

The Impact of Bilingualism on Dyslexia



HELP!

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Sponsored by:



HIDA's mission:

to increase awareness of dyslexia in our community;

provide support for individuals with dyslexia, their families and educators;

promote teacher training; and,

improve literacy for struggling readers.



Proclamation

WHEREAS, dyslexia is a learning disability that results in difficulty with spelling, reading comprehension, and learning in the classroom; and

WHEREAS, dyslexia affects how an individual processes language and does not indicate a lack of intelligence; and

WHEREAS, undiagnosed cases of dyslexia and unaccommodating learning environments can prevent people with dyslexia from achieving his or her full potential; and

WHEREAS, early identification and intervention are key to helping dyslexic people succeed in school and in life; and

WHEREAS, about 15-20 percent of the nation's population, including over 280,000 residents of the State of Hawai'i, have dyslexia or another reading disability; and

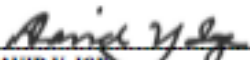
WHEREAS, the Hawai'i branch of the International Dyslexia Association is dedicated to increasing awareness of dyslexia in our community, providing support for individuals with dyslexia, families and educators, promoting teacher training, and improving literacy for struggling readers;

THEREFORE I, DAVID Y. IGE, Governor of the State of Hawai'i, do hereby proclaim October 2020 as

"DYSLEXIA AWARENESS MONTH"

in Hawai'i and ask the people of the Aloha State to join us in recognizing the importance of early diagnosis and intervention for children identified with this learning disability and celebrating the many accomplishments of those living with dyslexia.

Done at the State Capitol in the Executive Chambers, Honolulu, State of Hawai'i, this ninth day of September 2020.

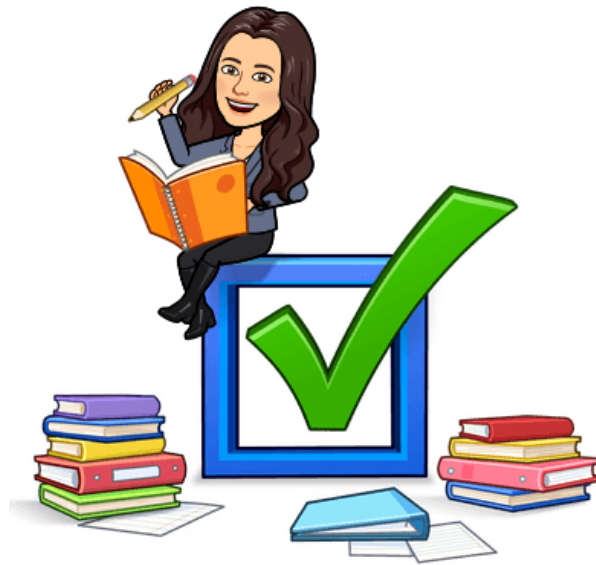

 DAVID Y. IGE
 Governor, State of Hawai'i

The Impact of Bilingualism on Dyslexia

Presentation Road Map

- *Getting to know my Audience!*
- *Bilingualism Demographics*
- *Understanding Bilingualism*
- *Languages similarities and differences*
- *Signs to look for*
- *Great Tips!*





1 . Are you Bilingual?

() YES () NO

2. How proficient are you in your second language?

- a) I understand very well but have a hard time speaking
- b) I speak fluently
- c) I can read and write but have a hard time speaking
- d) I am very fluent on both (I can read/write/speak/listen fluently)
- e) I can 'survive'!

Are **YOU** Bilingual?

It has been estimated that **more than 50%** of the world's population uses two or more languages (or dialects) in everyday life!



What is Bilingualism?

The definition is complex due to the variations on its dimension:

- ❖ Most bilinguals are not fluent in all language skills: listening, speaking, reading and writing
- ❖ Very few bilinguals are bi-literate
- ❖ Bilinguals usually have a dominant language

KEY Information about Bilingualism!

