Foundational Reading Skill Development and Dyslexia: Serving All Students

Literacy is understanding, evaluating, using, and **engaging** with written texts to **participate in society**, to achieve one's goals, and to develop one's knowledge and potential.

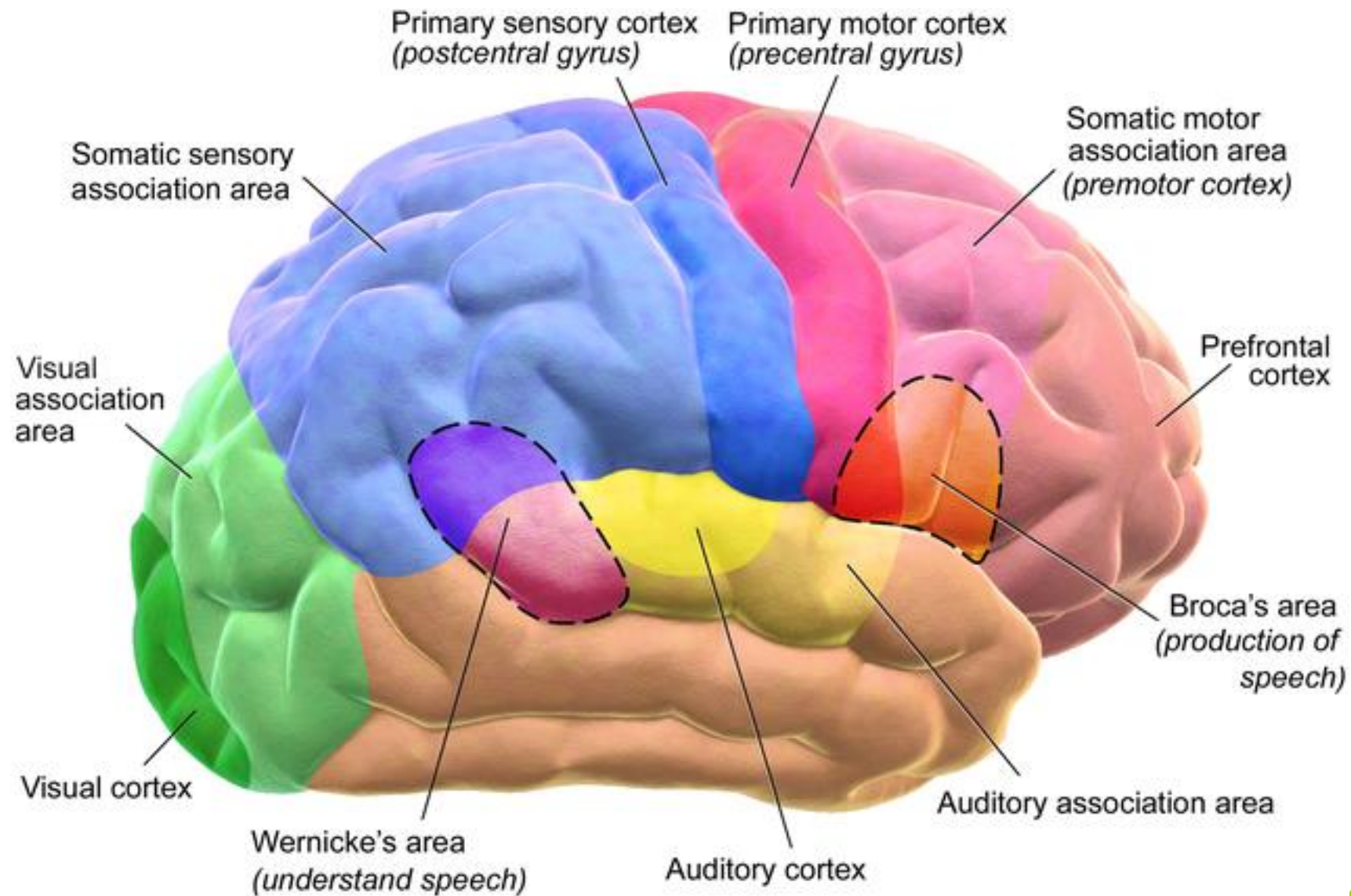**Organization for Economic Cooperation and Development, 2016**

Senate Bill 48

As of May 2019, Governor Kemp signed Senate Bill 48 into law. SB 48 (The Dyslexia Bill) provides for identification of and support for students in Kindergarten through 3rd Grade with characteristics of dyslexia.

