published article on congenital word-blindness; discussed multiple avenues of learning

Clara Schmitt
- 1918 – Reported cases of those diagnosed with word-blindness who had achieved success learning to read by using a phonetic approach.
- Students learned to **associate the sounds of letters with the letters themselves**.
Great Minds Think Alike

Dr. Samuel T. Orton – Neurologist who is considered to be the “father of dyslexia research”

Anna Gillingham – Math teacher and perhaps the country’s earliest school psychologist

Mildred McGinnis – Teacher of students who were deaf or hard of hearing; one of the country’s earliest speech correctionists (now known as speech-language pathologists)

Two Multisensory Methods

Three Professionals

Orton Gillingham McGinnis

Begin at the single sound level X X X

Precise articulation X X X

VAKT (visual-auditory-kinesthetic-tactile) X X X

Teach letter names X X *

Say phonemes while writing X X X

Say letter names while writing X X No

Segmenting and blending X X X

Use of diacritical marks N/A X No

Two Multisensory Methods

Three Professionals

Orton Gillingham McGinnis

Reading nonsense syllables X X X

Student recognizes/explains difference between vowels and consonants N/A X No

Early intervention is important X X X

Teach syllable division rules X X *

Teach visual association X X X

Teach spelling rules X X *

Correct letter formation when writing X X X

Teacher training is vital X X X

Gillingham-Stillman Linkages and McGinnis Seven Steps

Gillingham-Stillman Linkages

Visual

A - V

Kinesthetic

A - K

Auditory

Kinesthetic feedback with production 1 1 2 V-A-K

Precise artic from written 1 1 2 V-K

Establish written recall 1 3 1 5 V-A-K

Written form with spoken form 1 3 1 5 V-A-K

Written form with letter name 1 5 N/A V-A-K
Gillingham-Stillman Linkages and McGinnis Seven Steps

<table>
<thead>
<tr>
<th>Activity</th>
<th>Gillingham-Stillman</th>
<th>McGinnis</th>
<th>Linkages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copy written form</td>
<td>2</td>
<td>4</td>
<td>V-X</td>
</tr>
<tr>
<td>Write from dictation of letter name</td>
<td>4</td>
<td>N/A</td>
<td>V-A-K</td>
</tr>
<tr>
<td>Say phoneme after hearing letter name</td>
<td>6</td>
<td>N/A</td>
<td>A-K</td>
</tr>
<tr>
<td>Say letter name after hearing phoneme</td>
<td>7</td>
<td>N/A</td>
<td>A-K</td>
</tr>
<tr>
<td>Write from dictation of phoneme</td>
<td>8</td>
<td>3</td>
<td>V-A-K</td>
</tr>
<tr>
<td>Recognition of linguistic unit from auditory stimulus only</td>
<td>N/A</td>
<td>7</td>
<td>V-A-K</td>
</tr>
</tbody>
</table>

Which came first?

Early 20th Century: Orton, Gillingham, McGinnis

1949: Orton Dyslexia Society, currently known as the International Dyslexia Association (IDA)

1986: ALTA incorporated

Which came first?

1990: International Multisensory Structured Language Council (IMSLEC)

1998: IMSLEC began accrediting training courses

2010: IDA adopted Knowledge and Practice Standards for Teachers of Reading

No evidence that Orton or Gillingham ever met McGinnis or knew of her work.

McGinnis referenced Orton in her 1939 master’s thesis.

The approaches they created set the benchmark for the development of today’s standards.

Structured Literacy

July 1, 2014 – IDA Board of Directors “chose a name that would encompass all approaches to reading instruction that conform to IDA’s Knowledge and Practice Standards. That name is ‘Structured Literacy.’”

This term is “not designed to replace Orton Gillingham, Multisensory, or other terms in common use. It is an umbrella term designed to describe all of the programs that teach reading in essentially the same way.”
What does ASHA say?

The American Speech-Language-Hearing Association Position Statement:

Roles and Responsibilities of Speech-Language Pathologists with Respect to Reading and Writing in Children and Adolescents

SLPs play a “critical and direct role in the development of literacy for children and adolescents with communication disorders.”

What does ASHA say?

