Colorado Department of Education
Dyslexia Pilot Project

Student Assessment Part 2:
Assessment for Characteristics of Dyslexia

Presenters
Date

CTL Center on Teaching & Learning

Session Objectives

Review	Understand	Learn
Review the dyslexia protocol and features of dyslexia.	Understand the components of an assessment for characteristics of dyslexia.	Learn how to use the information collected in the assessment for characteristics of dyslexia, and how to implement next steps.

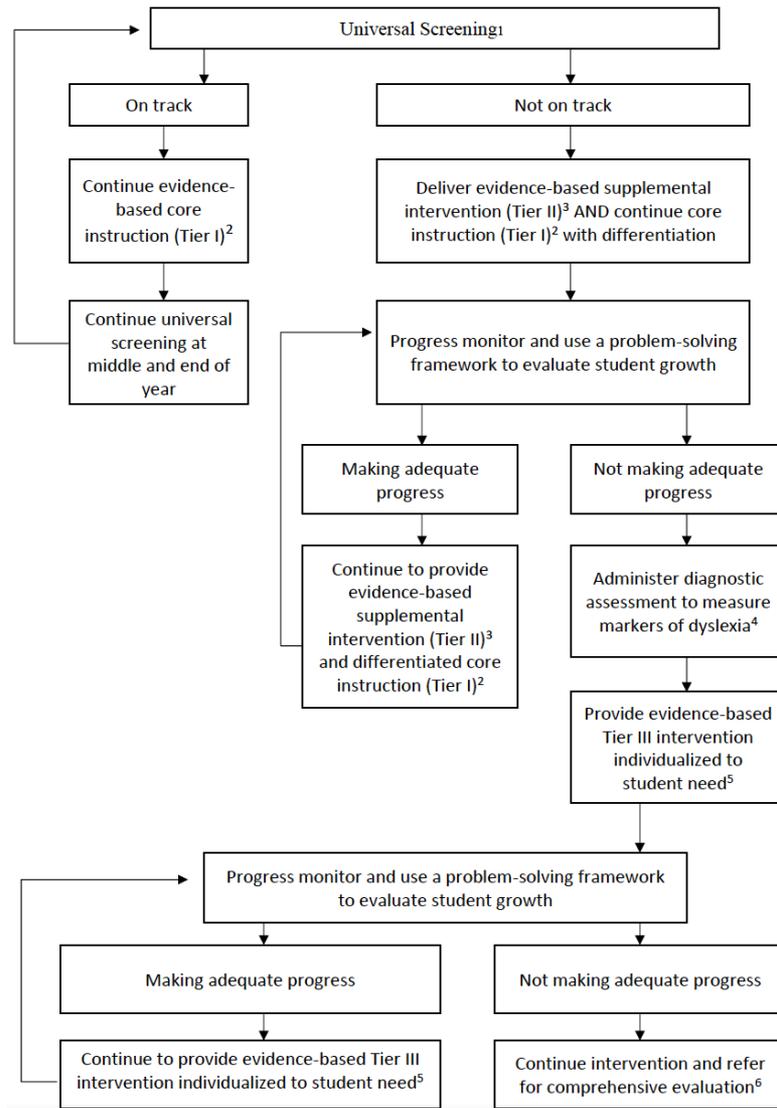# Part 1:
Review of the Dyslexia Protocol

Dyslexia Protocol Review

- What is the dyslexia protocol?
  - Screening and identification processes and intervention strategies for early identification of and support for students enrolled in kindergarten through third grade who may have dyslexia

Universal Screening[1]

On track

Not on track

Continue evidence-based core instruction (Tier I)[2]

Deliver evidence-based supplemental intervention (Tier II)[3] AND continue core instruction (Tier I)[2] with differentiation

Continue universal screening at middle and end of year

Progress monitor and use a problem-solving framework to evaluate student growth

Making adequate progress

Not making adequate progress

Continue to provide evidence-based supplemental intervention (Tier II)[3] and differentiated core instruction (Tier I)[2]

Administer diagnostic assessment to measure markers of dyslexia[4]

Provide evidence-based Tier III intervention individualized to student need[5]

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Continue to provide evidence-based Tier III intervention individualized to student need[5]