"Dyslexia …"

- Can be diagnosed prior to conventional reading
- Does not go away
- Is a continuum
- Affects phonological processing (e.g., matching sounds to letters)
- Can affect comprehension (e.g., meaning making)
- Can be detected early via a neurobiological exam
  - Auditory attention shifting
  - Auditory processing
  - Auditory meaning making
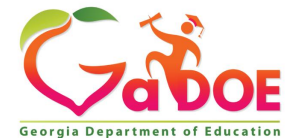 - Language development delays

Primary sensory cortex (postcentral gyrus)

Primary motor cortex (precentral gyrus)

Somatic sensory association area

Somatic motor association area (premotor cortex)

Visual association area

Prefrontal cortex

Visual cortex

Broca's area (production of speech)

Wernicke's area (understand speech)

Auditory cortex

Auditory association area

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Dyslexia Defined

The definition of dyslexia adopted by the International Dyslexia Association (IDA) states: "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 the growth of vocabulary and background knowledge."

Georgia Law
"Learning Disabilities"

160-5-1-.34 GEORGIA SPECIAL NEEDS SCHOLARSHIP PROGRAM

delineates which students are qualified to participate in the program

160-4-7-.14 PERSONNEL, FACILITIES AND CASELOADS

Special Education rule: Occurs as it regards class sizes and caseloads when serving students with specific learning disabilities

160-5-1-.08 CLASS SIZE

Regards class sizes when serving students with specific learning disabilities

160-4-7-.21 DEFINITI0NS

Special education rule: The term occurs in the definition of a "child with a disability"

Georgia Law

Rule 160-4-7-.05 ELIGIBILITY DETERMINATION AND CATEGORIES OF ELIGIBILITY

"Definition

(1) Specific learning disability is defined as a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell or do mathematical calculations. The term includes such conditions as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia and developmental aphasia. The term does not apply to children who have learning problems that are primarily the result of visual, hearing or motor disabilities, intellectual disabilities, emotional or behavioral disorders, environmental, cultural or economic disadvantage. [34 C.F.R. §300.8(c)(10)]"

"Dyslexia can look like and co-present with…"

A diagram with "Dyslexia" in the center circle, surrounded by: Dialectal Difference, Hearing Impairment, Garden-variety learning difficulties, Autism, Attention and sensory processing issues, Dysgraphia Dyscalculia, Social and emotional developmental delays, Speech and language delays

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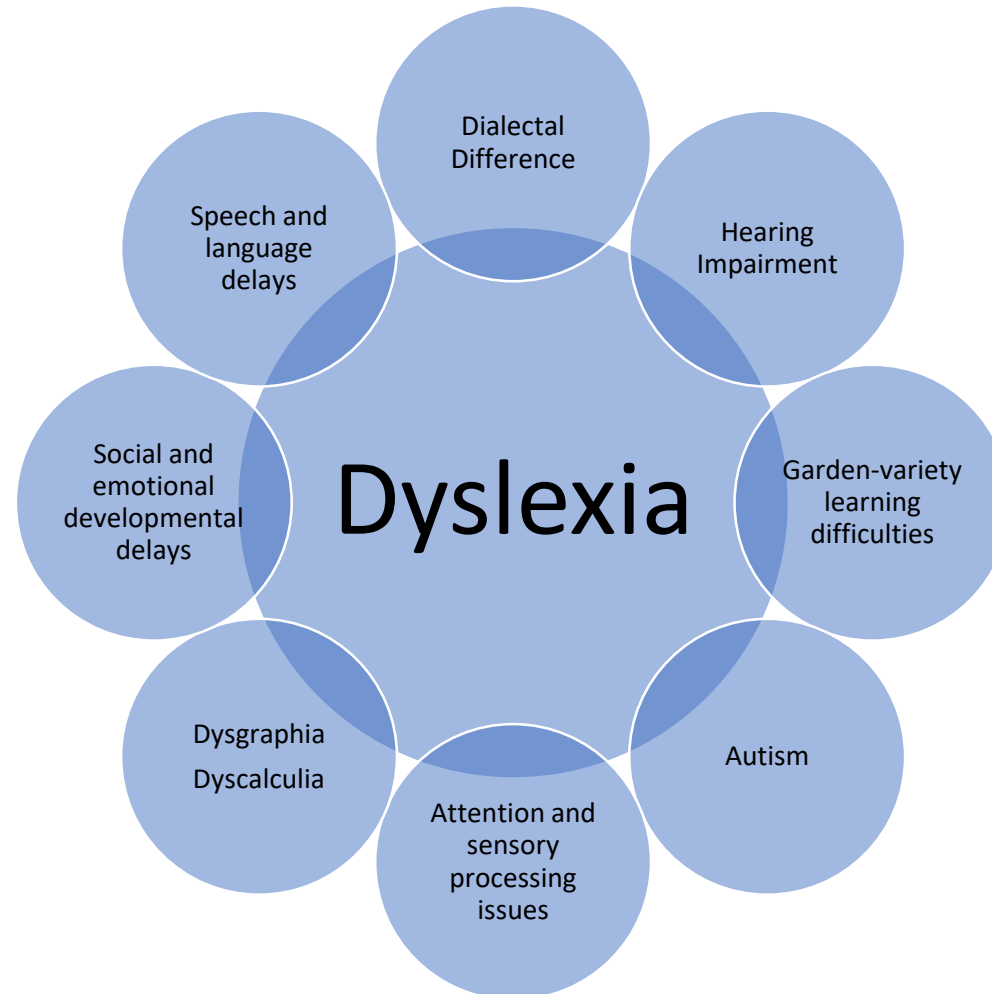
Prevention First
Georgia Tiered System of Supports

