



Speech & Language
Literacy Lab

MGH Institute of Health Professions • Boston

DEVELOPMENTAL LANGUAGE DISORDER: *FROM AWARENESS TO ADVOCACY*

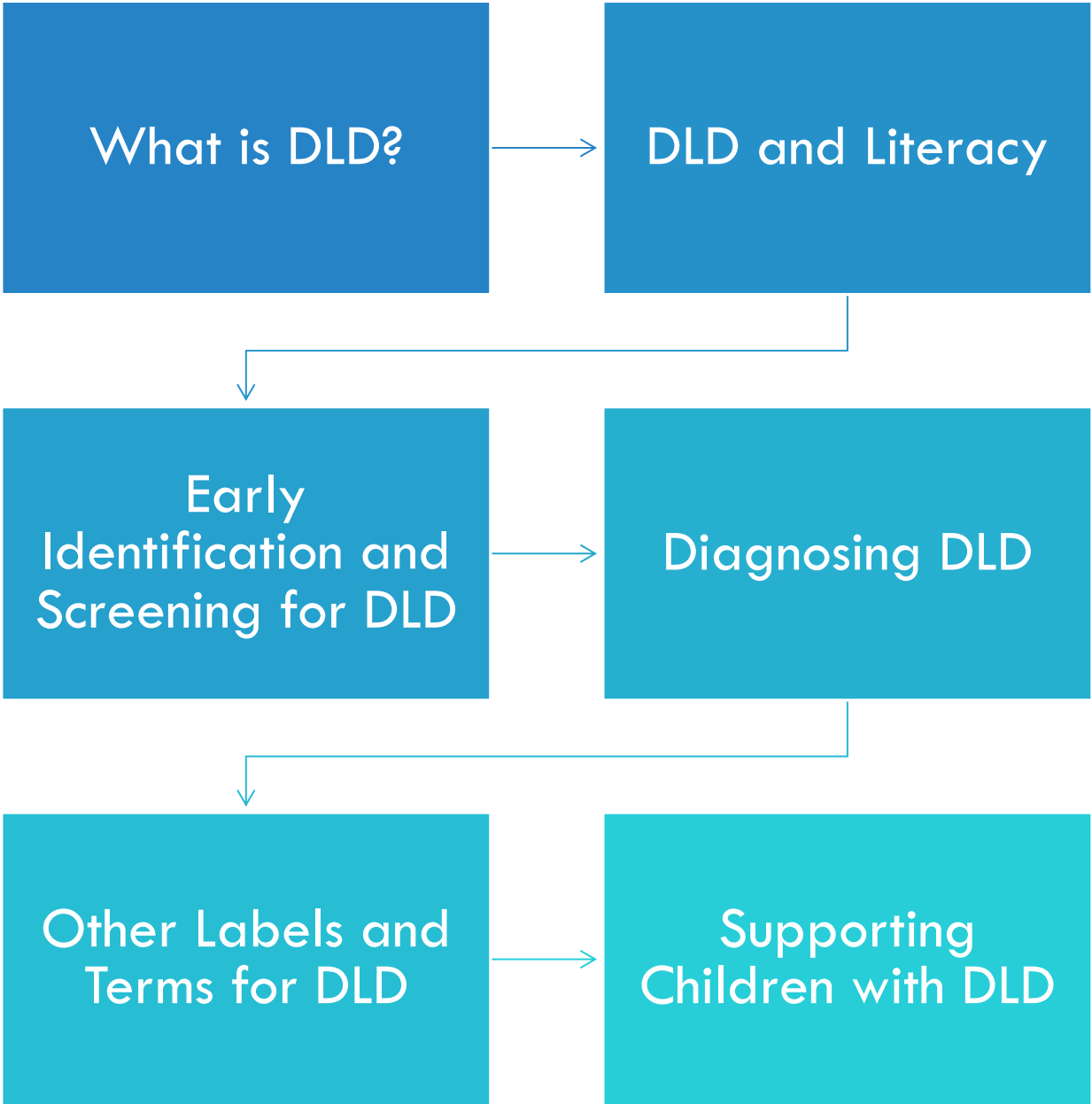
Kate Radville, MS, CCC-SLP

Speech Language Pathologist & Literacy Specialist
Doctoral Research Fellow. Speech and Language (SAiL)
Literacy Lab

Adjunct Instructor. Communication Sciences and Disorders
Department

MGH Institute of Health Professions

@kradville





What is DLD?

DLD and Literacy



Early Identification and Screening for DLD

Diagnosing DLD



Other Labels and Terms for DLD

Supporting Children with DLD



DLDANDME.ORG



[WHAT IS DLD?](#) [WHO WE ARE](#) [RESOURCES](#) [Q](#)

Welcome to DLD and Me!

Spreading the word about Developmental Language Disorder



[What is DLD?](#)

[Latest Articles](#)





DEVELOPMENTAL LANGUAGE DISORDER

Developmental Language Disorder is when a child or adult has difficulties talking and/or understanding language

THE FACTS ABOUT DLD

A person is born with DLD, persists across the lifetime

Cuts across SES and other disorders

Brain difference (“neurobiological”)

Hallmarks are difficulty learning new words and remembering them (vocabulary) and grammar learning & use (McGregor, 2020)

DLD affects approximately 1 in 10 children (Tomblin et al., 1997)

The trajectory and sequence of language development is similar, but there are persistent delays

THE FACTS ABOUT DLD

<https://radld.org/wp-content/uploads/2019/04/DLD-Fact-Sheet-English.pdf>



DEVELOPMENTAL LANGUAGE DISORDER (DLD) FACT SHEET

There are three things you need to know about DLD

1. Developmental Language Disorder is when a child or adult has difficulties talking and/or understanding language.
2. DLD is a hidden disability that affects approximately two children in every classroom, affecting literacy, learning, friendships and emotional well-being.
3. Support from professionals, including speech and language therapists and teachers, can make a real difference.

DLD: Diagnostic terminology, frequency, causes

- **Consensus on terminology:** The recommendation for the use of the diagnostic term Developmental Language Disorder has been published (Bishop et al., 2016; 2017), with an account of how consensus was reached.
- **Frequency:** DLD affects approximately two children in every classroom. A recent epidemiological study in the UK, the SCALES study (Norbury et al. 2016), found that 7.5% of children had DLD with no associated biomedical condition.
- **Causes:** DLD tends to run in families. Twin studies indicate strong genetic influence on DLD, but this seems to reflect the combined impact of many genes, rather than a specific mutation (Bishop, 2006). The

What is Developmental Language Disorder?



DLD is a brain difference that makes talking and listening difficult.



DLD affects about 2 children out of every classroom.



DLD poses a risk for social-emotional behavioral concerns



DLD is associated with risk for dyslexia and other learning disabilities.



DLD is five times more prevalent than autism.



DLD can last a lifetime, but help is available.

WHAT IS IT LIKE TO HAVE DLD?



<https://vimeo.com/361471019>

DL D MYTHS

[HTTPS://DL DANDME.ORG/MYTHS-ABOUT-DLD/](https://dldandme.org/myths-about-dld/)

MYTH: People with DLD mispronounce speech sounds.

TRUTH: People with DLD have trouble understanding and using language, when they are reading and when they are talking with someone.

Language is the words and grammar that people use to communicate ideas. Speech is moving the mouth, throat, and lungs to make words. DLD is not a speech problem. It is a problem using language. A person with DLD may have clear speech but still have a hard time understanding the words that she hears or reads or a hard time figuring out the right words and grammar to say what she wants.

MYTH: People with DLD don't speak proper English.

TRUTH: People with DLD have trouble learning English (or any other language).

There are many different dialects of English and they are all valid systems for communicating. DLD is not a dialect. The person with DLD will produce language that is incomplete, inconsistent, or immature compared to peers within his OWN dialect community.

MYTH: People with DLD are not smart.

TRUTH: DLD affects people at all levels of intellectual ability.

DLD is not an intellectual disability. People with DLD may be very smart but they will sometimes have difficulty expressing what they know.

DLD MYTHS

[HTTPS://DLDANDME.ORG/MYTHS-ABOUT-DLD/](https://dldandme.org/myths-about-dld/)

MYTH: Bilingualism causes DLD.

TRUTH: Bilingualism is beneficial.

DLD affects people who speak only one language and people who speak more than one language. There are social and cognitive benefits to becoming bilingual and parents who want to raise their children to be bilingual should not worry that they will cause DLD.

MYTH: Poor parenting causes DLD.

TRUTH: Genetic influences on brain development cause DLD.

The ways that parents speak or read to their children do not cause DLD. That said, sometimes it is hard to talk to a child who has limited language abilities. A speech-language pathologist can teach parents how to adapt their own talking and reading to enhance their child's language development and to maintain positive communicative interactions with their child. Parents don't cause the problem, but they can be part of the solution.

WHY ISN'T DLD A HOUSEHOLD NAME?

Language is hard to explain

Language difficulties can be concealed

Language difficulties are misunderstood

Language development is not well understood

Late talkers cause confusion (~25% go on to have DLD)

Language has been the domain of SLPs

It has been called by many names: <https://dldandme.org/terminology/>

Research Terminology

Developmental Aphasia or Dysphasia

The term “developmental aphasia” was one of the first used to describe children with difficulties in language production and comprehension. Popular in the 1950s, this term is no longer commonly used because of the misleading comparison to adult aphasia, which is caused by brain injury (DLD is not).

Specific Language Impairment (SLI)

One of the most widely used terms in current research. In principle, this refers to children who have DLD with “normal” nonverbal IQ scores. In reality, the criteria for “normal” nonverbal intelligence varies among research groups. To fully access the research literature on DLD, one should also review the literature on SLI.

Primary Language Impairment (PLI)

While this term is meant to emphasize that language is the primary impairment, it is often interpreted in different ways (and in the UK, it gets mixed up with “primary” as in “primary school!”). PLI can also be confused with an abbreviation for Pragmatic Language Impairment.

Language Learning Impairment (LLI)

This term places an emphasis on the fact that children with DLD have difficulties learning language. While more education-friendly than some other research terms, it is less popular.

Developmental Language Disorder (DLD)

DLD is currently a preferred term for language production and comprehension problems that emerge early in development and that have no known cause. Like developmental aphasia, it does not refer to a

Clinical Terminology

In clinical practice, the different labels mainly come from the Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM-5). Under the communication disorders subsection of “neurodevelopmental disorders,” there are two terms that a child with DLD could be given:

Language Disorder

This refers to children who have difficulties with vocabulary, sentence structure, and/or discourse.