Continue intervention and refer for comprehensive evaluation[6]
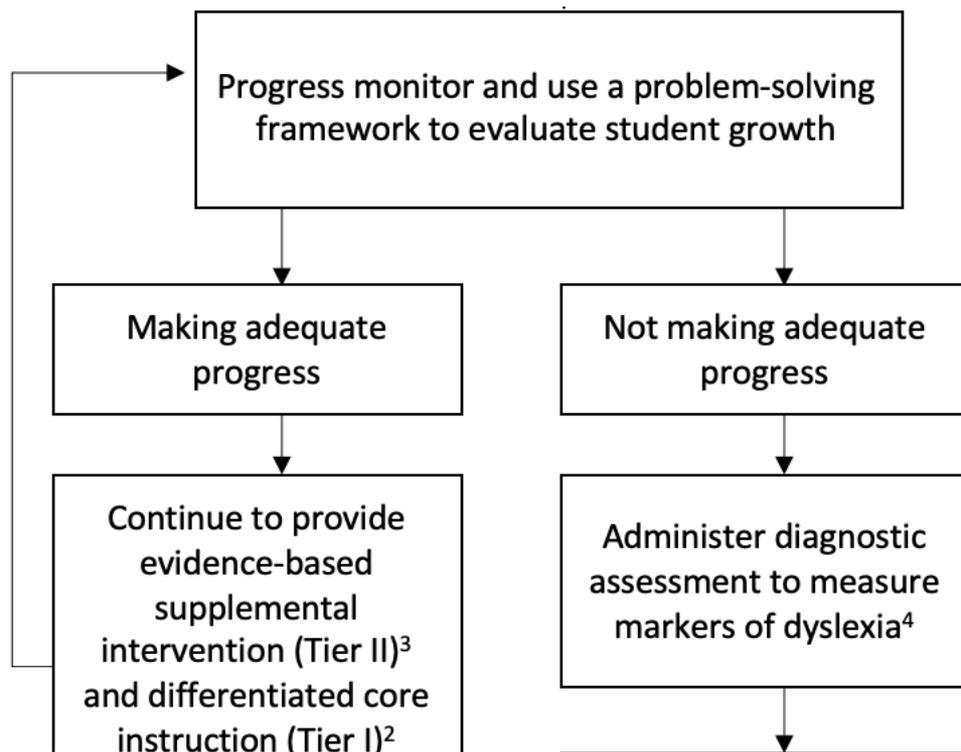
Key to Diagnostic Assessment

- The key to administering a diagnostic assessment is to administer it to students who really need it.

These are students who:

- Receive high-quality Core instruction (Tier I) &

- High quality Supplemental intervention (Tier II) &

- Do not make adequate reading progress on the basis of standardized progress monitoring assessments

# Today's Focus:
Assessment for Characteristics of Dyslexia

Progress monitor and use a problem-solving framework to evaluate student growth

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What is Dyslexia?

- "Dyslexia" means a **specific learning disability** that is **neurobiological** in origin. It is characterized by **difficulties** with **accurate or fluent word recognition**, or both, 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** (International Dyslexia Association, 2002; NICHD, 2003)

How dyslexia functions:
The current working hypothesis

Children with dyslexia:

- have differences in brain structure and functioning in the left hemisphere of the brain, specifically in areas involved in oral language and written language

- may recruit areas in the right hemisphere to compensate for these structure and functioning differences

- typically show core phonological processing deficits, which leads to difficulties associating sounds with letters, and with learning how to read

Key linkages in dyslexia
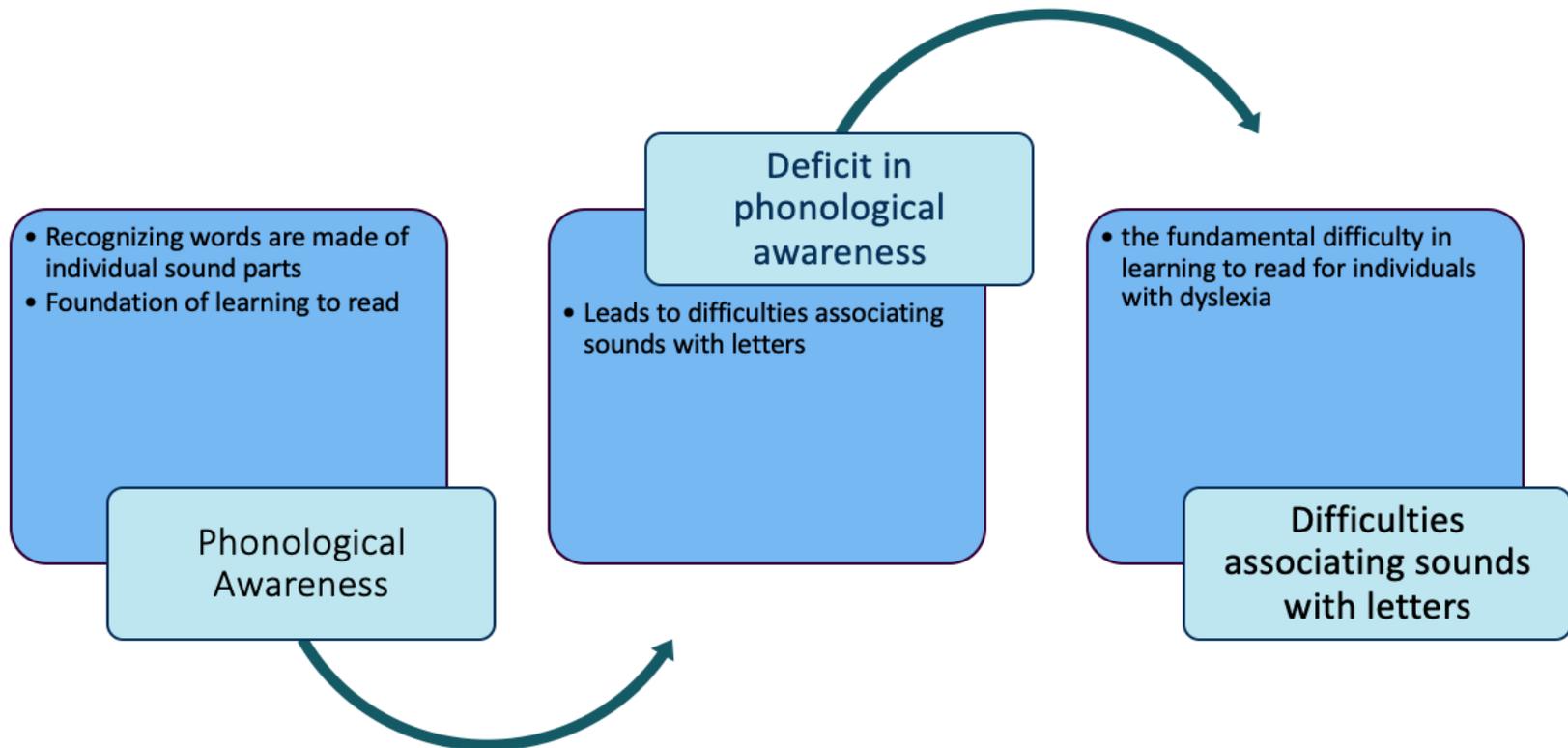
Characteristics of dyslexia