Tier I: Primary Level of Prevention
- Instruction/Core Curriculum
  - o The focus of the primary level of prevention is on all students.

Tier II: Secondary Level of Prevention
- Intervention
  - o The focus of the secondary level of prevention is on students identified through screening as underperforming or at risk for poor learning/behavior outcomes or those who are need of acceleration/enrichment.

Tier III: Tertiary Level of Prevention
- Intensive Intervention
  - o The focus of the tertiary level of prevention is on students who have not responded to primary or secondary level prevention. The instruction is evidence-based intensive instruction and is continuously adjusted and individualized to address the needs of each student.

Tier 1
Standards and Instruction

Speech and Language	Literacy
Aural and oral development • Temporal processing • Articulation • Voice issues **Dialect** • Explicit code-switching **Syntax and Morphology** • Prefix/suffixes/roots • Sentence structures **Semantics** • Meanings as they relate to context **Pragmatics** • What's "appropriate"	**Phonology** • Rhyming • Segmenting sounds (e.g., syllables, onset-rime) • Blending sounds • Deletion of sounds **Phonics** • Letter-sound relationships **Concept and background knowledge development** • Semantic instruction (e.g., agent-object; cause-effect, sequence) • Vocabulary • Concepts of print; familiarity **Communication** • Social and emotional development

EFFECTIVE READING INSTRUCTION

Instructional design of high-quality programs should include:

- explicit and systematic strategies for instruction
- consistent instructional routines
- opportunities for practice with appropriate student support materials
- cumulative review
- alignment to the Georgia Standards of Excellence for English Language Arts
- integration of the components of reading rather than isolation each skill

THE MANY STRANDS THAT ARE WOVEN INTO SKILLED READING

LANGUAGE COMPREHENSION

BACKGROUND KNOWLEDGE
(facts, concepts, etc.)

VOCABULARY
(breadth, precision, links, etc.)

LANGUAGE STRUCTURES
(syntax, semantics, etc.)

VERBAL REASONING
(inference, metaphor, etc.)

LITERACY KNOWLEDGE
(print concepts, genres, etc.)

increasingly strategic

SKILLED READING:
Fluent execution and coordination of word recognition and text comprehension.

WORD RECOGNITION

PHONOLOGICAL AWARENESS
(syllables, phonemes, etc.)

DECODING (alphabetic principle, spelling-sound correspondences)

SIGHT RECOGNITION
(of familiar words)