Specific Learning Disorder

This refers to children who have difficulties with reading, writing, or math whether they have deficits in spoken language or not. However, since spoken language is critical for learning to read and write, children with DLD could be labeled as having specific learning disorder.

Insurance

In the U.S., some insurance companies will cover some of the costs of diagnosing and treating DLD; however, these companies will use different terms from any of those listed above. To bill insurance, your clinician will need to list an ICD-10 code. The codes most likely to encompass DLD are F80.1 Expressive language disorder or F80.2 Expressive and receptive language disorder.

Educational

In U.S. educational policy, the Individuals with Disabilities Education Act (IDEA) has its own names and categories of disabilities. There are three IDEA terms that a child with DLD could be given:

Developmental Delay

This includes children with delays in language acquisition. This term is typically used in educational settings that serve children birth to eight years old.

Speech or Language Impairment

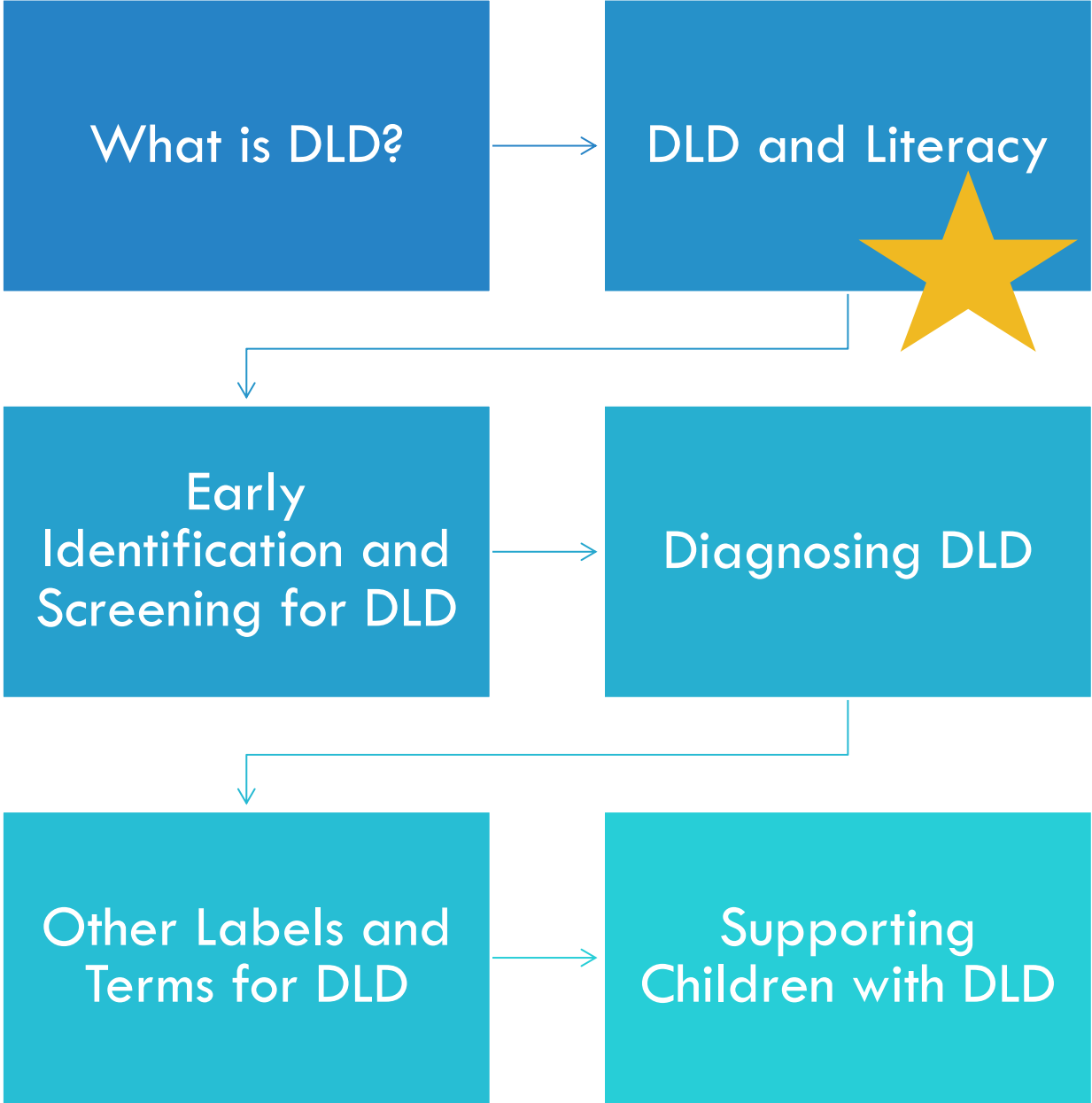
This includes children with a communication disorder, including language impairment, that affects their educational performance. This term can also be abbreviated as SLI or S/LI, which is not to be confused with Specific Language Impairment.

Specific Learning Disability

Not to be confused with the DSM-5 label “Specific Learning Disorder,” this educational term refers to children with trouble understanding or using spoken or written language, which affects their reading, writing, spelling, math, or other areas.

Educational labels are particularly important because they are the basis for determining whether your child qualifies for intervention services and accommodations in school. Of note, educational labels can differ by country.

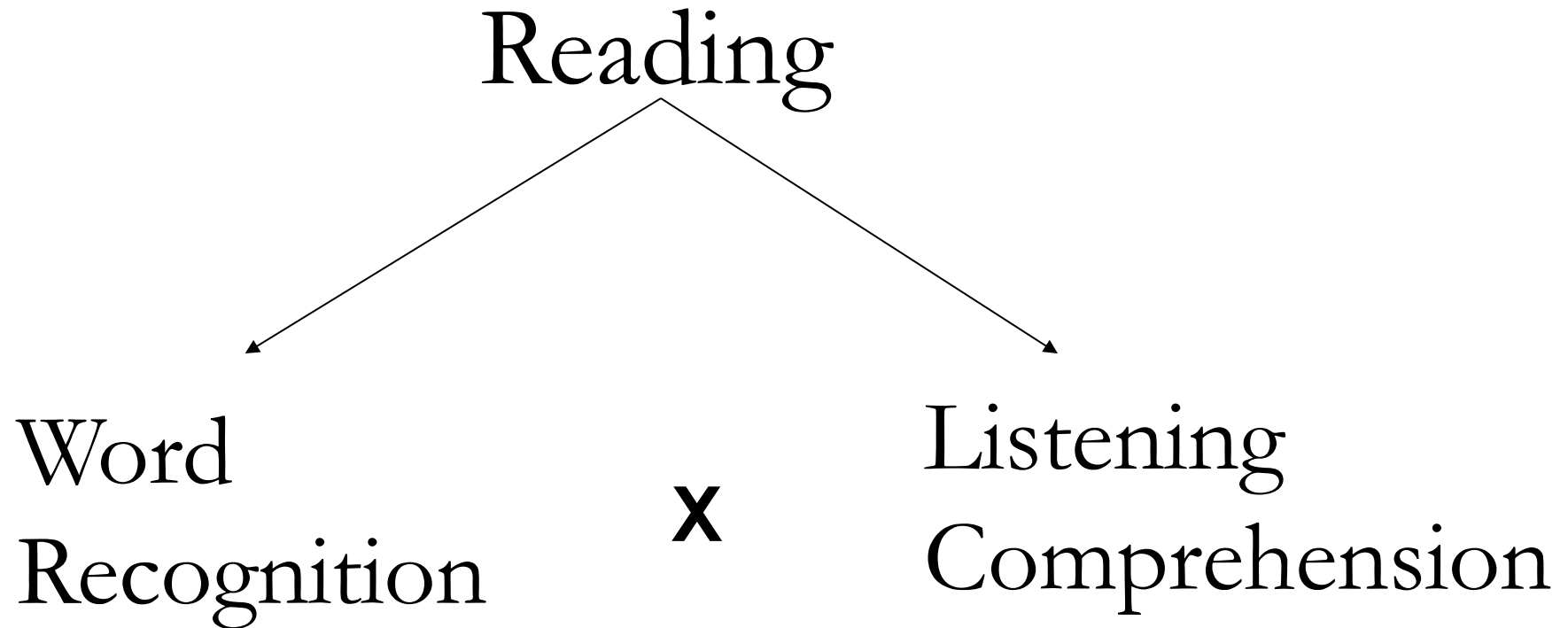
All of these terms could potentially be used to describe a child with DLD. Because of this, there has been a worldwide push to decide on a common term. Fueled by the CATALISE Consortium (Bishop et al., 2016), “developmental language disorder” is becoming more and more prominent as the preferred term. As research in DLD continues to move forward, having a common term will help bring together the many researchers, clinicians, and educational policymakers who want to support children with DLD.



DO CHILDREN WITH DLD HAVE DIFFICULTY WITH READING?



THE SIMPLE VIEW OF READING



HOW ARE WORD READING AND LISTENING COMPREHENSION DIFFERENT?