- ✓ Most bilinguals are **NOT equally proficient** in both languages
- ✓ Bilinguals usually **don't speak both languages** equally well and that is because they use each language in **different contexts, activities and domains** (home, school, work...).
- ✓ *Proficient bilinguals demonstrate both **accuracy and fluency**, and use a variety of **discourse strategies** in all languages. This is **RARE!***
- ✓ *There are many native speakers who are fluent but not proficient*
- ✓ Basic conversational fluency might only require as little as **3,000 words**
- ✓ Native-level fluency is estimated to be between **20,000–40,000** words;

WHY it this Important?



Native-like
fluency?

Basic
Conversation
Fluency?

Language
Proficiency?

Language
Domains?

Bi-literacy?



Because what we **'SEE'** is not
necessarily the **'REALITY'**

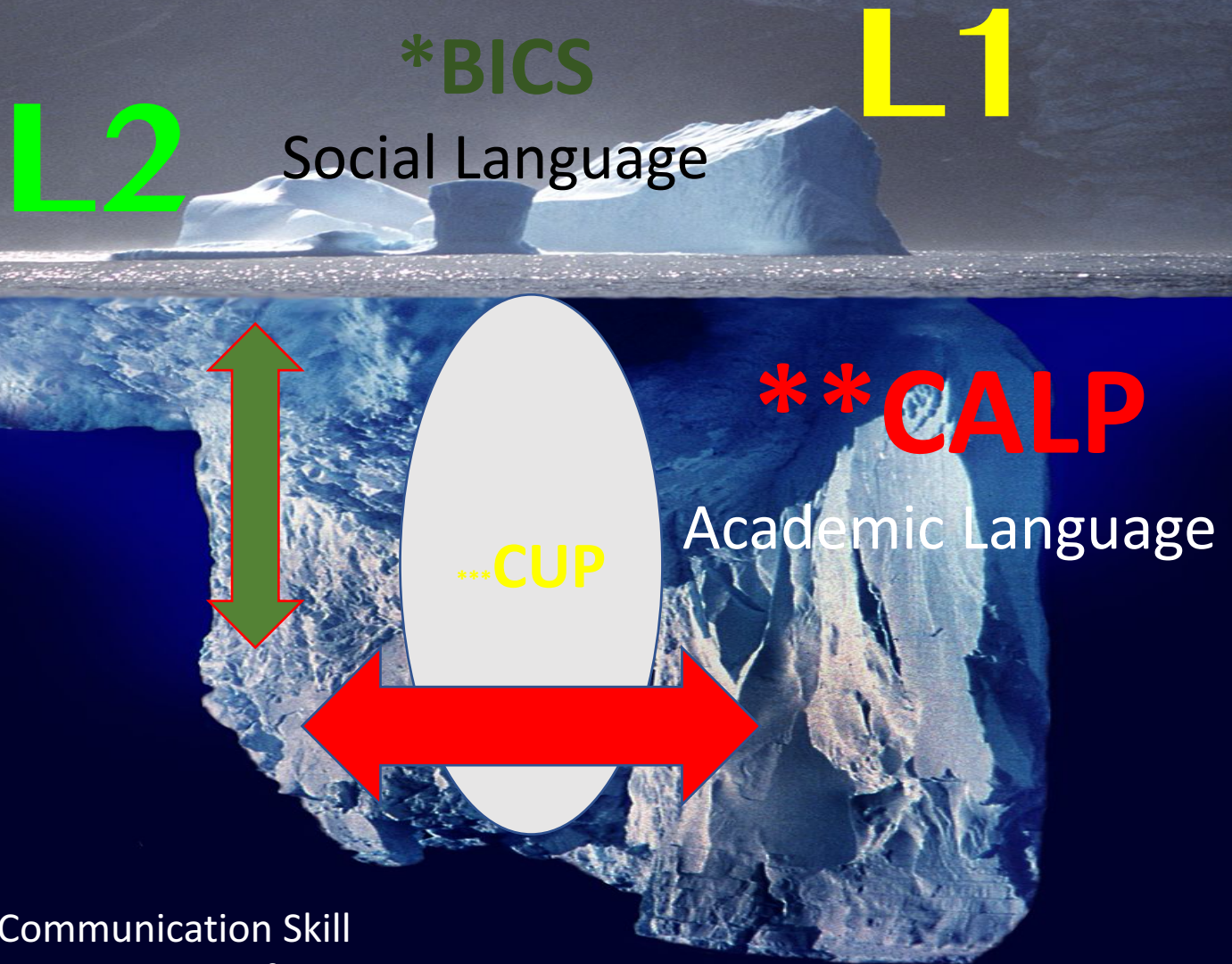




L1

L2

The Iceberg Theory
(Cummins, 1996)