Spoken language = foundation for written language

Reciprocal relationship between spoken and written language

Children with spoken language problems often have written language problems

What does ASHA say?

Components of language that may be involved in spoken and written language problems: phonology, morphology, syntax, semantics, pragmatics.

Problems can occur in “production, comprehension, and awareness of language at the sound, syllable, word, sentence, and discourse levels.”

What does ASHA say?

Appropriate roles for SLPs include:

- Prevention
- Identification
- Assessment
- Intervention
- Assisting Others

What does Mississippi law say about diagnosis of dyslexia?

Mississippi law specifies three categories of professionals who are qualified to diagnose dyslexia:

- Psychologists
- Psychometrists
- Speech-Language Pathologists

(Miss. Code Ann. § 37-173-15)

Great Minds Think Alike: Parallel Paths to Multisensory Instruction

Why does this matter?
Gillingham-Stillman: Linkages
1. Name of letter, sound of letter, kinesthetic feedback
2. Motor memory for letter form established
3. Student says letter name in response to visual symbol
4. Student writes letter from dictation of letter name
5. Student says sound of letter in response to visual symbol
6. Student says sound of letter in response to hearing letter name
7. Student says name of letter in response to hearing sound letter makes
8. Student says letter name and writes letter in response to hearing sound letter makes

McGinnis: Seven Steps
1. Recognition (reading) of the written, cursive form of Northampton symbol
2. Production of spoken form of Northampton symbol while looking at written form
3. Associating written form of language being taught with picture, object, action, or placement
4. Copying written form
5. Establishing recall of both the spoken and written forms of the language
6. Associate spoken form with written form
7. Recognition of the language from an auditory stimulus only (acoustic step; pure auditory training)