Word Reading

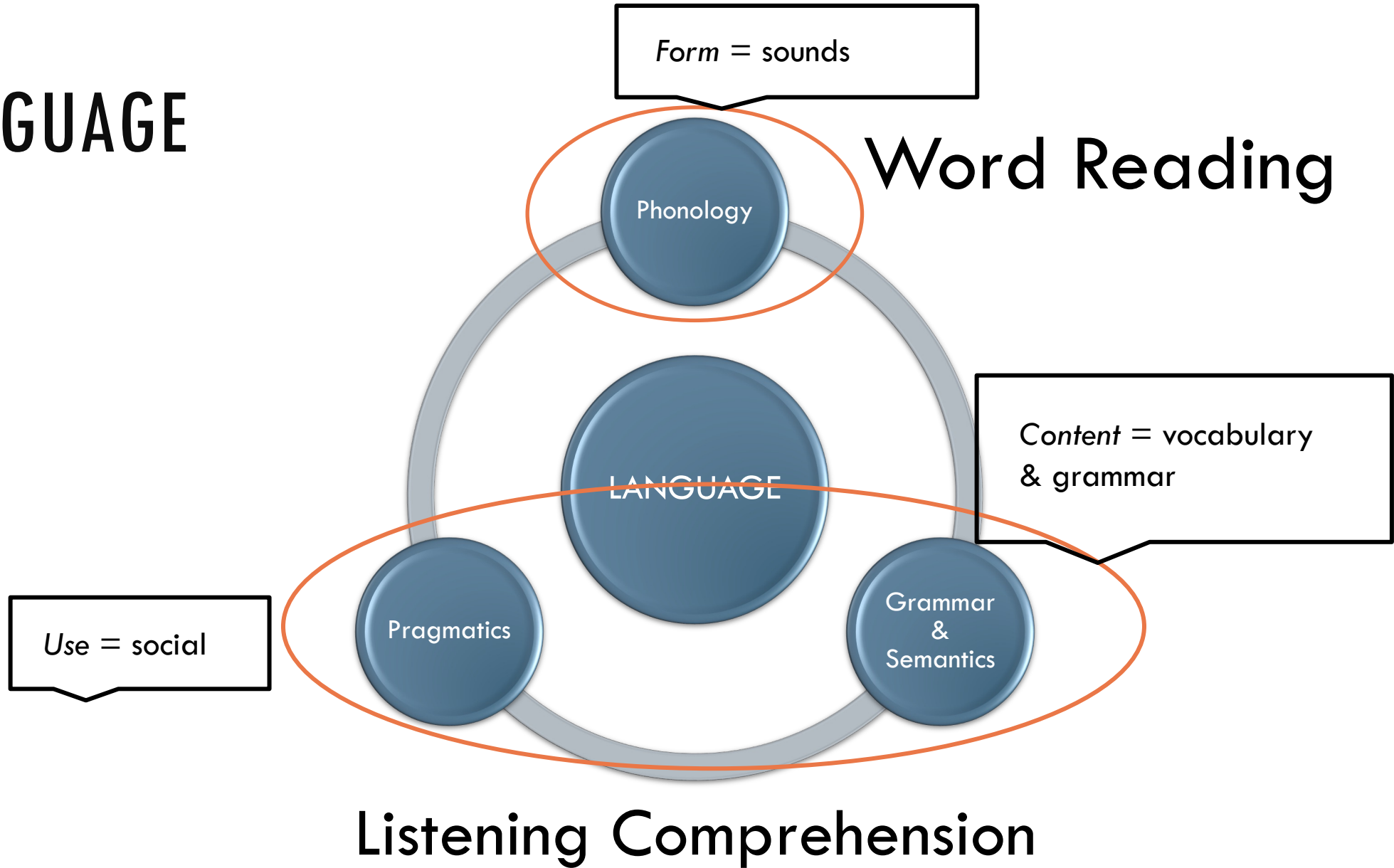
The ability to accurately translate printed letter patterns into spoken words

vs.

Listening Comprehension

The ability to understand spoken language

LANGUAGE

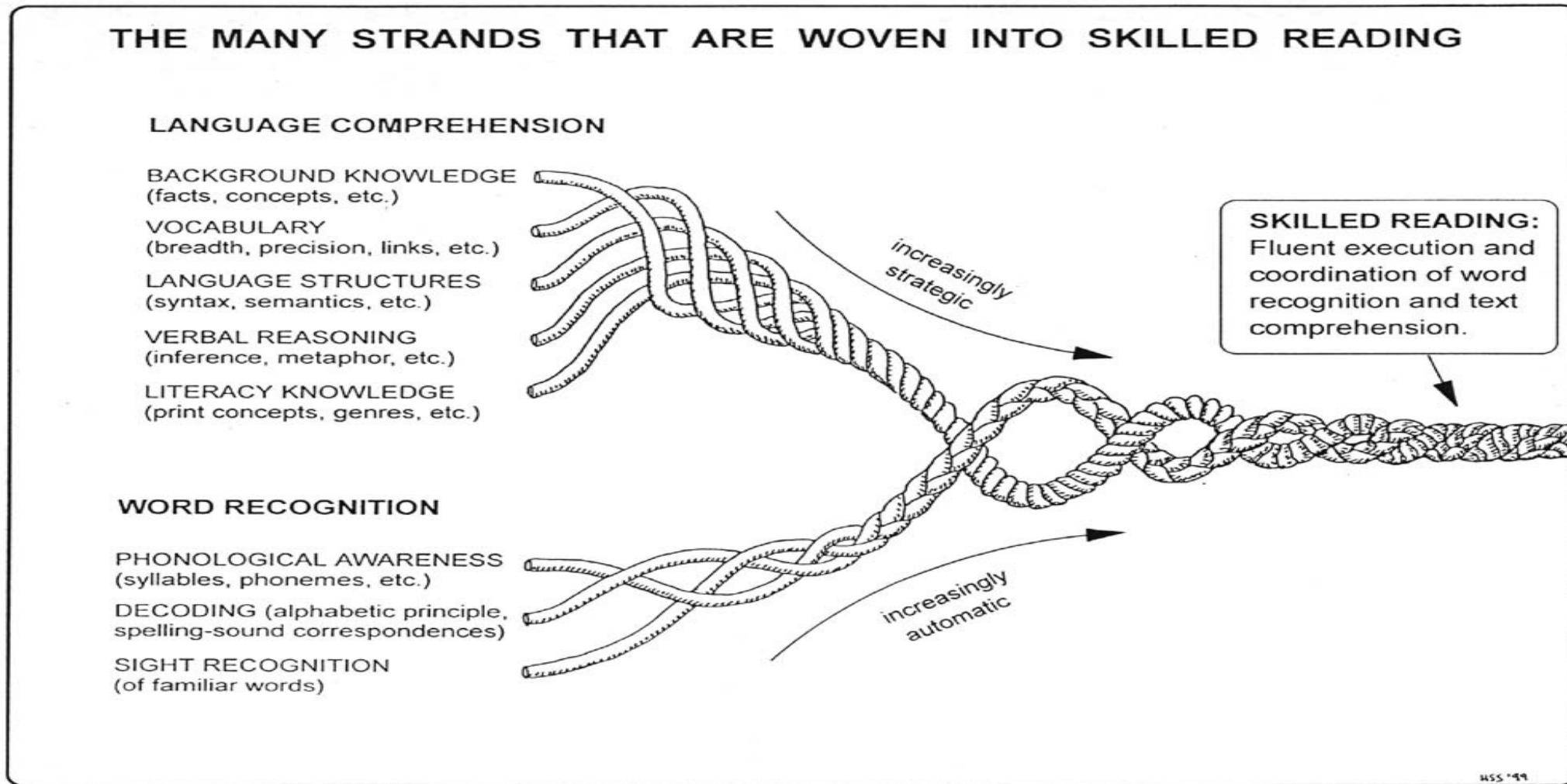


WHY IS THE SIMPLE VIEW IMPORTANT?

Both components need to be considered when thinking of “reading”

The goal of reading is comprehension, and comprehension cannot occur without both word reading and listening comprehension

Expanding on the Simple View (it's not so simple!)



Scarborough, H. S. in Neuman, S.B. & Dickinson, D. K. (2001). *Handbook of Early Literacy Research*. New York: Guilford Press.

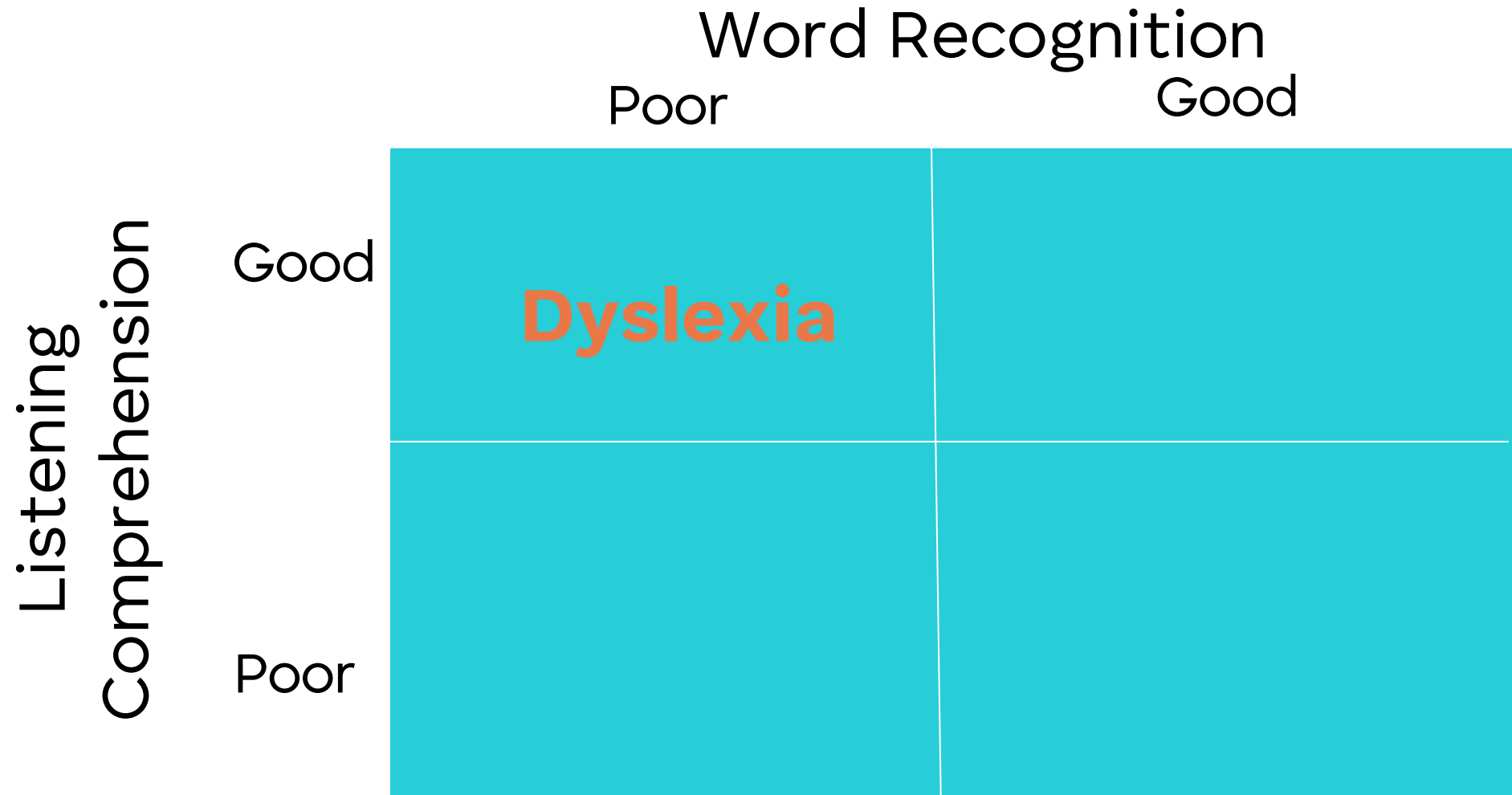
SUBGROUPING POOR READERS

Poor readers are not all the same: Multiple causes for poor comprehension.

The simple view can be used to group poor readers based on individual differences.