- Individuals with dyslexia typically read at levels significantly lower than expected despite having normal intelligence

- The disorder varies from person to person

- Common characteristics are difficulty with **phonological processing** (the manipulation of sounds), spelling, and/or rapid visual-verbal responding
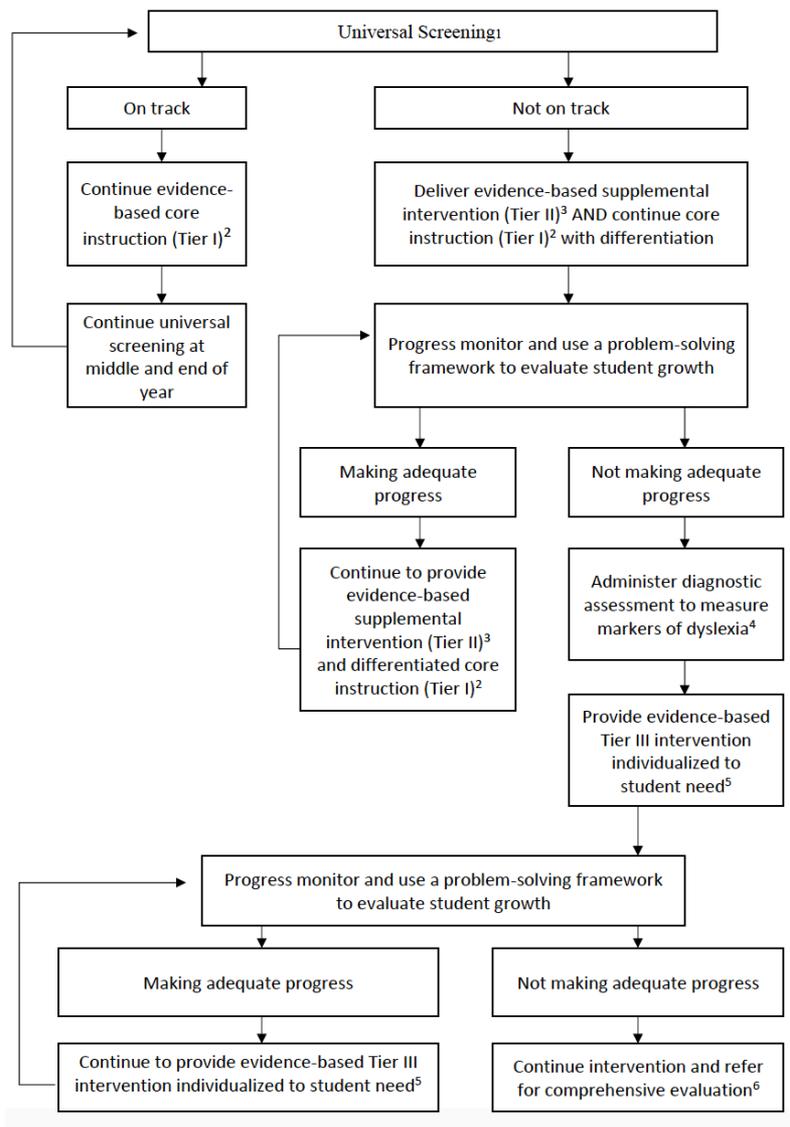
Key differences between typical readers and readers with dyslexia