- *Basic Interpersonal Communication Skill
- **Cognitive Academic Language Proficiency
- ***Common Underlying Proficiency

IMPORTANT!

- Bilingual does not necessarily indicate that the speaker is fully competent and fluent in at least two languages.
- Bilinguals, more likely, have varying levels of language domains.
- Being bilingual refers to having access to and using two or more languages on a daily basis.

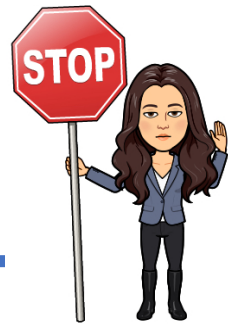
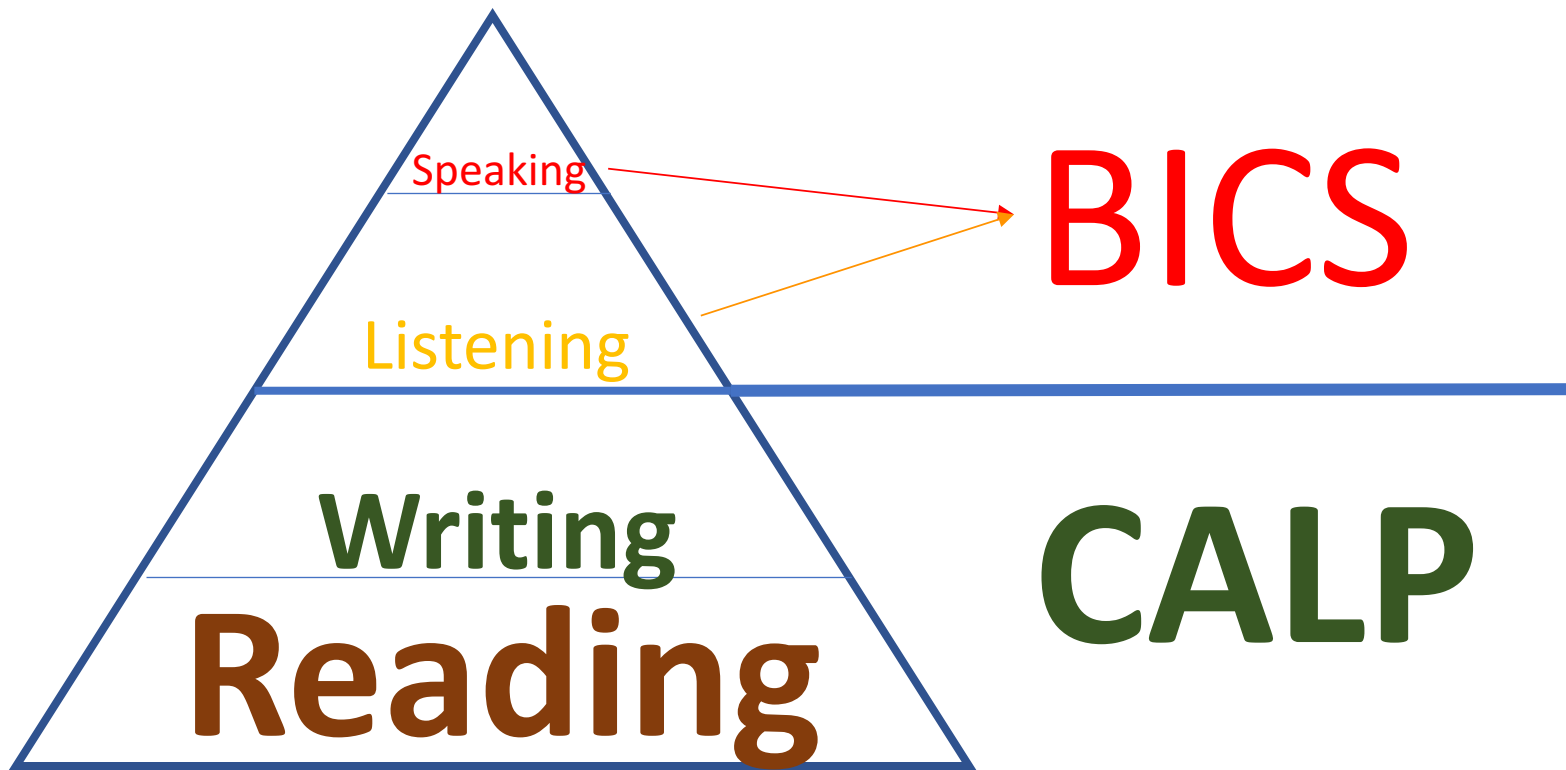
(Baker 2006, Martin 2009)