POOR READER SUBGROUPS

CATTS, HOGAN, & ADLOF, 2005; CATTS, HOGAN, & FEY, 2003



FACTS ABOUT DYSLEXIA

A person is born with dyslexia, persists across the lifetime

Cuts across SES and other disorders

Brain difference

Key deficits in phonological (sound) and orthographic (letter) processing

Many laws require early screening (Snowling, 2019)

DYSLEXIA RESOURCES

Video: <https://dyslexicinsight.com/videos-explaining-dyslexia/>

Dyslexia Foundation Webinars

<https://dyslexiafoundation.org/>

International Dyslexia Association (IDA)

<https://dyslexiaida.org/>

The Reading League

<https://www.thereadingleague.org/>

What SLPs need to know about dyslexia

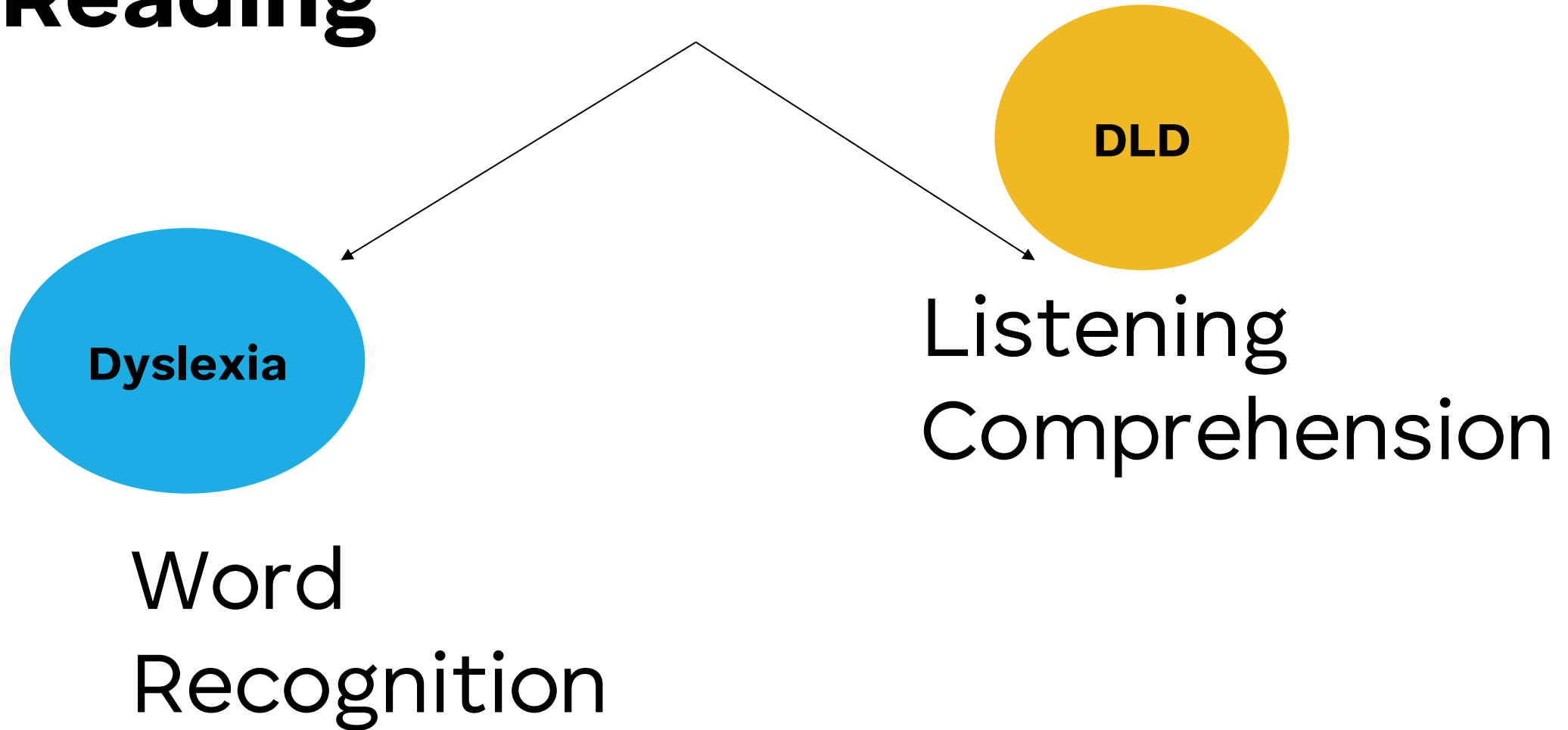
<https://academy.pubs.asha.org/2018/10/lshss-clinical-forum-what-slps-need-to-know-about-dyslexia/>

POOR READER SUBGROUPS

CATTS, HOGAN, & ADLOF, 2005; CATTS, HOGAN, & FEY, 2003

		Word Recognition	
		Poor	Good
Listening Comprehension	Good		
	Poor		Developmental Language Disorder (DLD)

Reading



POOR READER SUBGROUPS

CATTS, HOGAN, & ADLOF, 2005; CATTS, HOGAN, & FEY, 2003

		Word Recognition	
		Poor	Good
Listening Comprehension	Good	Dyslexia	
	Poor	DLD and Dyslexia	Developmental Language Disorder (DLD)

**TAKE HOME POINT:
SCHOOL-AGE CHILDREN
WITH SPEECH AND LANGUAGE IMPAIRMENTS
OFTEN STRUGGLE WITH READING.**

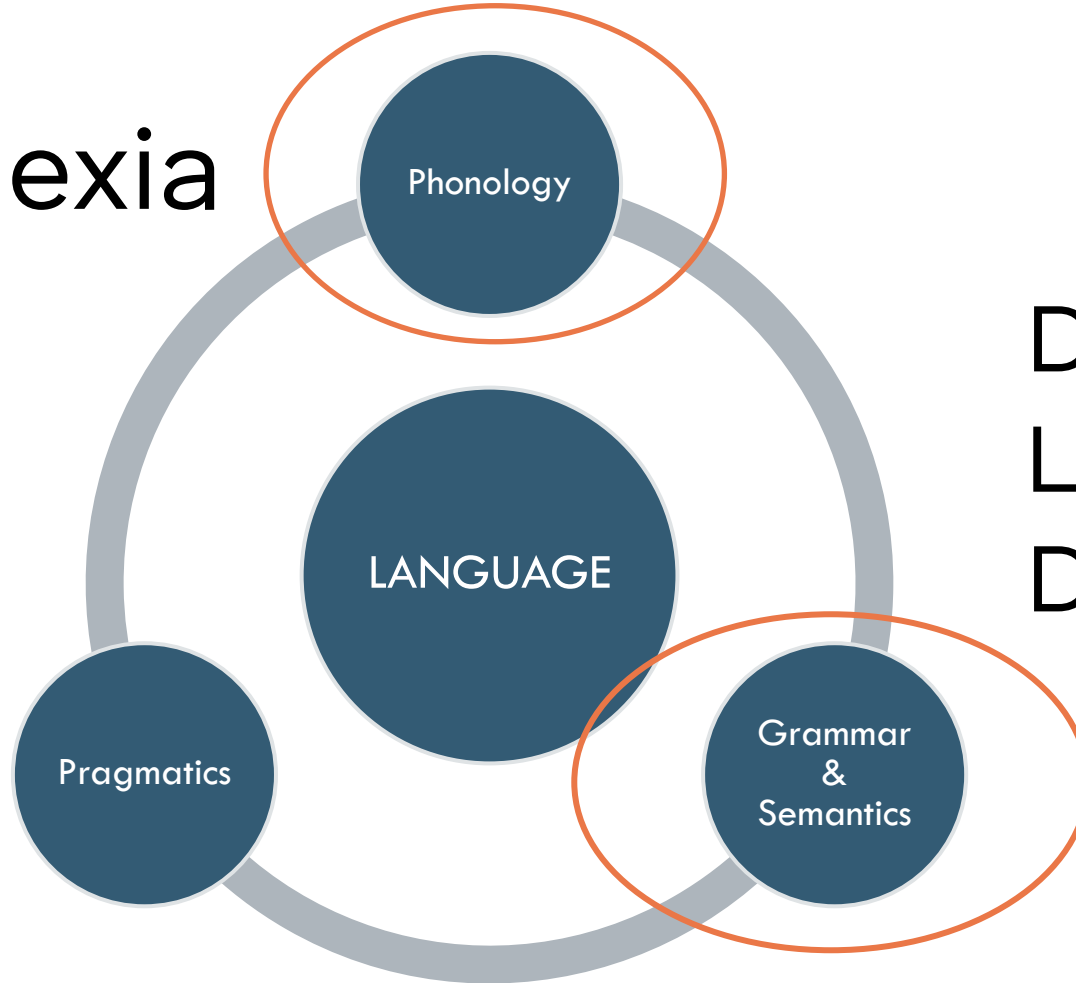
**CHILDREN WITH LANGUAGE DIFFICULTY ARE 6 TIMES MORE LIKELY THAN TYPICAL PEERS TO
HAVE A READING PROBLEM**

STOECKEL ET AL., 2013

Is dyslexia a language disorder?