increasingly automatic

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Growth Trajectories for Language and Literacy Skills
Hollis Scarborough (Roughly Estimated)
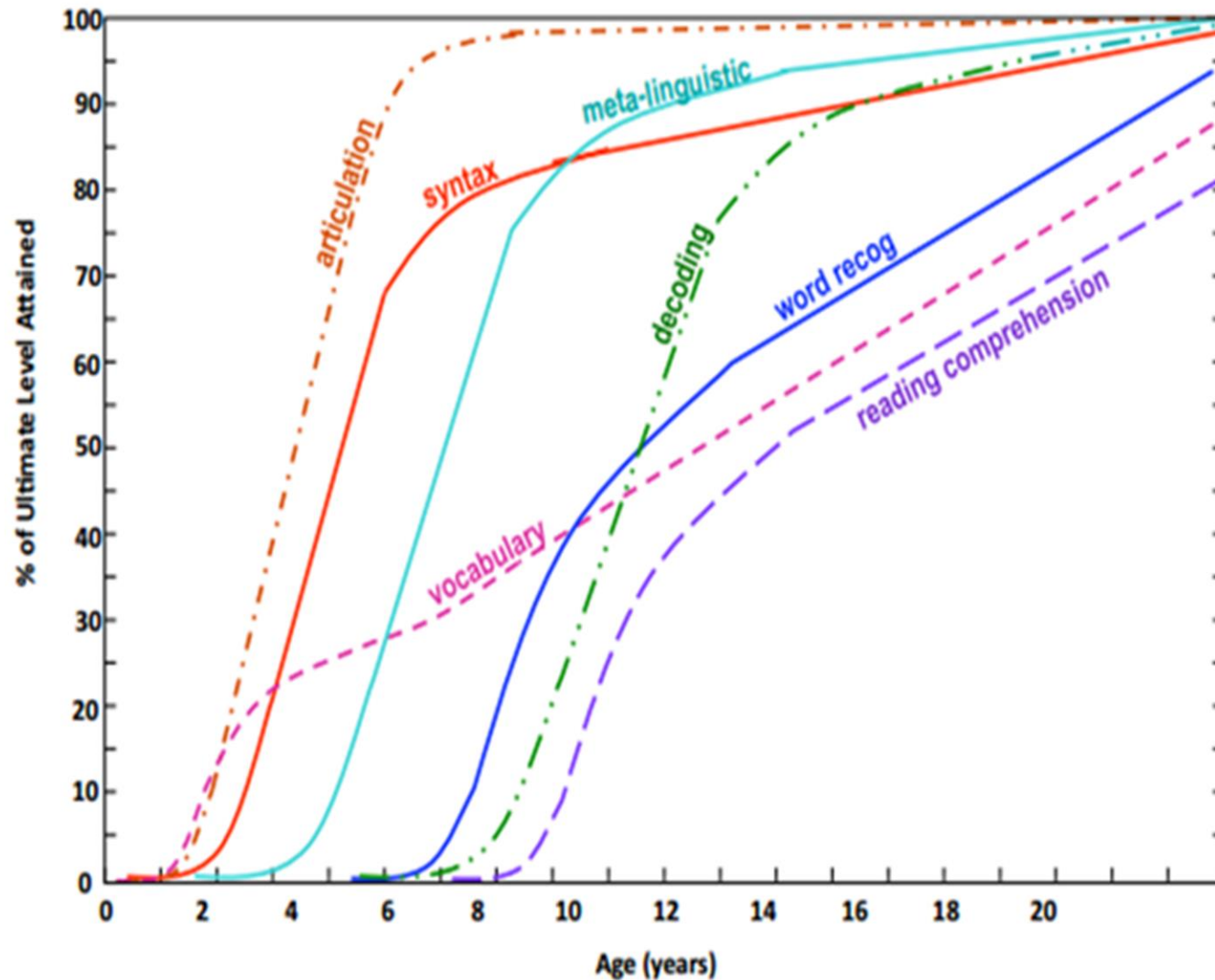
Credit: Paris, S. G. (2005). Reinterpreting the Development of Reading Skills. *Reading Research Quarterly , 40*(2), 184-202.

Georgia's MTSS Pyramid

Tiered Systems of Supports is to ensure that the screening process will inform quality classroom instruction, necessary interventions, and intensive interventions for individual students.