What to Look for when Assessing Bilingual Children

First/Native Language Proficiency Level **X** *Second Language Proficiency Level*



BICS *Characteristics*

Limited word knowledge
(3,000 – 5,000 words)



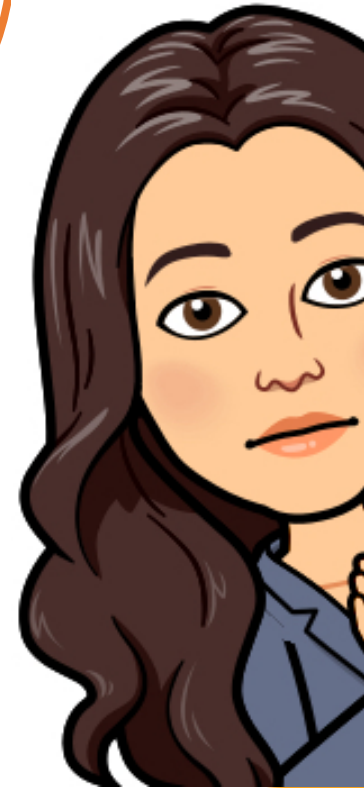
Limited listening skill exposure

- ✓ Difficulty following rules
- ✓ Difficulty paying attention and staying focused
- ✓ Limited speaking

No/very limited exposure to books

- ✓ Limited speaking vocabulary
- ✓ Difficulty with phonics and phonemic awareness
- ✓ Difficulty paying attention and staying focused