- Significant impairment in reading attainment

- Poor spelling

- Slow, labored reading

- 'Unexpectedness' in light of other abilities

- Family history of dyslexia

- Poor phonemic awareness

- Poor decoding skills

- More prone to negative self-attribution

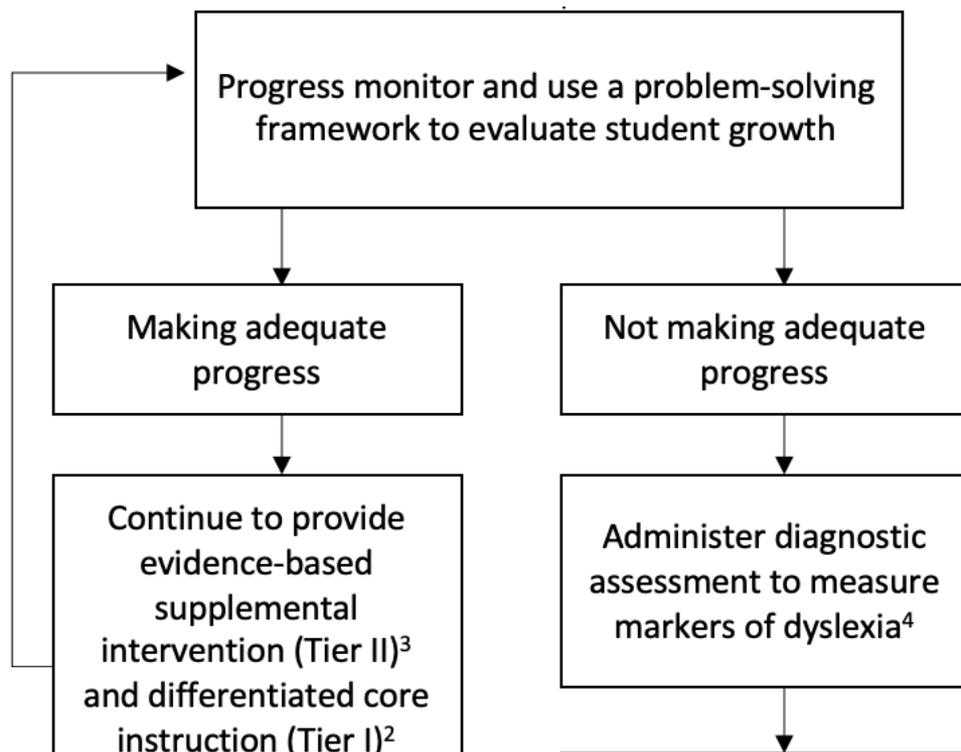- More likely to disengage from lesson due to frustration and difficulty

Adapted from Thambirajah (2010)

Part 2:
Assessment for Characteristics of Dyslexia

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Today's Focus:
Assessment for Characteristics of Dyslexia

Assessment for Characteristics of Dyslexia

- Used to help determine student performance in relation to potential "Markers of Dyslexia"
- Goal is to screen students for characteristics of dyslexia and provide appropriate interventions to those who are identified as needing support
- The goal **is not** to formally diagnose dyslexia
- The identification of characteristics of dyslexia is sufficient to plan for and implement reading interventions
- Further, more comprehensive, evaluation will be provided to students who do not respond to the intervention provided

Assessment for Characteristics of Dyslexia

- Provided to students who are "not making adequate progress" in supplemental instruction, based on:
  - Inadequate progress based on benchmark criteria chosen *or*
  - Demonstration of specified reading behaviors during supplemental instruction indicative of difficulty mastering content
- These are not necessarily students who are "failing" supplemental instruction; it may include students who need sustained supplemental instruction in order to achieve reading goals

Assessment for Characteristics of Dyslexia: Logistics

- When?
  - Takes place within 60 <u>calendar</u> days of universal screening
- Who assesses?
  - Conducted by trained specialists, likely a School Psychologist and/or Speech Language Pathologist
- What is assessed?
  - The assessment will gather information in three areas: 1) Markers of dyslexia, 2) Family history, and 3) Teacher perceptions
- Why?
  - The purpose of the assessment is to determine whether the student demonstrates the characteristics of dyslexia and to provide appropriate intervention for those students