3% to 5% of students

SST

15% of students

80% of students

Tier III: Tertiary Level of Prevention – Intensive Intervention

Tier II: Secondary Level of Prevention - Intervention

Tier I: Primary Level of Prevention – Instruction/ Core Curriculum

SWD, EL, Gifted

Students receive services at all levels, depending on need.
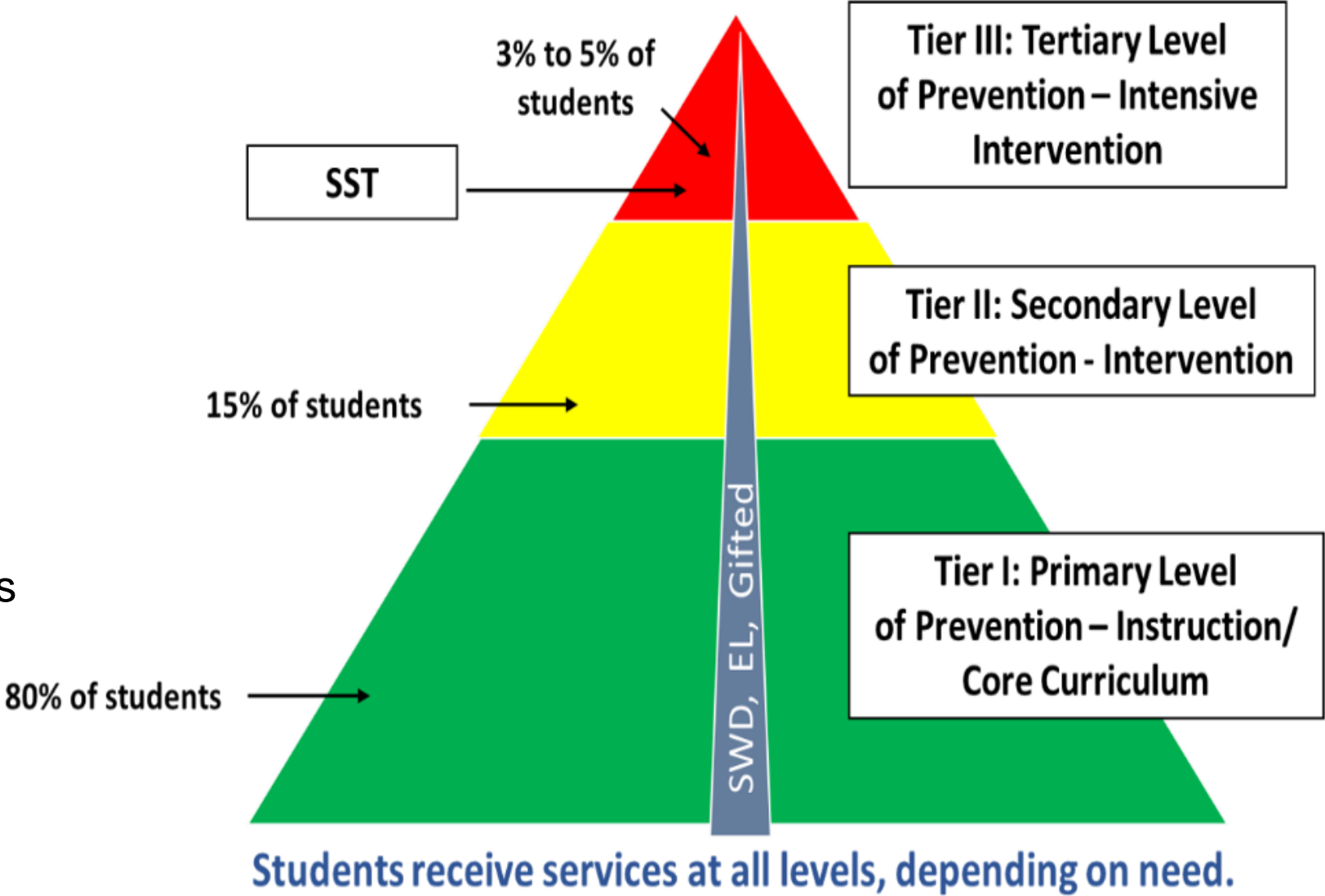
ESSENTIAL COMPONENTS OF AN EFFECTIVE SCREENER FOR READING DIFFICULTIES

