Dyslexia In Texas
1895 - 1896

2 British Physicians – W. Pringle Morgan and James Hinshelwood both wrote about “congenital word blindness”
James Hinshelwood, MD, was first physician to advocate for a specific educational approach in *Congenital Word Blindness*.

- recommended “the method of simultaneous appeal to as many cerebral centers as possible”
- multisensory approach linking visual, auditory, and kinesthetic modalities of teaching students with reading disabilities
1926

Samuel T. Orton, MD., recommended “the use of all sensory pathways to reinforce the memory patterns and strengthen one another.”
Called reading and spelling disorders strephosymbolia.

Samuel T. Orton, MD.
1920’s

Anna Gillingham and Bessie Stillman developed a phonics approach following Orton’s theories using V – A – K instruction incorporating activities to link the senses.
1940’s

- Began in-depth training in the remedial procedures of Gillingham and Stillman
- Enrolled in the first formal course at Mass General
Luke Waites, M.D.

“A Pioneer in the Treatment of Dyslexia.”

Joined the staff of Texas Scottish Rite Hospital in 1964

1960’s
Aylett Cox organized the Orton-Gillingham materials and began teaching in small groups.
A Historical Perspective

• Word blindness (Kussmaul, 1877; Morgan, 1896)
• Strephosymbolia (Orton, 1925)
• Minimal Brain Injury/Perceptual deficits (Strauss, Cruikshank, mid 1900’s)
• Specific Learning Disability (Kirk, 1963)
• Specific Developmental Dyslexia (World Neurology Foundation, 1968)
The first meeting of the World Federation of Neurology's Research Group on Developmental Dyslexia and World Illiteracy took place at the Language Research and Training Laboratory of the Texas Scottish Rite Hospital, Dallas, Texas, U.S.A. on 3rd, 4th and 5th April, 1968. The following attended:

Chairman: Macdonald Critchley, London, England
Lucius Waites, Dallas, Texas, U.S.A.
Stanton Barron, Abilene, Texas, U.S.
Eberhard Bay, Dusseldorf, Germany
Arthur Benton, Iowa City, Iowa, U.S.
Douglas Buchanan, Chicago, Illinois,
Constantin Calavrezo, Bucharest, Rum
Artidoro Cacares, Lima, Peru
Douglas Crowther, San Francisco, Cal
WORLD FEDERATION OF NEUROLOGY

SECRETARY-GENERAL-TREASURER

PROFESSOR HENRY MILLER

PRESIDENT

DR. MACDONALD CRITCHLEY
INSTITUTE OF NEUROLOGY
QUEEN SQUARE
LONDON W.C.1
ENGLAND
TEL. TERMINUS 1038
Specific Developmental Dyslexia

A disorder manifested by difficulty in learning to read despite conventional instruction, adequate intelligence, socio-cultural opportunity. It is dependent upon fundamental cognitive disabilities which are frequently of constitutional origin.

World Federation of Neurology, 1968
69th Texas Legislature passes HB 157 and HB 2168 requiring screening and treatment of dyslexia in Texas Public Schools
Definition Progression Continued

• Developmental Reading Disorder (American Psychiatric Association, 1980)

• Dyslexia
  (International Dyslexia Association, 1995)

• Research based definition
  (National Reading Panel and IDA, 2002)
Myths & Misunderstandings About Dyslexia

- Does not exist – is merely a catch all term for learning problems
- Dyslexia cannot be diagnosed until a child is 8 to 11 years old
- It’s a visual problem – people see and write letters and words backward
- Forcing a student to read every day will make him or her a better reader
Dyslexia is a specific learning disability that is neurological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede growth of vocabulary and background knowledge.

Adopted by the Board of Directors, International Dyslexia Association, November, 2002
“Dyslexia is a specific learning disability”

• one specific type of learning disability
• not the same as the term “learning disability” that qualifies a student for special education
• however, 80% of students with a learning disability have a reading problem
• may exist along with other conditions such as ADHD or an oral language disorder
“...neurological in origin”

- when a person has dyslexia, their brain works differently
- these differences have been shown in fMRI studies

Geschwind 1979. Scientific American, 241
“... characterized by difficulties with accurate and/or fluent word recognition and by poor spelling...”

- the student misreads common words
- the student stumbles over words when reading
- a student may read a word correctly once and then misread it another time
- the student misspells common words and has problems using spelling rules
“... and decoding abilities.”

- the student has a difficult time making sound–symbol relationships
- the student has a difficult time sounding out words
- the student may look at the first letter of a word and guess what the word is, often adding, omitting or substituting sounds
“...difficulties typically result from a deficit in the phonological component of language ...”