Assessment for Characteristics of Dyslexia
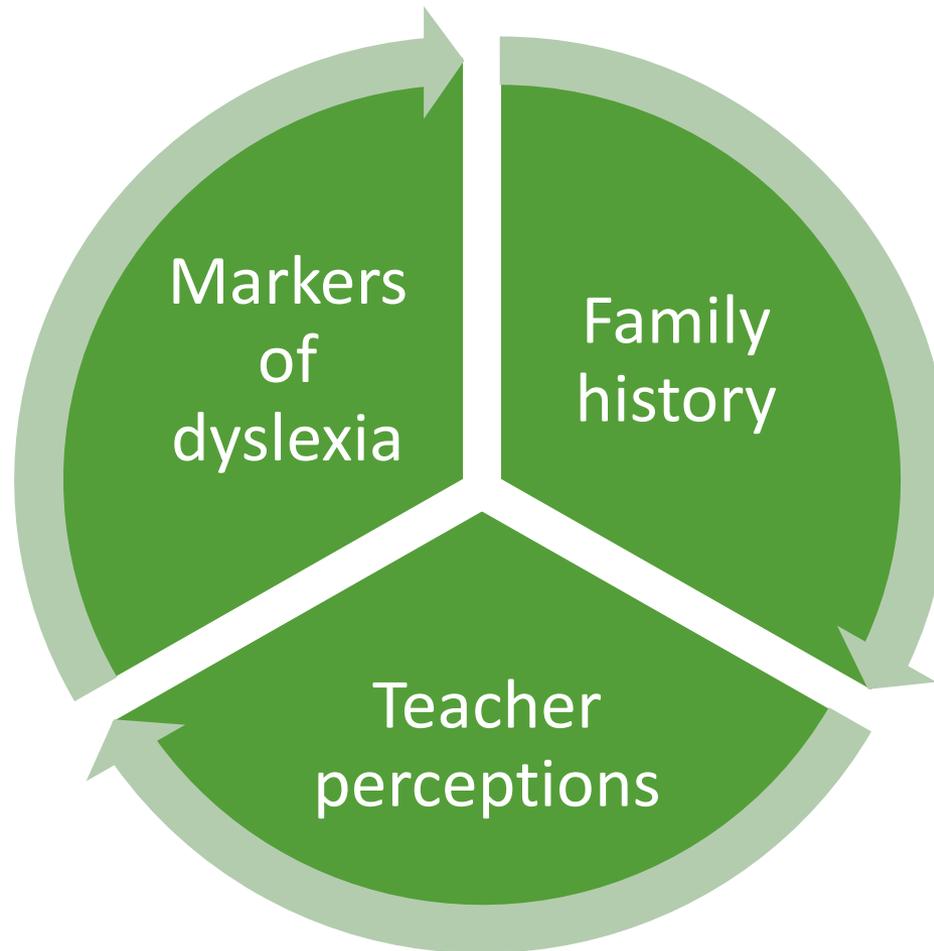
1. Markers of Dyslexia

- The key markers of dyslexia are:
    - Problems with decoding or single word reading and/or
    - Poor reading fluency and
    - Poor spelling
- Phonological processing problems are the underlying causes of dyslexia
- Some individuals may experience difficulty with Rapid Automatic Naming that can compound the challenge of learning to read

(International Dyslexia Association, 2018)

1. Markers of Dyslexia

- The following areas should be assessed because they are markers of dyslexia:
    - Phonological awareness
    - Phonological memory
    - Rapid automatized naming
    - Phonics skills
    - Decoding
    - Oral Reading Fluency
    - Spelling
- Some areas will be assessed through *Universal Screening* measures while others will be included in the *Assessment for Characteristics of Dyslexia*

1. Markers of Dyslexia: Methods of Assessment

Universal Screening

- Phonological awareness
- Phonics
- Decoding
- Oral Reading Fluency
- Spelling

Diagnostic Assessment for Characteristics of Dyslexia

- Phonological memory
- Rapid Automatized Naming
- Additional phonological awareness measures, as needed
- Spelling, if not assessed through Universal Screening

Phonological and Phonemic Awareness

- An individual's awareness of and access to the sound structure of his/her oral language

- Assessed during Universal Screening through the Phoneme Segmentation Fluency (PSF) subtest, at minimum

Phonics (i.e., Alphabetic Principle)

- Understanding of the symbol (letter) to the sound(s) relationship, either individually or in combination with other letters

- Assessed during Universal Screening through the Nonsense Word Fluency (NWF) subtest

Decoding

- Ability to use symbol-sound associations to identify (read – pronounce) words
  - Real Words
  - Nonsense Words
- Assessed during Universal Screening through the Word Reading Fluency (WRF) and Nonsense Word Fluency (NWF) subtests

Oral Reading Fluency

- Ability to read accurately, at a story-telling pace – to facilitate / support comprehension
    - Single Words
    - Sentences and Paragraphs
- Assessed during Universal Screening through the Oral Reading Fluency (ORF) subtest

Phonological Memory

- Ability to recall sounds, syllables, words
- Assessed during Diagnostic Assessment through through a reliable and valid measure (e.g., the Comprehensive Test of Phonological Processing)

Rapid Automatized Naming

- Speed of naming objects, colors, digits or letters

- The ability to name familiar items quickly from memory

- Assessed during Diagnostic Assessment through a reliable and valid measure (e.g., the Comprehensive Test of Phonological Processing)