1. Phonological and phonemic awareness

2. Sound-symbol recognition

3. Alphabet knowledge

4. Decoding skills

5. Rapid naming

6. Encoding skills

A screener alone cannot identify dyslexia. The use of a screener can indicate that further individualized assessment is needed.
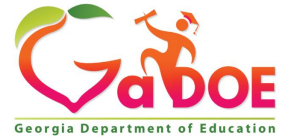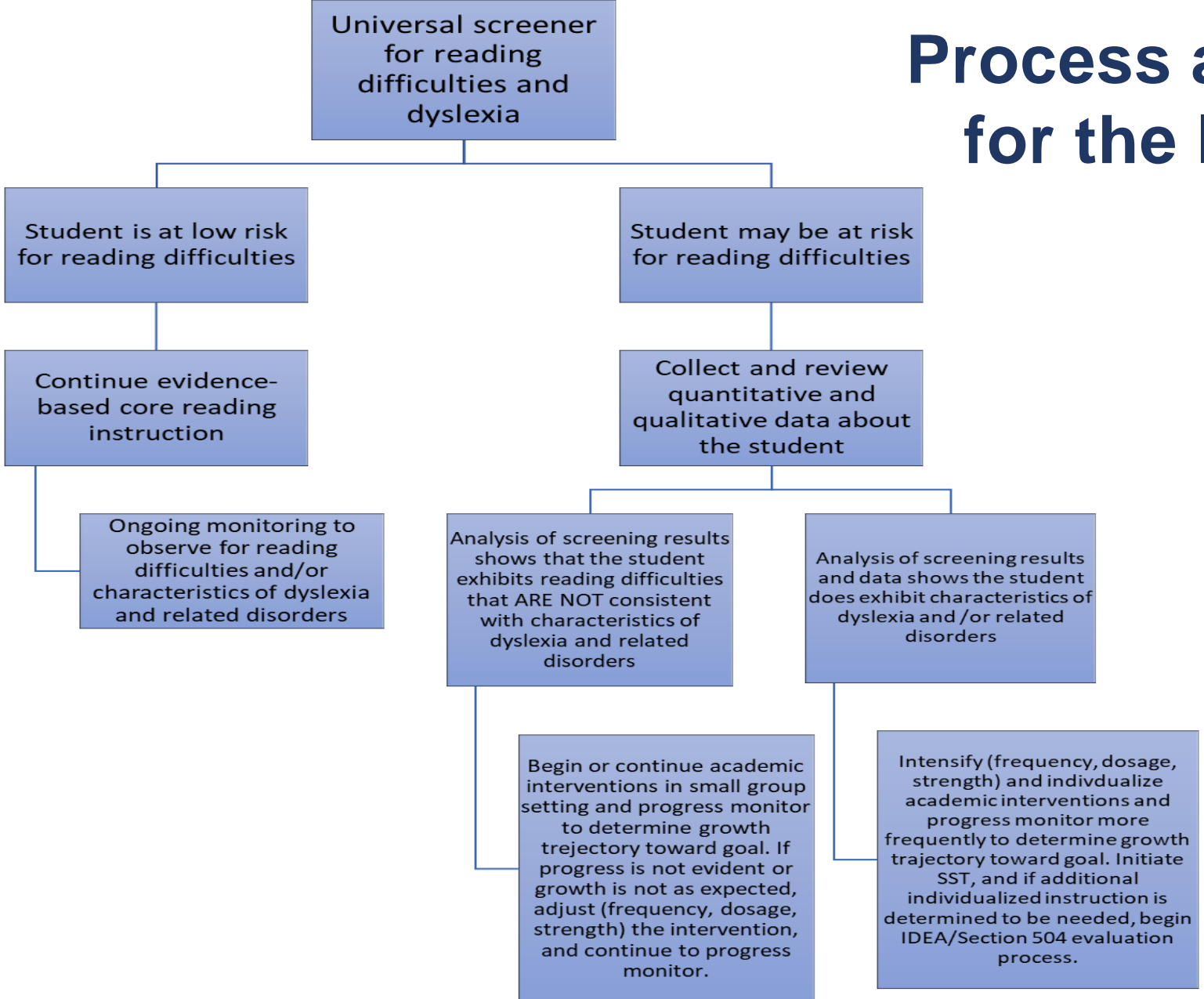
Process and Procedures for the Identification of Dyslexia

Universal screener for reading difficulties and dyslexia

Student is at low risk for reading difficulties

Continue evidence-based core reading instruction

Ongoing monitoring to observe for reading difficulties and/or characteristics of dyslexia and related disorders

Student may be at risk for reading difficulties

Collect and review quantitative and qualitative data about the student

Analysis of screening results shows that the student exhibits reading difficulties that ARE NOT consistent with characteristics of dyslexia and related disorders

Analysis of screening results and data shows the student does exhibit characteristics of dyslexia and /or related disorders

Begin or continue academic interventions in small group setting and progress monitor to determine growth trejectory toward goal. If progress is not evident or growth is not as expected, adjust (frequency, dosage, strength) the intervention, and continue to progress monitor.

Intensify (frequency, dosage, strength) and indivdualize academic interventions and progress monitor more frequently to determine growth trajectory toward goal. Initiate SST, and if additional individualized instruction is determined to be needed, begin IDEA/Section 504 evaluation process.

Delivery of Dyslexia Instruction

Once a school identifies that a student shows characteristic of dyslexia, it is important to provide aligned interventions that include **all** off the following principles:

- **Explicit** – explains skills, directly teaches, and models what is expected

- **Systematic and cumulative** – introduces concepts in a definite, logical sequence; orders concepts from simple to more complex

- **Multi-sensory** – links listening, speaking, reading, and writing together; involves movement and "hands-on" learning(visual, auditory, kinesthetic, tactile).