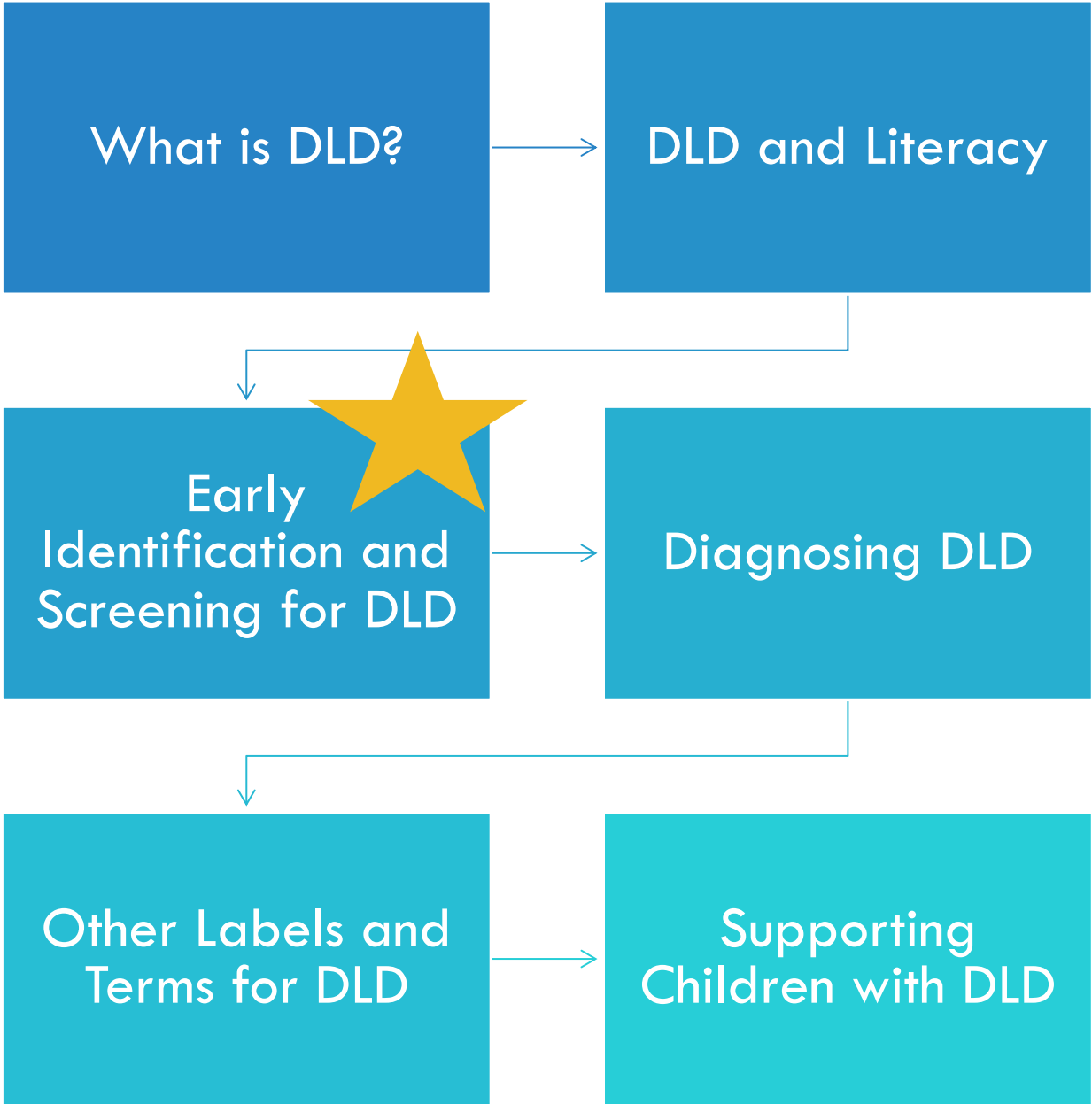
Dyslexia



Developmental
Language
Disorder

Take Home Points

- Children with dyslexia have a deficit in word reading
 - Ranges from mild to severe
- Children with DLD have a deficit in language
 - Ranges from mild to severe
- 50% of children with DLD have dyslexia
- Both children with dyslexia and DLD have language deficits, but their language deficits are different
- *Almost all poor readers have some early speech and language delays* (Adlof & Hogan, 2018)



WHEN IS DLD IDENTIFIED?

What percentage of children with DLD are identified as having language difficulties in Kindergarten?

1. 90%
2. 75%
3. 50%
4. 20%

DLD: COMMON, BUT HIDDEN

Only ~20% of children with DLD are identified in early childhood / early elementary school

(see Adlof & Hogan, 2019 for review)

Who is identified? (Wittke, Spaulding, & Schechtman, 2013)

- Those with executive functioning deficits
- Those who have mothers with high SES

Long term impacts of DLD

- Low self esteem
- Shame
- Unable to negotiate with language
- Reading deficits...which lead to knowledge deficits
- Juvenile delinquency
- Higher rate of sexual assault

WHY ISN'T DLD CAUGHT EARLIER IN SCHOOLS?



School-based screenings are common. For example, schools regularly screen for hearing loss or vision difficulties. Screenings help parents and teachers find problems that may negatively affect learning. Unfortunately, screening of language skills is not a common practice in schools. Why? Three myths get in the way.

Myth 1: Language screenings are time-consuming.

Truth: There are language screeners that can be given quickly and easily in the classroom.

Myth 2: Language screenings are not reliable.

Truth: There are highly reliable language screeners for children in kindergarten and higher grades.

Myth 3: Schools already screen for language when they screen for reading.

Truth: It is great that school's regularly screen children's reading skills but reading screeners (like the DIBELs) screen for written language problems. Oral language problems, which may be contributing to the reading problem or to problems in classroom participation, go undetected.


<https://dldandme.org/school-language-screening/>

“Adults with a history of DLD who received targeted intervention during their school years reported less contact with their local police service compared with AMPs at age 24.”

“There is a need for early identification of children with DLD. Early intervention aimed at ameliorating such difficulties could possibly have distal outcomes in relation to offending.”


Research Report |  Open Access |  

More or less likely to offend? Young adults with a history of identified developmental language disorders*

Maxine Winstanley, Roger T. Webb, Gina Conti-Ramsden 

First published: 21 November 2017 | <https://doi.org/10.1111/1460-6984.12339> | Citations: 4

† A free Video Abstract to accompany this article is available at <https://youtu.be/lpuwoOEaurQ>

 SECTIONS

 PDF  TOOLS  SHARE

Abstract



Figure

Metric

Citation



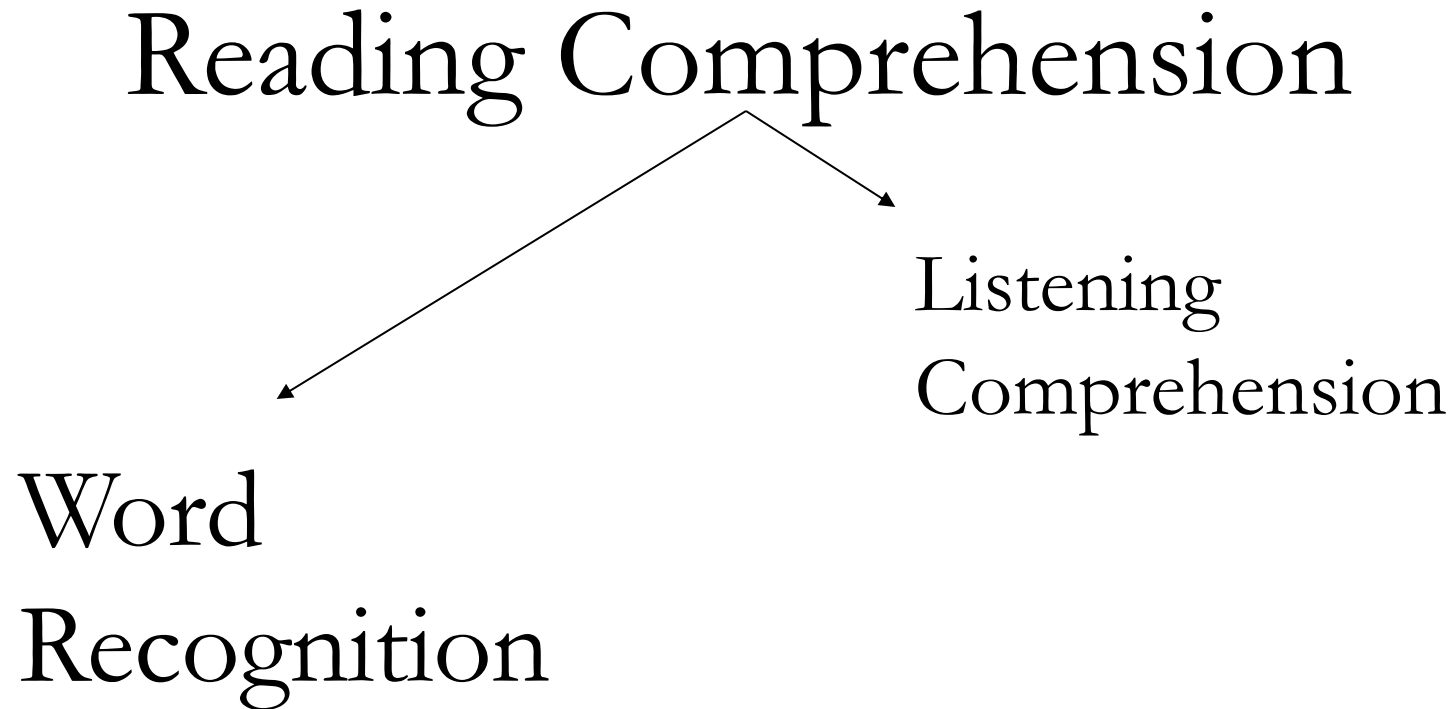
Detail

The Simple View is not so simple...



'READING' CHANGES OVER TIME

(CATTS, HOGAN, & ADLOF, 2005)



'READING' CHANGES OVER TIME

(CATTS, HOGAN, & ADLOF, 2005)

