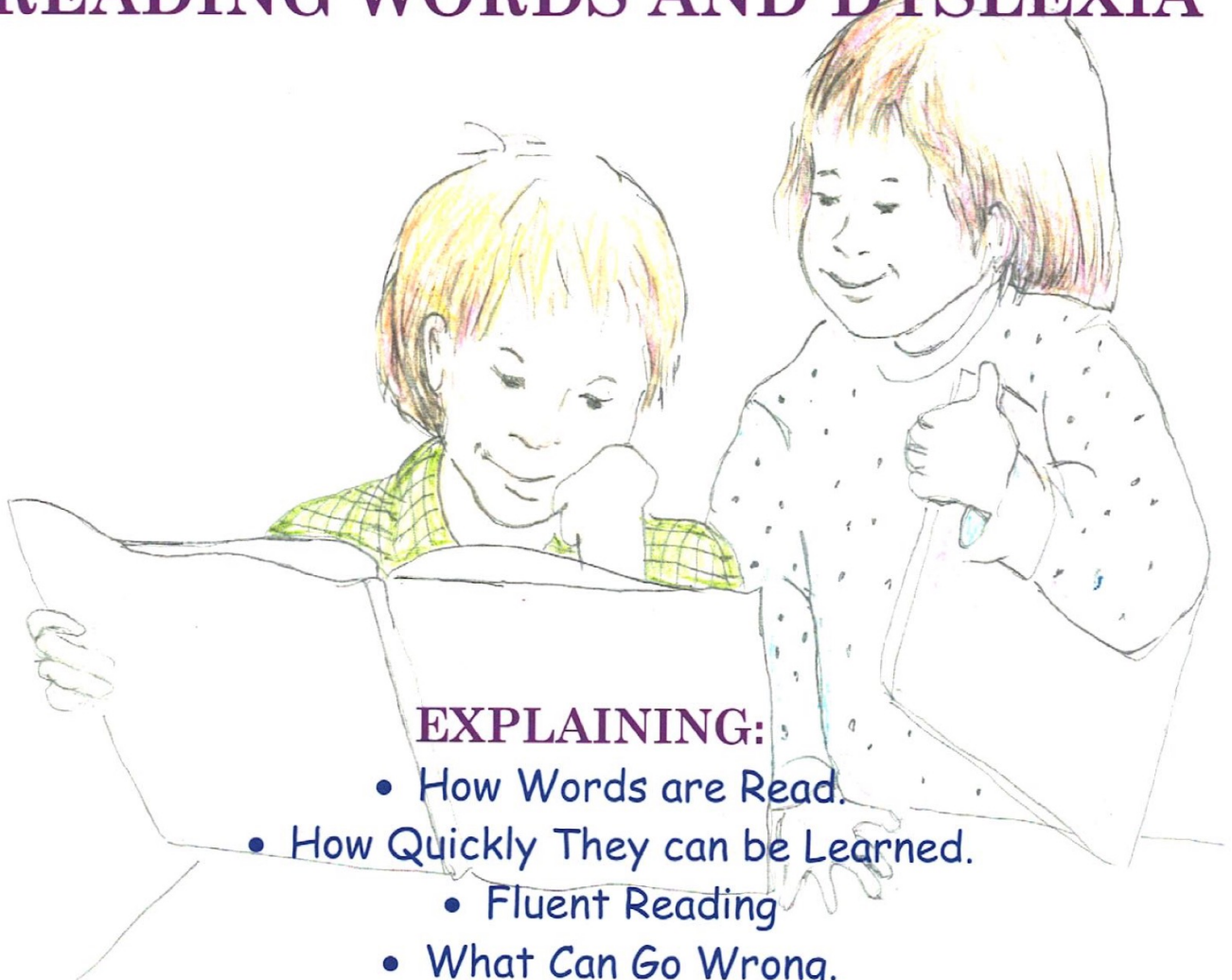


Introduction

THE SCIENCE OF READING WORDS AND DYSLEXIA



EXPLAINING:

- How Words are Read.
- How Quickly They can be Learned.
 - Fluent Reading
 - What Can Go Wrong.
 - Dyslexia.
- Instructional Implications.