- **Language-based** – addresses all levels of language, including sounds (phonemes), symbols (graphemes), meaningful word parts (morphemes), word and phrase meanings(semantics), and sentence formation (syntax)

- **Aligned to individual student need** – addresses the skill deficit(s) identified through targeted assessments
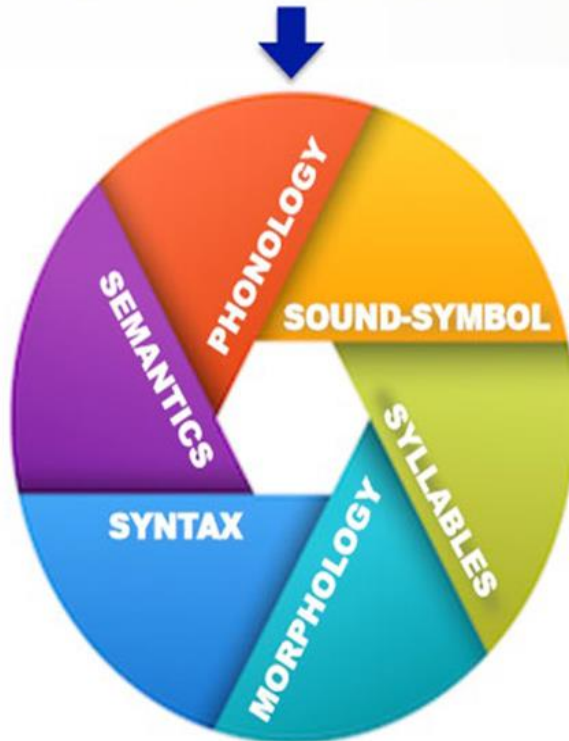
STRUCTURED LITERACY

Structured Literacy (SL) is a promising approach for educators interested in more effective ways to teach students with dyslexia. It is characterized by providing systematic, explicit instruction that integrates listening, speaking, reading, and writing and emphasizes the structure of language across the speech sound system (phonology), the writing system (orthography), the structure of sentences (syntax), the meaningful parts of words (morphology), the relationships among words (semantics), and the organization of spoken and written discourse.

Elements of Structured Literacy

STRUCTURED LITERACY PRIMER

Structured Literacy's ELEMENTS work together.

PHONOLOGY
SOUND-SYMBOL
SYLLABLES
MORPHOLOGY
SYNTAX
SEMANTICS

Structured Literacy's Evidence–Based Elements

Phonology (study of sound structure of spoken words) is a key element of Structured Literacy Instruction. **Phonemic awareness** (ability to distinguish / segment / blend / manipulate sounds relevant to reading/spelling) is central to phonology.

Sound-Symbol Association Once students develop phoneme awareness, they must learn the **alphabetic principle**—how to map phonemes to letters (**graphemes**) and vice versa.

Syllables Knowing the six syllable / vowel grapheme types helps readers associate vowel spellings with vowel sounds. Syllable division rules help readers divide / decode unfamiliar words.

Morphology A **morpheme** is the smallest unit of meaning in language. Studying base elements and affixes helps readers decode and unlock the meanings of complex words.

Syntax—the set of principles that dictate the sequence and function of words in a sentence—includes grammar, sentence structure, and the mechanics of language.

Semantics Semantics is concerned with meaning. The Structured Literacy curriculum (from the start) includes instruction in the comprehension and appreciation of written language.

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Principles of Structured Literacy

STRUCTURED LITERACY PRIMER

These PRINCIPLES guide how Structured Literacy's elements are taught.

SYSTEMATIC & CUMULATIVE

EXPLICIT

DIAGNOSTIC
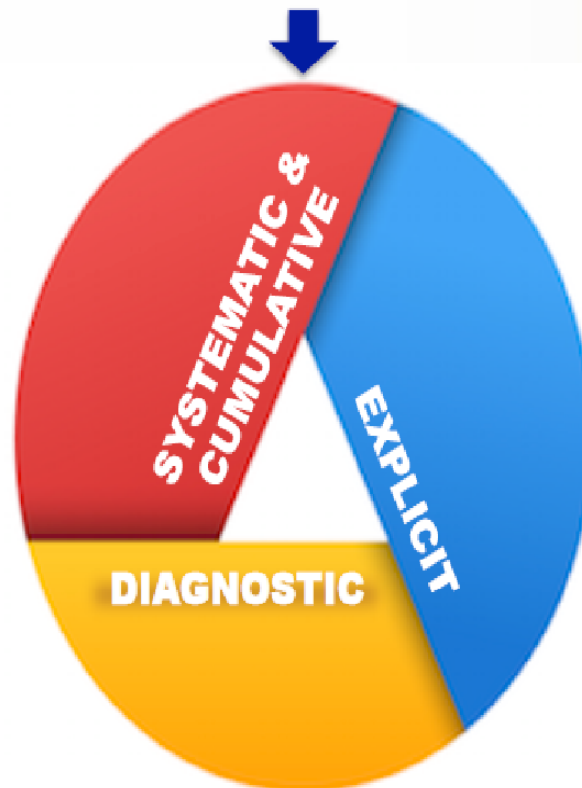
Structured Literacy's Evidence-Based Teaching Principles

Systematic & Cumulative Structured Literacy teaching is systematic and cumulative. **Systematic** means that organization of material follows the logical order of language. The sequence begins with the easiest and most basic concepts and elements and progresses methodically to the more difficult. **Cumulative** means each step is based on concepts previously learned.