Spelling

- The student's ability to accurately encode words from dictation (the student's ability to spell accurately)

- There is a reciprocal nature of sounding out words (decoding) and spelling words (encoding)

- Assessed during Diagnostic Assessment through a reliable and valid measure (e.g., the Test of Written Spelling), or

- Assessed during Universal Screening (e.g., Acadience Spelling)

Assessment for Characteristics of Dyslexia
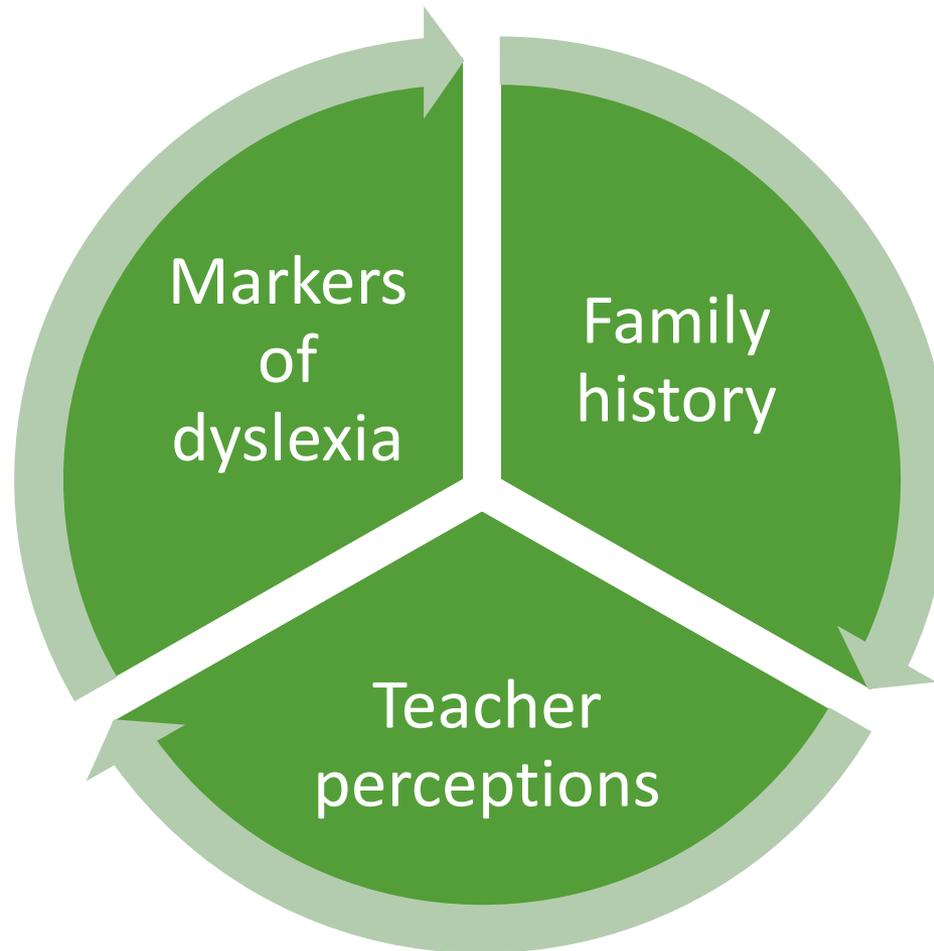
2. Family History

- The earliest indicator of risk for reading failure may be a family history of reading difficulties (Catts, 2017).

- Dyslexia is heritable and runs in families.

- Family history of dyslexia is a significant student risk factor (Snow, Burns, and Griffin 1998).
  - 40% to 60% of children with a single parent or a sibling with reading disability will have reading problems themselves (Gilger et al., 1996; Scarborough, 1990; Snowling, et al., 2003).

- A child is four times more likely to develop dyslexia if they have a parent with dyslexia (Snowling & Melby-Lervåg 2016).

2. Family History

- Families will complete a screener to help assess risk for dyslexia
- Information will address family history of dyslexia and other learning disabilities
- This screener will also include a review of the child's developmental history
  - One of the earliest indicators of problems in oral language and subsequent reading difficulties is failure to begin talking at the appropriate developmental stage.
  - Investigations show that children who were late talkers are generally less skilled than typical children in reading and spelling throughout the school years (Lyytinen et al., 2005; Preston et al., 2010; Rescorla, 2002).