Reading Comprehension

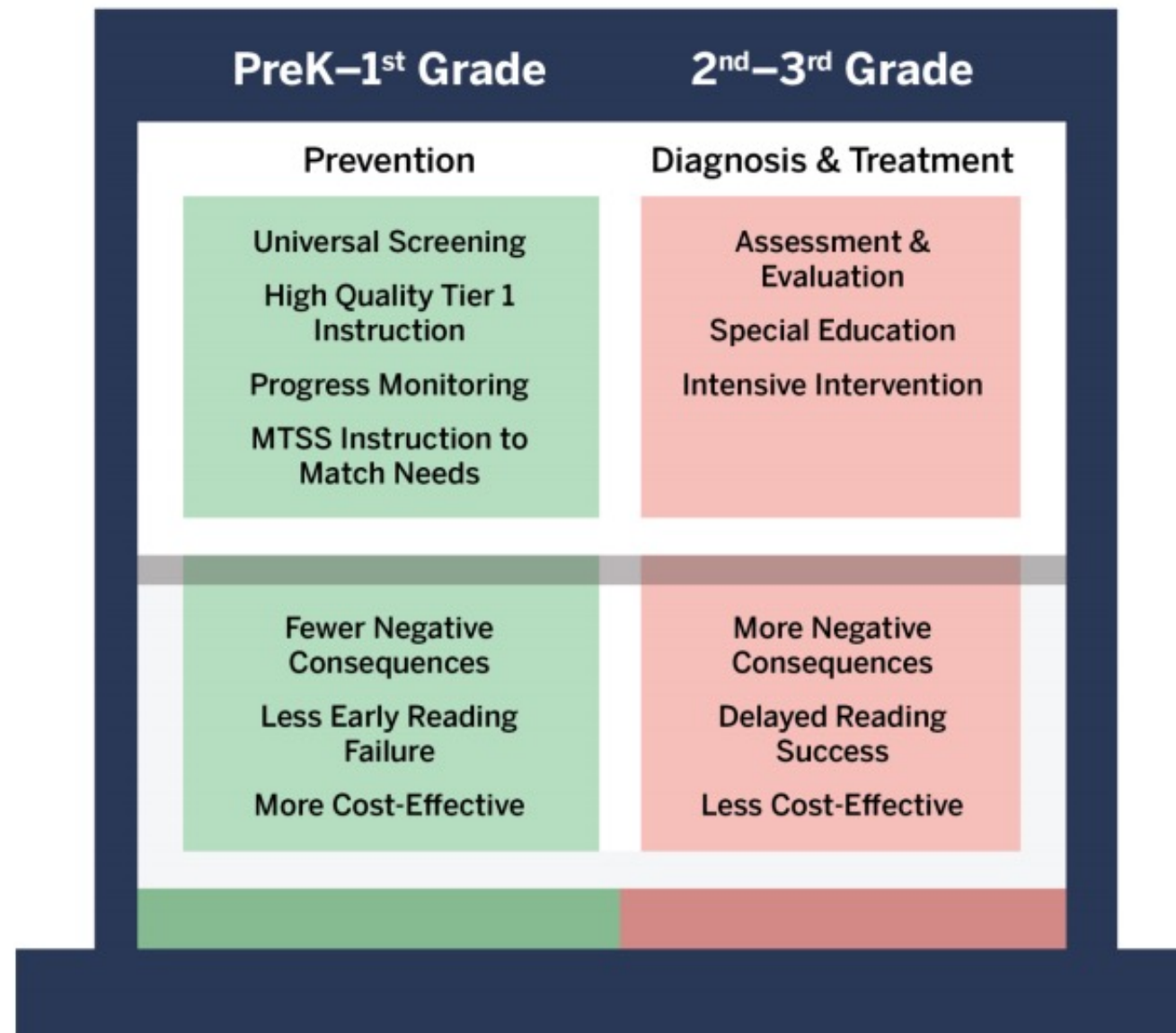


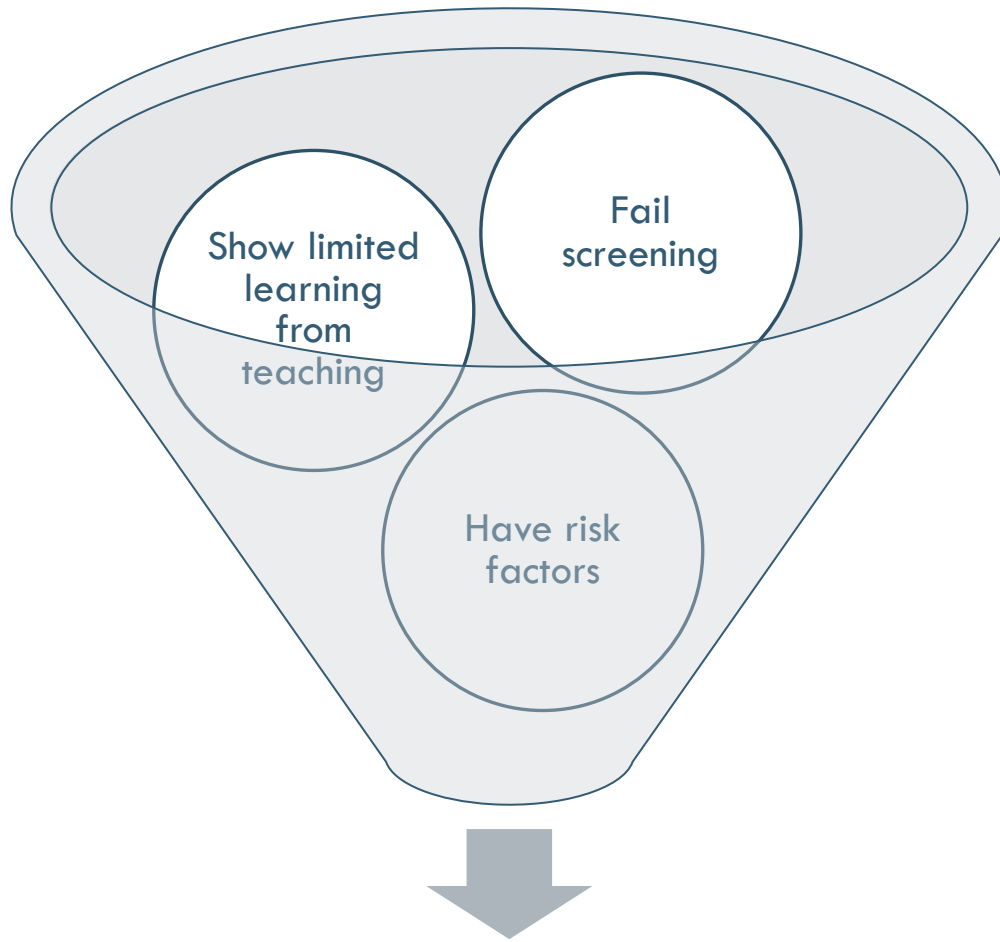
```
graph TD; A[Reading Comprehension] --> B[Word Recognition]; A --> C[Listening Comprehension]
```

Word Recognition

Listening
Comprehension

Windows of Opportunity





Needs further assessment

EARLY SCREENING FOR DLD: RESOURCE

Open Access Resource for Language Screening Measures

<https://tinyurl.com/screen4DLD>



FURTHER LEARNING: LANGUAGE SCREENING, EARLY IDENTIFICATION

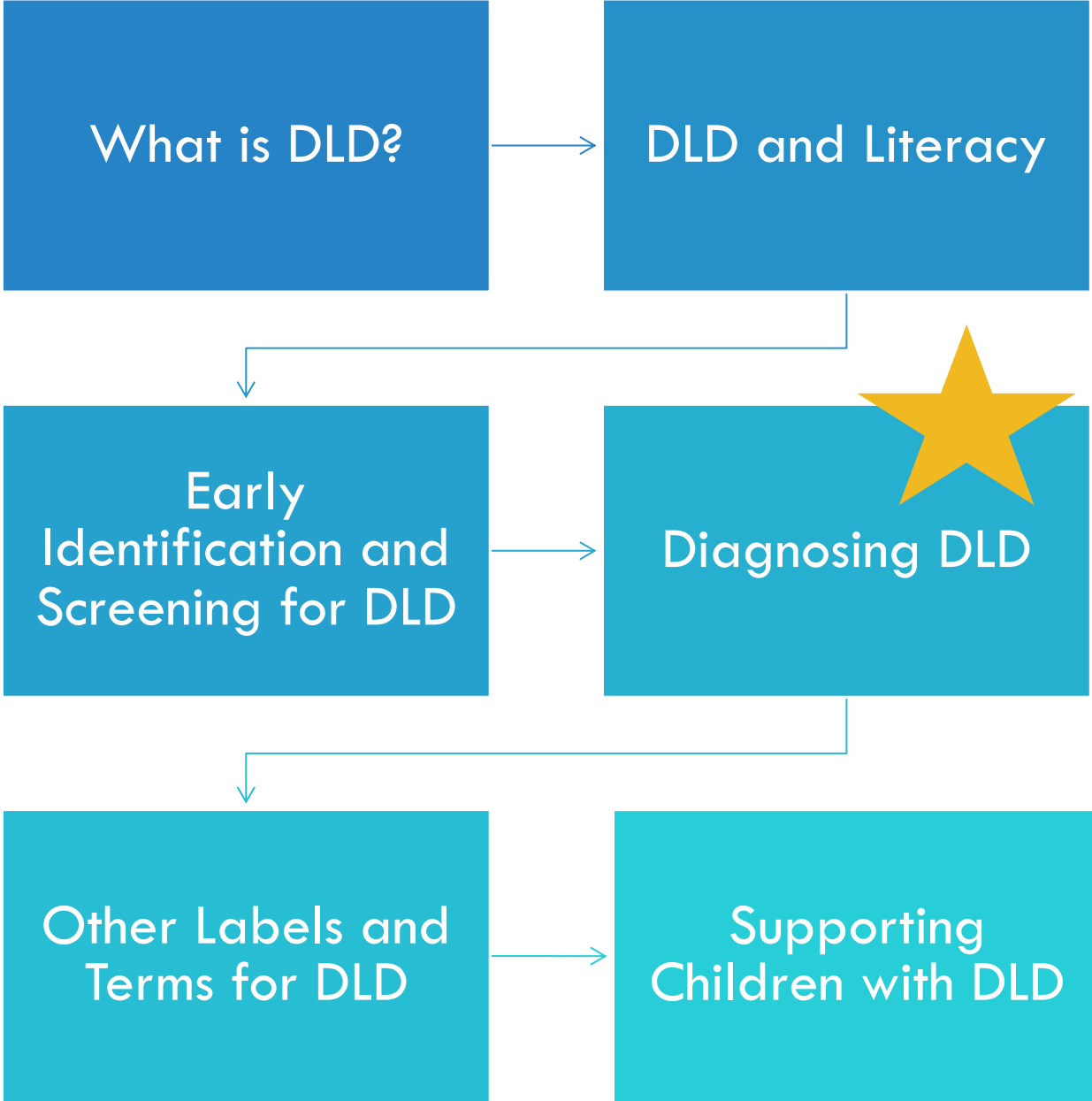


Language Screening &
Early Identification of DLD

With special guest Tiffany P. Hogan, PhD CCC-SLP, Director of the Speech and Language (SAiL) Literacy Lab and Professor in the Department of Communication Sciences and Disorders at MGH Institute of Health Professions in Boston.