Explicit Structured Literacy instruction requires direct teaching of concepts with continuous student-teacher interaction and does not assume students deduce concepts. (While **multisensory teaching** lacks the extensive research that validates Structured Literacy's other teaching principles, decades of clinical results support efficacy of simultaneous association of auditory, visual, kinesthetic-motor modalities for enhancing memory and learning in students with dyslexia.)

Diagnostic Teachers must be adept at individualizing instruction (even within groups) based on careful and continuous assessment, both informal (e.g., observation) and formal (e.g., with standardized measures). Content must be mastered to the degree of automaticity needed to free attention and cognitive resources for comprehension and oral/written expression.

PROFESSIONAL LEARNING OPPORTUNITIES

Note: GaDOE does not endorse any organization.

Professional Learning Opportunity	Website
AIM Institute for Learning and Research	https://institute.aimpa.org/
American Speech-Language-Hearing Association (ASHA)	https://www.asha.org/
The Center for Effective Reading Instruction (CERI)	https://effectivereading.org/
Cox Campus	https://www.coxcampus.org/
The Dyslexia Resource	https://dyslexiaresource.org/
Dyslexia Training Institute	https://www.dyslexiatraininginstitute.org/certification.html
Dyslexia Training Modules – Virginia Department of Education	http://www.doe.virginia.gov/teaching/licensure/dyslexia-training/index.shtml
edWeb	https://home.edweb.net/
Institute for Multi-Sensory Education	https://www.orton-gillingham.com/
International Multisensory Structured Language Education Council (IMSLE	http://www.imslec.org/
Language Essentials for Teachers of Reading and Spelling (LETRS)	https://www.voyagersopris.com/professional-development/letrs/overview
Microsoft Education Dyslexia Awareness Course	https://education.microsoft.com/courses-and-resources/courses/dyslexia-awareness-in-partnership-with-made-by-dyslexia
SREB Teacher Training Resources	https://www.sreb.org/dyslexia/training
Tennessee Center for the Study and Treatment of Dyslexia	https://www.mtsu.edu/dyslexia/overview.php
Teacher Training Programs (Independent)	https://dyslexiaida.org/accredited-teaching-training-programs/
Teacher Training Programs (University)	https://dyslexiaida.org/university-programs-accredited-by-ida/
University of Georgia Dyslexia Certificate Program	https://online.uga.edu/degrees-certificates/graduate-certificate-dyslexia

Important Senate Bill 48 Dates

December 1, 2019	Dyslexia Informational Handbook released
December 30, 2019	Georgia Professional Standards Commission dyslexia endorsement made available
July 1, 2020	K- 3 screening policies for students who have characteristics of dyslexia, other disorders, or both
2020-2021 School Year	Three-year pilot program begins
December 1, 2022	Evaluation of the results of the pilot program
2024-2025 School Year	Screening for all K-3 students for characteristics of dyslexia

Need More Information?

https://www.gadoe.org/dyslexia

Contact Information

Zelphine Smith-Dixon, Ed.D.
State Director,
Special Education Services and Supports
Email: zsmith@doe.k12.ga.us

Belinda Tiller
Special Education,
Program Specialist
Phone: (404) 656-3963
Email: belinda.tiller@doe.k12.ga.us

Franeka Colley, Ed.S.
Content Integration,
Special Education Program Specialist
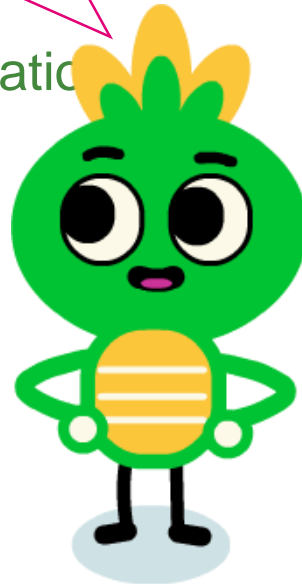Phone: (404) 657-2461
Email: franeka.colley@doe.k12.ga.us

Caitlin McMunn Dooley, Ph.D.
cdooley@doe.k12.ga.us

Let me know how you liked the talk…fill out a survey here.