An ODE Approved Study on
The Understanding and Recognition of Dyslexia

CHARLES ARTHUR, Founder, Arthur Academy Charter Schools
carthur@teleport.com, 971-544-7341

All information and materials found at: arthurreadingworkshop.com

Winter/Spr. Term: Tuesday's, 5:00 to 7:00, Feb. 12, 26, Mar. 12, April 9 and 23.
In the home of the instructor: 3112 SE Main St. Portland, OR 97214
Cost: \$25 for expenses

Notice of Seminar on: **The Science of Reading at the Word Level and How it Explains Dyslexia.**

Charles Arthur, Instructor, 971-544-7341, carthur@teleport.com

An ODE approved study on **The Understanding and Recognition of Dyslexia**

This seminar is in the form of five small, 2 hour meetings, every other week, (excluding spring break) in the home of the instructor, for a total of 10 class hours. Participants will be electronically provided a syllabus, handouts and a copy of a powerpoint presentation for each meeting, via email or website: arthurreadingworkshop.com

Winter/Spring Dates and Place :

Tuesdays, every other week, divided by spring break,
3112 SE Main St. Portland, OR 5:00 to 7:00

February 12 and 26, March 12, (spring break) April 9 and 23

One PSU Credit available

Focus

The seminar examines how a theory of reading words has been developed and has helped explain dyslexia. (Part I) This can both deepen an understanding of reading, its teaching and, as well as, help understand the cause of dyslexia. In particular, an appreciation can be gained on how explicit systematic teaching of small increments is beneficial for all and crucial, in a more intense form, for children with difficulties learning to read.

Thesis

Dyslexia is best understood within the context of research and scholarly study of the theory of reading words and how it relates to speech. It has become clear that due to its neurological base, ["learning to read is strikingly different from other sorts of learning"](#). The signature problem with children with dyslexia is the difficulty in learning to read words. The understanding and recognition of this begins with recognizing that this difficulty is a result of a specific neurological weakness in the part of the brain that controls speech. This weakness interferes with or inhibits the ability to learn to read words. Therefore, *"We read with our eyes, but the starting point for reading is speech."* (Seidenberg, Mark. **Language at the Speed of Sound**, pg. 7, 2017).

It has been learned that, neurologically, speech and reading are bound together by the alphabet. (Part II) When the relationship is right, reading can work almost as well as listening to speech. This means that readers can read as fast and automatic as they listen to someone talk. How to explain this has been a mystery for ages. The science of reading words has sought to find a theory that finally solves this mystery, leading to a better understanding of teaching reading and dyslexia.

So, what can go wrong?

The irony is: in spite of how easily reading words is done by good readers, a mystery in itself, learning to read, for a variety of reasons, is extraordinarily difficult for many children, which adds to the mystery. A clue begins with considering that speech evolved way before reading was invented. Because of the alphabetic writing system, reading brings an increased demand on this prior capability for speech. Any weakness will show up in learning to read words when this added demand is called on. Its ill effects on learning to read is called dyslexia. Dyslexia, thus, is due to a neurological weakness in the capacity for speech. This interferes with reading at the place where reading and speech are joined by the alphabet. The weakness is not a disorder or a disfunction. It is a result of the normal distribution of the human capacity for speech, which then effects individuals at the lower end of the curve. The official definition of dyslexia refers to this weakness. *"These (reading) difficulties typically result from a deficit (weakness) in the phonological component of language (speech)."*

In order to understand the theory of reading words and the condition of dyslexia, it is necessary to understand how reading, at the word level, has become bound to speech, the "phonological component of language". Once a theory is found that explains how words are learned and read, an understanding of dyslexia becomes clear. This body of knowledge has also provided direction and a framework for research on instruction and treatment/prevention of dyslexia. The finer points of instruction can only be determined by research in instruction itself. The combined research on both theory and instruction have coincided in identifying the most effective approach for teaching beginning reading. (Part III)

Sponsoring Organization:
Arthur Academy Charter Schools
Mastery Learning Institute
13717 SE Division St. Portland. OR 97236

Syllabus Table of Contents

The Science of Reading Words

and How it Relates to Beginning Reading and Dyslexia

1	<p>Introduction – The Mystery</p> <p>Part Ia</p> <p>Seeking and Building a Theory</p> <p>Applications and critical distinctions at the single word level</p>	1- 5
2	<p>Part Ib</p> <p>How the Theoretical Basis of Reading is Derived from Speech.</p> <ul style="list-style-type: none"> • Speech Side- Dyslexia • Print Side-the Alphabet • Applications on a grand scale • Summary Evaluation 	1-20
3	<p>Part II.</p> <p>How Brain Imaging has Contributed</p> <p>Confirming and Completing the Theory and its Explanation of Dyslexia</p>	1 – 16
4	<p>Part IIIa.</p> <p>How Theory Confirms Explicit/Systematic Teaching</p> <ul style="list-style-type: none"> • A Theoretical Frame of Reference • The question of an over-all approach • National Reading Panel on Teaching <ul style="list-style-type: none"> • The need for further detail 	1 - 10
5	<p>Part IIIb.</p> <p>A Framework of the Essentials</p> <ul style="list-style-type: none"> • Phonemic Awareness, <ul style="list-style-type: none"> • Phonics, and Fluency • With Added Intensity When Needed 	11 – 20