Assessment for Characteristics of Dyslexia
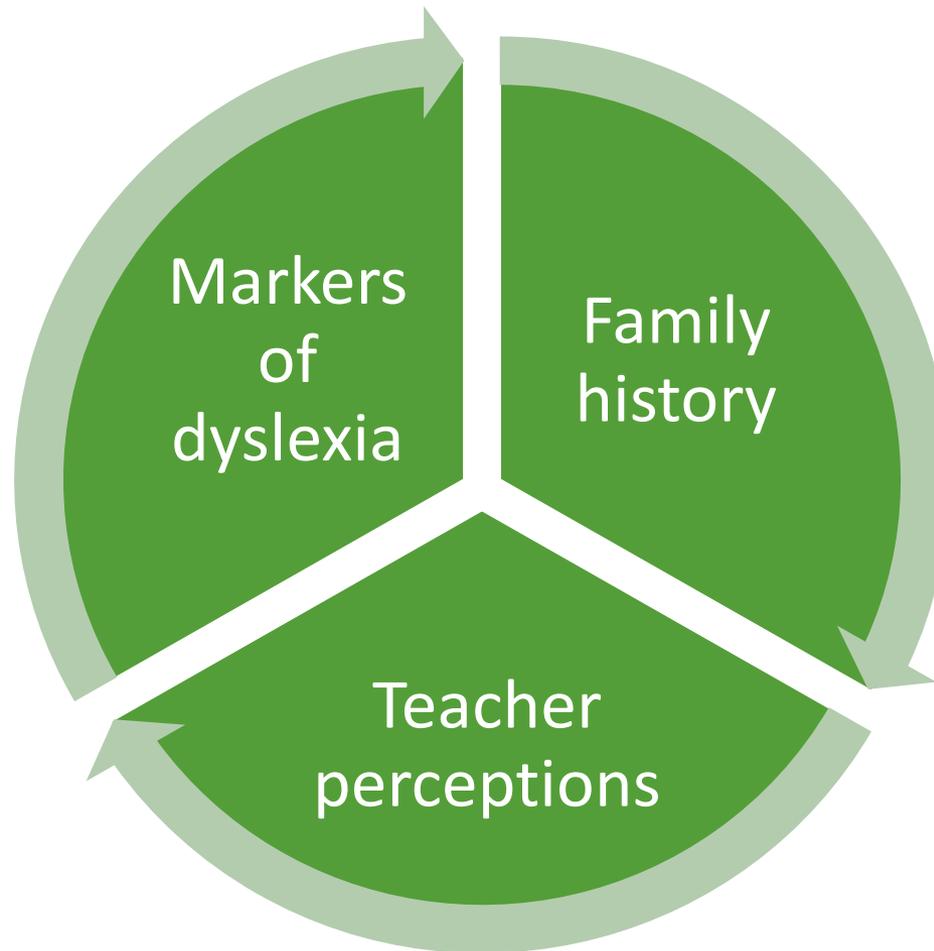
3. Teacher perceptions

- Teacher perceptions of reading, broad academic, and behavioral skills
- Teachers will record student reading behaviors as part of lesson mastery data collection during Tier II and Tier III instruction
  - This will be covered in more detail in the Enhancing Core Reading Instruction training

Part 3:
Using the Data Collected

Interpreting the Data

- Once testing is completed, the assessment team will score and analyze the assessment results

- Data collected will be entered into the *Assessment for Characteristics of Dyslexia* data summary sheet

- The assessment team will review the data summary sheet to determine if the pattern of results indicate that the student displays characteristics of dyslexia

Activity

- Use the Case Studies provided to complete a sample *Assessment for Characteristics of Dyslexia* data summary sheet

- For each Case Study, determine:
  - Does the data indicate that the student shows characteristics of dyslexia?
  - Why or why not?

Next steps:
Communicate with Parents

- Parents of children who show characteristics of dyslexia will be notified and given information about dyslexia and reading intervention
  - What the school will do
  - What parents can do at home
 - How the school will support parents and their child

Next steps:
Provide Intervention
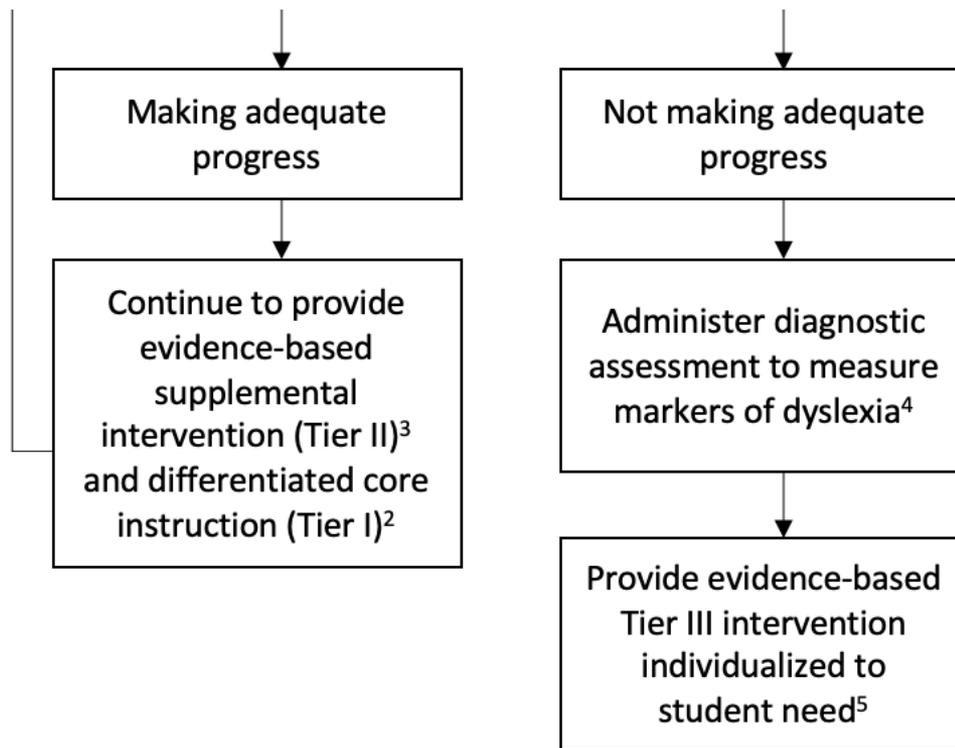
Next steps:
Provide Intervention