- the “phonological component” is the sound system of our language
- problems with these skills lead to problems in learning to read
- so, surprisingly, intelligence does not always lead to strong reading skills
- this explains why a child who does well in other areas can struggle with reading
“...unexpected in relation to other cognitive abilities and the provision of effective classroom instruction”

- it is a surprise that the child struggles to read
- good reading is not predicted by
  - age
  - intelligence
  - other abilities in school
- good classroom instruction is important!
- watching how the student responses to good instruction can lead to earlier intervention
“...secondary consequences may include problems in reading comprehension and reduced reading experience that can impede growth of vocabulary and background knowledge”

• recognizes that if a child struggles to read, that child will read less
• a child who reads less, does not “practice” and does not improve as quickly as classmates
• a child who reads less learns fewer vocabulary words for reading comprehension
THE DYSLEXIA HANDBOOK

REVISED 2007, UPDATED 2010

Procedures Concerning Dyslexia and Related Disorders

TEXAS EDUCATION AGENCY • AUSTIN, TEXAS
FEBRUARY 2007, UPDATED SEPTEMBER 2010
Components of Effective Instruction

Specific Components and Strategies Proven to Address the Needs of Students with Dyslexia

- Phonemic awareness
- Graphophonemic knowledge
- Language structure
- Linguistic
- Strategy-oriented
Phonemic Awareness

Enables students to work with sounds in spoken language.

Identify
Segment
Blend
Manipulate
Graphophonemic Knowledge

Letter-Sound Plan:

- words are made of sounds
- sounds are written with letters in the right order

Students learn to:

- blend sounds associated with letters into words
- separate words into component sounds for spelling and writing
Morphology: study of the units of meaning in language such as suffixes and prefixes

WIZARD OF ID

BY BRANT PARKER AND Hohnny Hart
Language Structure

- Syntax: grammar, the rules that determine word order
Language Structure

- **Semantics**: word meaning, deals with multiple meanings and figurative language

Mad as a Wet Hen
by Marvin Terban

Amelia Bedelia
by Peggy Parrish
• **Pragmatics**: the use of language in a particular context

If a child says, "That's how it doesn't go," respond, "You're right. That's not how it goes."
Linguistic

Instruction to improve proficiency and fluency with patterns of language so that words and sentences are the carriers of meaning.

Correct this sentence:

It was me who broke the window.

It was not me who broke the window.
Strategy Oriented

Reliable set of strategies or procedures for

• Decoding
• Encoding

…that lead to

• Word Recognition
• Fluency
• Comprehension
Descriptors of an Effective Dyslexia Program:

- Explicit direct instruction
- Individualized
- Intensive
- Meaning based
- Multisensory
Explicit Direct Instruction

Systematic
Sequential
Cumulative

- no assumption of prior skills
Systematic Format

System of teaching that is...

Scientific

Structured

Logical

Integrated

Designed specifically for . . .

students with difficulty in reading.
Sequential Presentation

Sequence of Presentation of Concepts:

SIMPLE → COMPLEX
FREQUENT → INFREQUENT
RELIABLE → LESS RELIABLE

LETTERS -- SYLLABLES -- WORDS -- SENTENCES
CUMULATIVE INSTRUCTION

Small Increments of New Learning

based on foundation of previous learning
taught from known to unknown

Controlled Materials

Consistent Systematic Repetition

Application of Basic Concepts Learned
What works for student with dyslexia?

Research-based instruction that matches the INDIVIDUAL student’s needs
Intensive, Highly Concentrated Instruction

- maximizes student engagement
- uses specialized methods and materials
- produces results
- contains all the Components of Instruction
Meaning Based

Instructional goals that:

- facilitate accuracy and fluency
- emphasize comprehension and composition
The term *multisensory* has been used to refer to any learning activity that includes the use of two or more sensory modalities simultaneously to take in or express information.
Accredited Courses in Texas

- JPW Learning Center – San Angelo
- LEAD – (Literacy Education and Academic Development) – Dallas
- McKinney Christian Teacher Training – McKinney
- Neuhaus Education Center – Houston
- Scottish Rite Dyslexia Center of Austin - Austin
Accredited Courses in Texas

- Scottish Rite Learning Center of West Texas – Lubbock
- The Shelton School – Dallas
- Southern Methodist University – Plano
- Texas Scottish Rite Hospital for Children – Dallas
Courses In-Process in Texas

- Midwestern State University – Wichita Falls
- Rawson – Saunders School - Austin
- Scottish Rite Learning Center of South Texas – San Antonio