References

Academic Language Therapy Association: www.altaread.org
American Speech Language Hearing Association: www.asha.org
DuBard School for Language Disorders: www.usm.edu/dubard
International Dyslexia Association: www.eida.org
International Multisensory Structured Language Education Council: www.imslec.org
<table>
<thead>
<tr>
<th>Year</th>
<th>Orton</th>
<th>Gillingham</th>
<th>McGinnis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1878</td>
<td>July 12 - born in Batavia, IL</td>
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<tr>
<td>1879</td>
<td>October 15 - born in Columbus, OH</td>
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<tr>
<td>1890</td>
<td>October 12 - born in Alton, IL</td>
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<tr>
<td>1900</td>
<td>Earned B. A. from Swarthmore College</td>
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<tr>
<td>1901</td>
<td>Earned B. S. from Ohio State University</td>
<td>Earned B. A. from Radcliffe</td>
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<tr>
<td>1901-1904</td>
<td>Taught at Friends School in Philadelphia, PA</td>
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<tr>
<td>1905</td>
<td>Earned M. D. from University of Pennsylvania School of Medicine</td>
<td>Began work at Ethical Culture School in New York City; Met Bessie Stillman</td>
<td></td>
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<tr>
<td>1906</td>
<td>Earned Master's degree in education from Harvard University; Trained as a pathologist at Boston City Hospital</td>
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<tr>
<td>1909</td>
<td>Began work as a neuropathologist at Worcester, MA State Hospital; Taught at Clark University and Harvard Medical School</td>
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<tr>
<td>1910</td>
<td>Earned Master's degree from Teachers' College, Columbia University; Took leave of absence from Ethical Culture School to study in Germany</td>
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<tr>
<td>1912</td>
<td>Found that some bright students had trouble learning to read - called this &quot;baffling difficulty;&quot; Met Dr. Henry Goddard; began interest in assessment of ability</td>
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<tr>
<td>1913</td>
<td>Studied in Germany with Dr. Alois Alzheimer</td>
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<tr>
<td>1914</td>
<td>Pathologist and Clinical Director of the Pennsylvania Hospital for Mental Diseases in Philadelphia</td>
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<tr>
<td>1915</td>
<td>One of the first teacher graduates of the CID Normal Training Class</td>
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<tr>
<td>1916</td>
<td>Employed by CID as one of the first teachers of the deaf</td>
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<tr>
<td>1918</td>
<td>Became head of the Department of Speech Correction at CID</td>
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<tr>
<td>1919</td>
<td>Established psychopathic hospital in Iowa City, IA and Department of Psychiatry at University of Iowa College of Medicine</td>
<td>Assisted Dr. Goldstein in rehab of service men who lost speech as a result of head injury. Developed procedures for adults that were later adapted for children who were deaf and/or aphasic</td>
<td></td>
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<tr>
<td>1919</td>
<td>&quot;The development and organization of the sequence of steps and procedures which constitute the Association Method were completed shortly after World War I.&quot; (McGinnis, 1963)</td>
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<tr>
<td>1923</td>
<td>Took 6 month leave from CID to study speech-language pathology</td>
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<tr>
<td>1925</td>
<td>Mobile mental hygiene clinic started in Greene County, IA; Found M.P.</td>
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<td>1928</td>
<td>Left Iowa and went to Columbus, OH</td>
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<tr>
<td>Year</td>
<td>Orton</td>
<td>Gillingham</td>
<td>McGinnis</td>
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<tr>
<td>1929</td>
<td>Moved to NYC; became neuropathologist at New York Neurological Institute and professor of neurology and neuropathology at Columbia University College of Physicians and Surgeons</td>
<td>Met Samuel T. Orton</td>
<td></td>
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<tr>
<td>1929</td>
<td>Met Anna Gillingham</td>
<td>Considered Ph.D. studying under Dr. Goddard at Ohio State U.</td>
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<tr>
<td>1930</td>
<td>Began professional collaboration with Gillingham</td>
<td>Began professional collaboration with Orton</td>
<td>Teachers College of CID affiliated with Washington University</td>
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<tr>
<td>1931</td>
<td>Became Language Research Project at NY Neurological Institute</td>
<td>Became Research Fellow in Language Disabilities at the NY Neurological Institute's Language Research Project</td>
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<tr>
<td>1932</td>
<td>Published beginnings of the Manual (typed pages)</td>
<td>Earned B. S. in Education from Washington University</td>
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<tr>
<td>1933</td>
<td>Manual was mimeographed and put in binders</td>
<td>First bound edition of the Manual (Old Brown); Retired from Ethical Culture School and moved to Hawaii to train teachers there</td>
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<tr>
<td>1934</td>
<td>Published a series of lectures in a book called &quot;Reading, Writing, and Speech Problems in Children&quot;</td>
<td>Returned to New York</td>
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<td>1936</td>
<td>Began professional collaboration with Gillingham</td>
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<tr>
<td>1937</td>
<td>Began professional collaboration with Orton</td>
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<tr>
<td>1938</td>
<td>Published a series of lectures in a book called &quot;Reading, Writing, and Speech Problems in Children&quot;</td>
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<td>1939</td>
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<td>1947</td>
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<tr>
<td>1948</td>
<td>November 17 - Orton died</td>
<td>October 2 - Bessie Stillman died</td>
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<td>1949</td>
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<td>1954</td>
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<tr>
<td>1955</td>
<td></td>
<td>Chosen as one of the first ten &quot;Women of Achievement&quot; by the St. Louis Globe-Democrat</td>
<td></td>
</tr>
<tr>
<td>1956</td>
<td></td>
<td>Red Manual published</td>
<td>Etoile DuBard worked part-time and studied under McGinnis at CID</td>
</tr>
<tr>
<td>1960</td>
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<tr>
<td>1961</td>
<td></td>
<td>Served as a consultant at the Instituto Mexicano de la Audicion y el Language in Mexico City</td>
<td></td>
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<tr>
<td>1963</td>
<td></td>
<td>Retired from CID; published book: Identification and Education by the Association Method</td>
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<tr>
<td>1964</td>
<td></td>
<td>May 27 - Gillingham died</td>
<td></td>
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<tr>
<td>1965</td>
<td></td>
<td>Lectured in Peru as a Fulbright Scholar; lectured in Argentina and Venezuela</td>
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<tr>
<td>1967</td>
<td></td>
<td>Pathway School in Jeffersonville, PA named a building for her</td>
<td></td>
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<tr>
<td>1967</td>
<td></td>
<td>Lectured in England and visited Ireland to trace Irish ancestry; became ill and returned home; November 14 - McGinnis died</td>
<td></td>
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</tbody>
</table>