THE
**TALKING
DLD**
PODCAST 





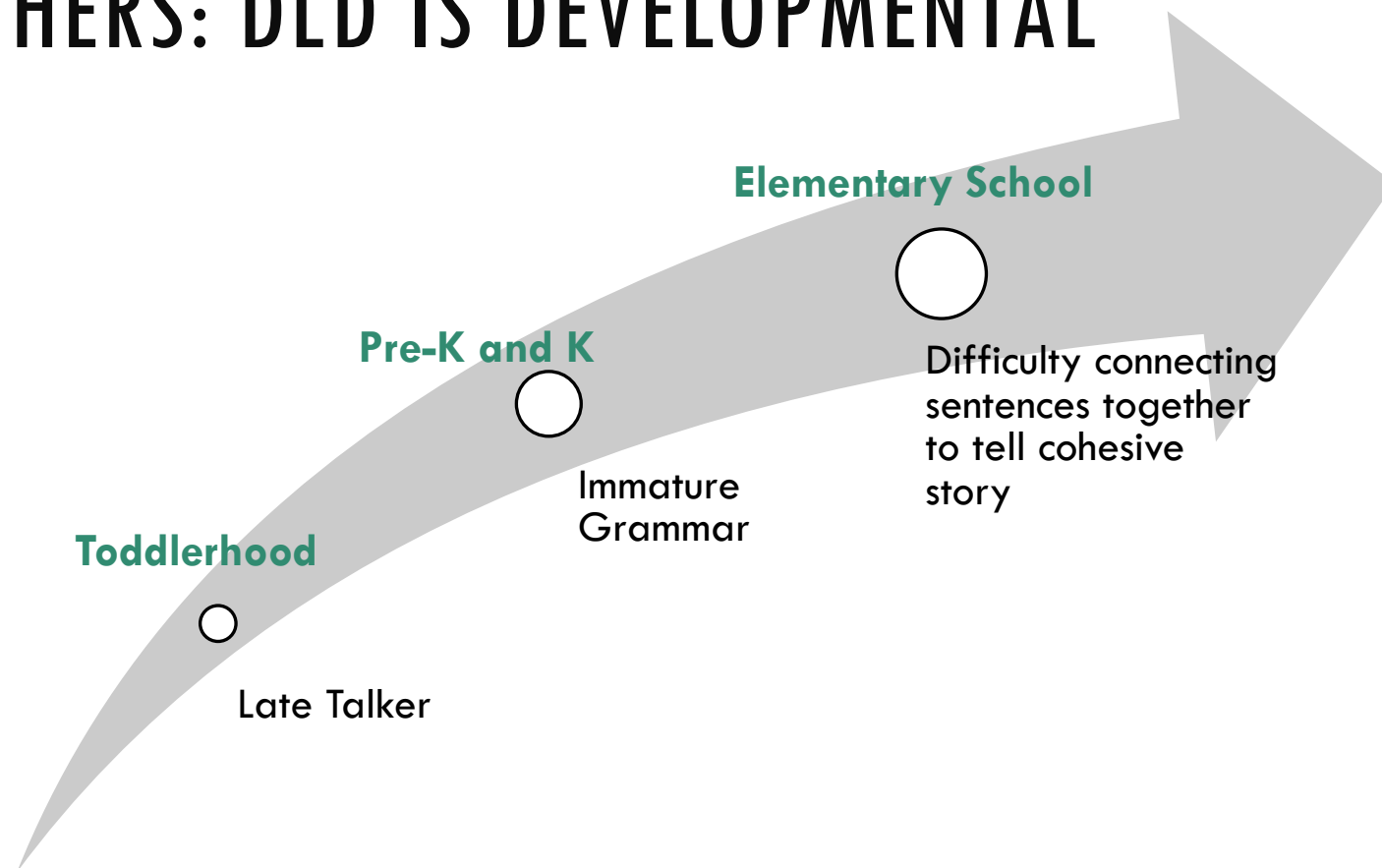
HOW IS DLD DIAGNOSED?

Expressive (producing language) and receptive (understanding) tests

Examples of Tasks/ Subtests:

- Recalling (repeating) sentences
- Generating sentences
- Picking pictures that go together
- Retelling a story

SOME TESTS ARE MORE HELPFUL FOR DIAGNOSIS THAN OTHERS: DLD IS DEVELOPMENTAL

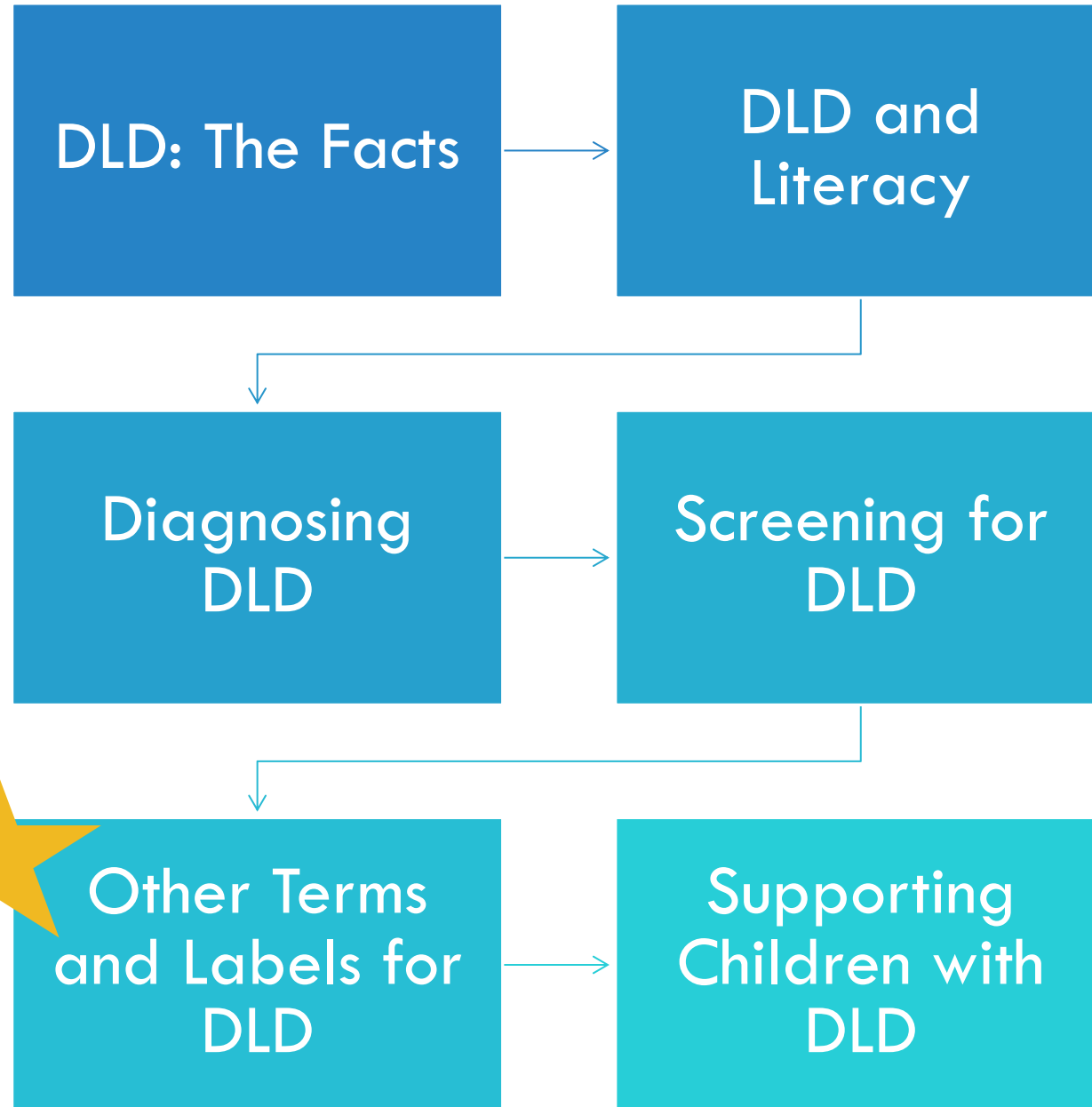


Also consider...

- Grit
- Resilience
- Perseverance
- Supporters
- School
- Family
- Nutrition/Exercise

Always test oral language skills in an evaluation, regardless of the primary deficit





Labels used to qualify for services

DD

Developmental Delay

SLD

Specific
Learning
Disability

SLI

Speech & Language
Impairment

Developmental Language Disorder

What's the benefit of a label?

What are reasons not to label?



Pros

- Access to services
- Connection/community
- Advocacy
- Empowerment
- Understanding
- Clarity

Cons

- Stigma
- Low expectations

EDUCATION AND DESTIGMATIZING

From Deficit Remediation to Capacity Building: Learning to Enable Rather Than Disable Students With Dyslexia

Gabrielle Rappolt-Schlichtmann ✉, Alyssa R. Boucher and Miriam Evans

https://doi.org/10.1044/2018_LSHSS-DYSLC-18-0031



EPISODE 2: NEURODIVERSITY, LABEL STIGMA, & UDL WITH GABRIELLE RAPPOLT-SCHLICHTMANN & ALYSSA BOUCHER

12/7/2018

0 Comments

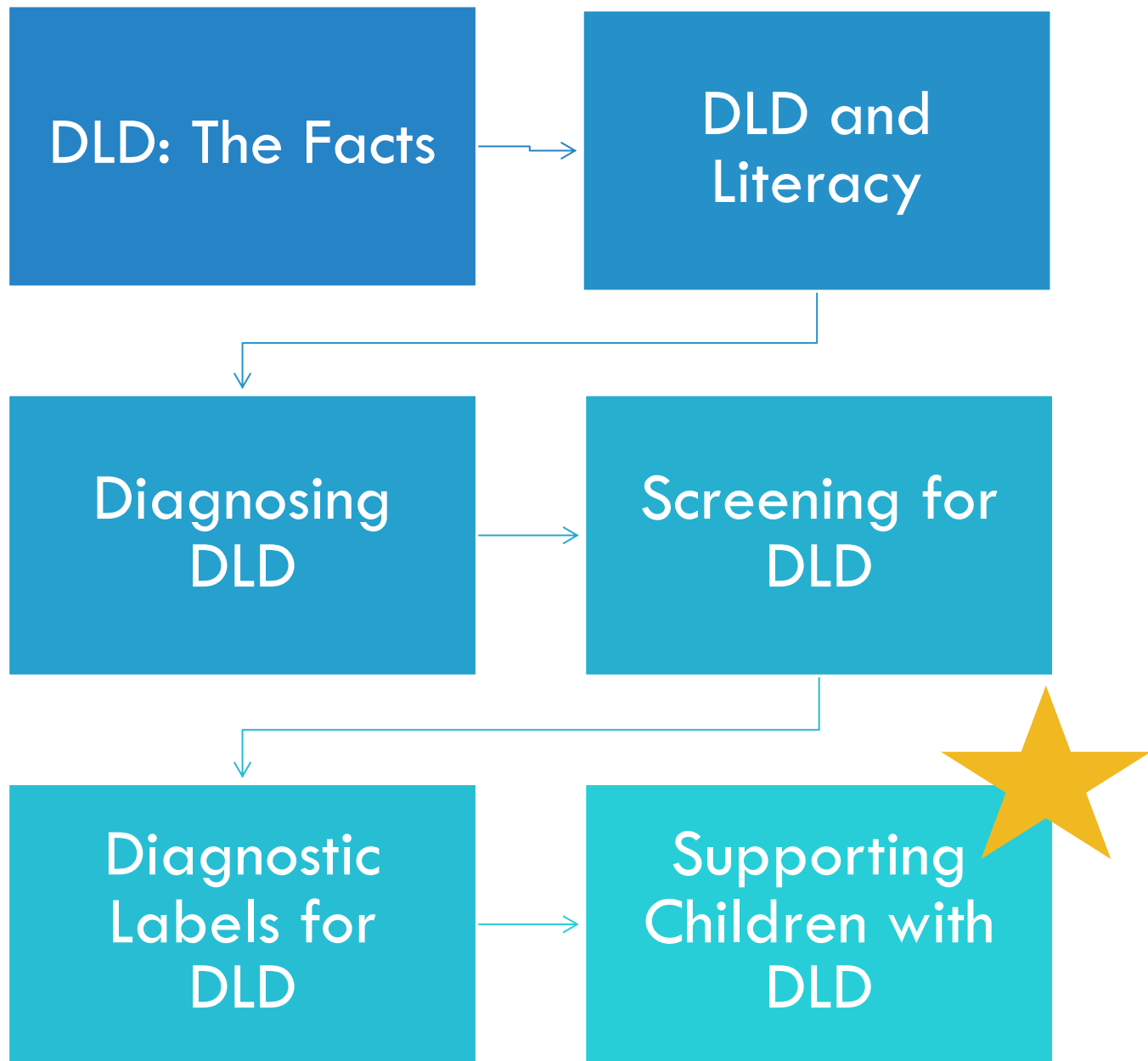
Learn about the neurodiversity view of learning disabilities like dyslexia, considerations for label stigma in the context of early identification of reading deficits, and how to apply principles of Universal Design for Learning in intervention.