- Results of the diagnostic assessment for characteristics of dyslexia are used to help select interventions appropriate for students with dyslexia

- Progress monitoring data will be collected and analyzed using a data-based decision-making process

- 504 plan may be invoked when students demonstrate "Markers of Dyslexia" and need this level of support (or beyond) to learn to read

Next steps:
Conduct Comprehensive Evaluation
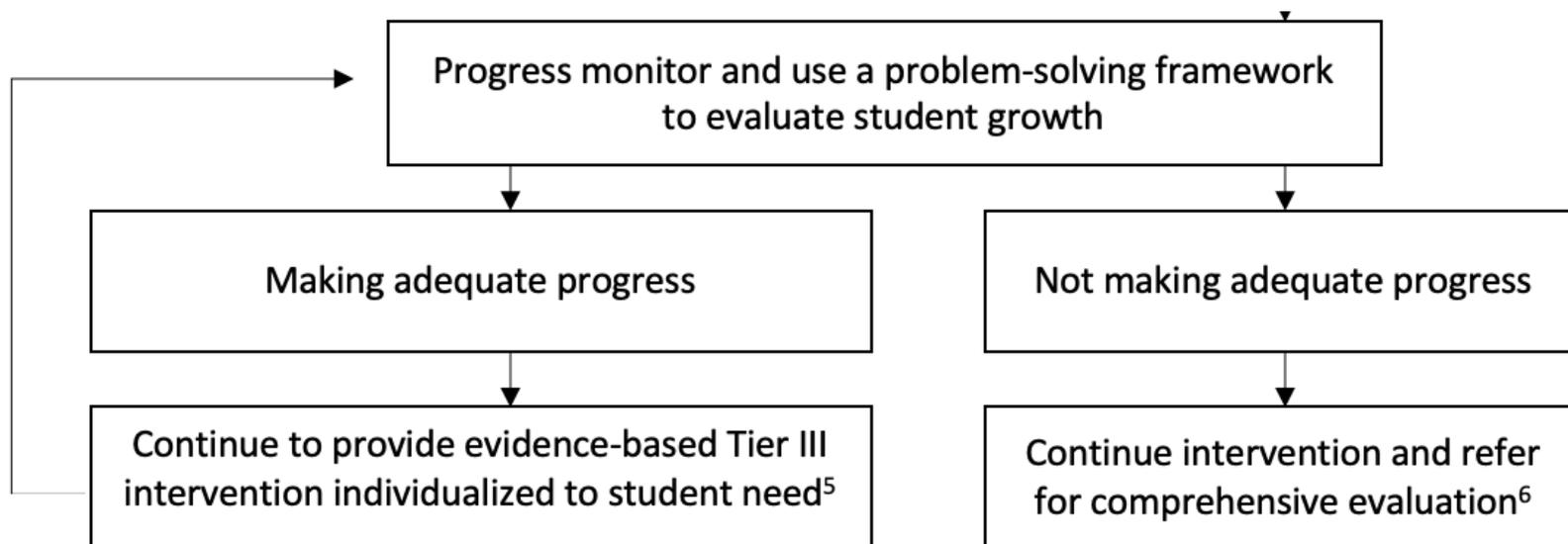
Next steps:
Conduct Comprehensive Evaluation

- Considered for students who do not make adequate progress in presence of Intense Intervention (i.e., Tier III)

- Referral to multidisciplinary team for comprehensive assessment
  - (i.e., developmental history; standardized, norm-referenced assessments, additional diagnostic assessments; performance in other areas; student observations in multiple settings);

- Team eligibility decision making consistent with ECEA and IDEA

- Students ineligible for special education who demonstrate "Markers of Dyslexia" provided 504 plan

Wrap Up

- Questions

- Next Steps