See 

Hear 

Speak 

**PODCAST
HOST**



HOW TO HELP CHILDREN WITH DLD IN THEIR CLASSROOMS

CURRAN & HOGAN, 2021

Look for DLD

- Screening
- Follow-up testing
- Label to qualify for services vs DLD diagnosis

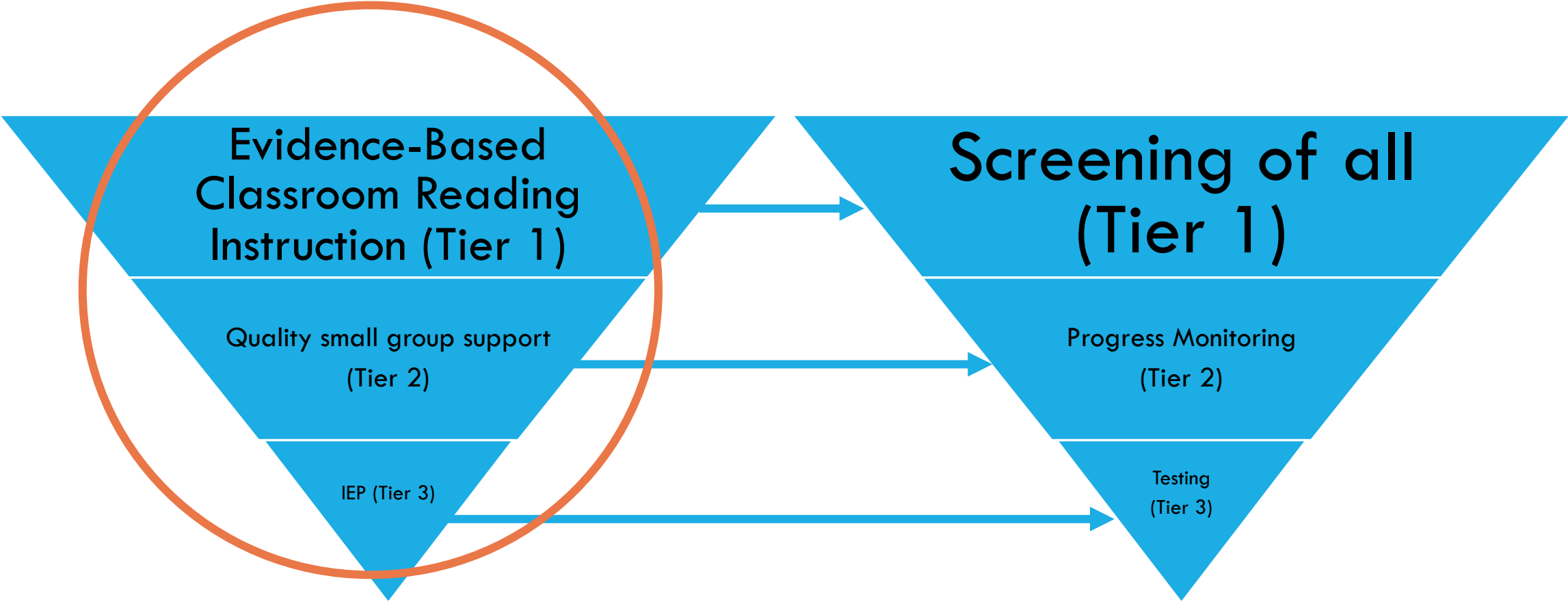
Talk about DLD

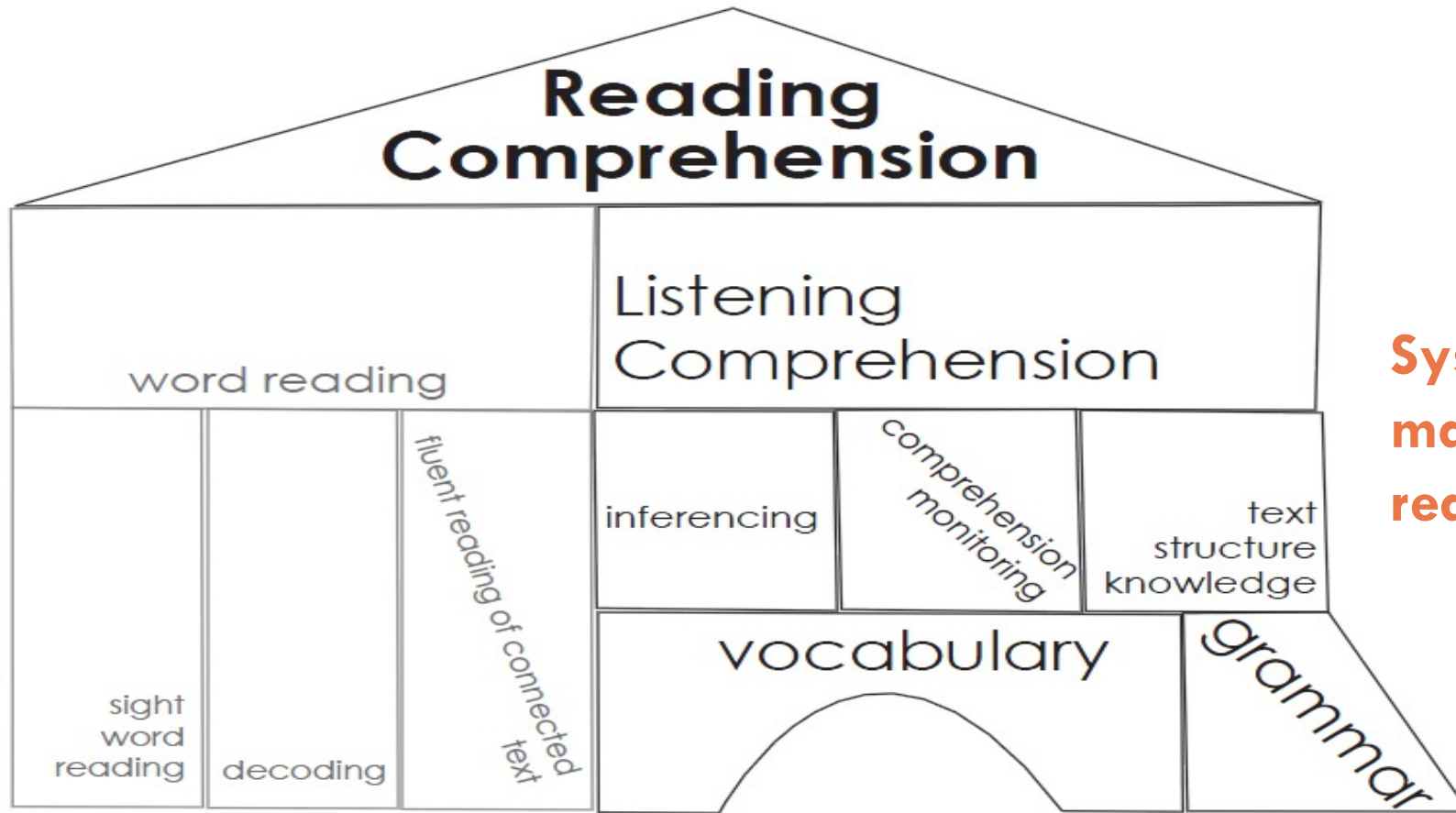
- Advocacy
- Collaborate: Increase quality language input in classrooms

Support Peer Relationships

- Value neurodiversity

Evidence-based instruction in both word reading and language comprehension for all children in the context of MTSS





Systematically teach/ support malleable factors that support reading comprehension

DLD ADVOCACY

PERSPECTIVES

Tutorial

Developmental Language Disorder: Applications for Advocacy, Research, and Clinical Service

Karla K. McGregor,^a Lisa Goffman,^b Amanda Owen Van Horne,^c
Tiffany P. Hogan,^d and Lizbeth H. Finestack^e



DLD ADVOCACY

 OPEN ACCESS |  EDITOR'S AWARD | Language, Speech, and Hearing Services in Schools | Clinical Focus | 2 Oct 2020

How We Fail Children With Developmental Language Disorder

Karla K. McGregor 

https://doi.org/10.1044/2020_LSHSS-20-00003

 Abstract |  PDF |  Tools |  Share

Abstract

Purpose For over two decades, we have known that children with developmental language disorder (DLD) are underserved. We have also known that DLD does not attract the research attention that it merits given its prevalence and impact. The purposes of this clinical focus article are to present evidence that these failures continue, explore the reasons behind these failures, and propose solutions.



SEEHEARSPEAKPODCAST.COM

History of DLD

Awareness campaigns for DLD

DLD & Working Memory

DLD & ADHD

A parent's perspective on DLD

[EPISODES](#)

[ABOUT](#)

[SIGN UP FOR EMAIL ALERTS](#)



See • Hear • Speak

Interesting conversations with people who care about reading, language, and speech in the developing child.

SLP NERDCAST: DLD AND DYSLEXIA



#GOALS

1. Routine screening (and testing) for word reading difficulties (dyslexia) and language comprehension difficulties (DLD) in early grades,
2. Evidence-based instruction in both word reading and language comprehension (and background knowledge!) for all children,
3. Developmentally appropriate instruction across the grades,
4. Understand and value neurodiversity.