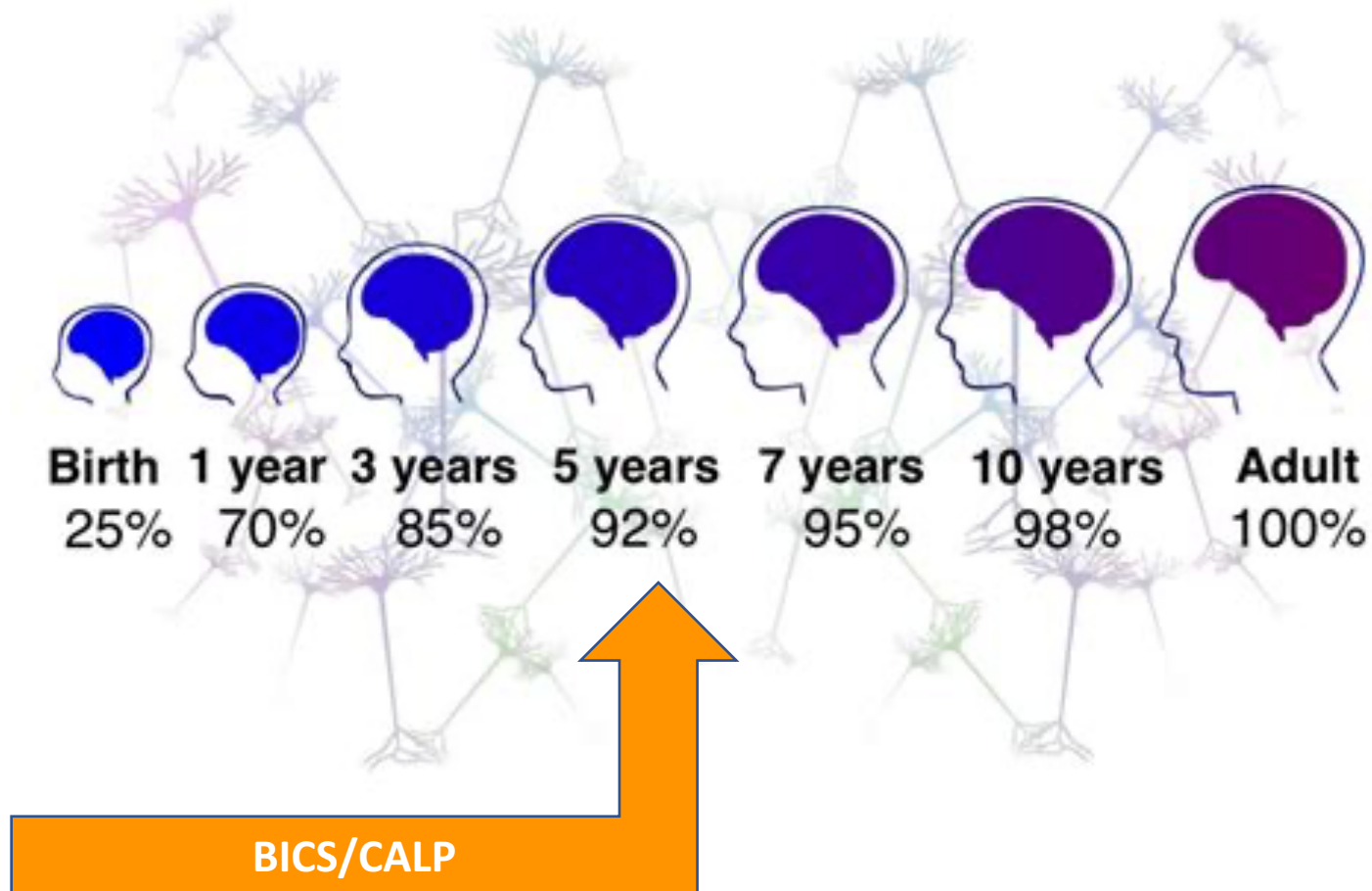
How common is
this type of student
profile?



Nationally representative data suggest that around 25% of caregivers *NEVER* read with their children



Brain Growth



Language Input During... The first 5 years



- The quality of Early language exposure **matter** in later **reading performance**. (Golinkoff, et al., 2018; National Early Literacy Panel, 2008).
- **Low language environment** children, when followed later into school, were specifically found to be at a **learning disadvantage**. (Hart & Risely, 2003).
- **Ambient language** has a big effect on **language development** - compared to language spoken directly to the child. (Golinkoff et al. 2018).

The BICS Language Foundation



Academic challenges

Limited Language Foundation = Limited Comprehension
+ Limited Language Output



BICS &

Dyslexia



Both



- ✓ Chronic ear infections
- ✓ Delay in establishing a dominant hand
- ✓ Confusion with left and right
- ✓ Trouble learning to tie shoes
- ✓ Odd pronunciations or saying sounds in the wrong sequence (e.g., pa-sket-ti (spaghetti), am-i-nal (animal), em-i-ny (enemy))
- ✓ A history of family members with reading problems

- ✓ Speech delay
- ✓ Difficulty recognizing sight words
- ✓ Difficulty with word retrieval; trouble finding the word one wants to use (e.g., "That thingy")
- ✓ Early difficulty with letter names and sounds
- ✓ Trouble with rhyming words



CALP – Language Support

Hi! I will
definitely
need your
support!

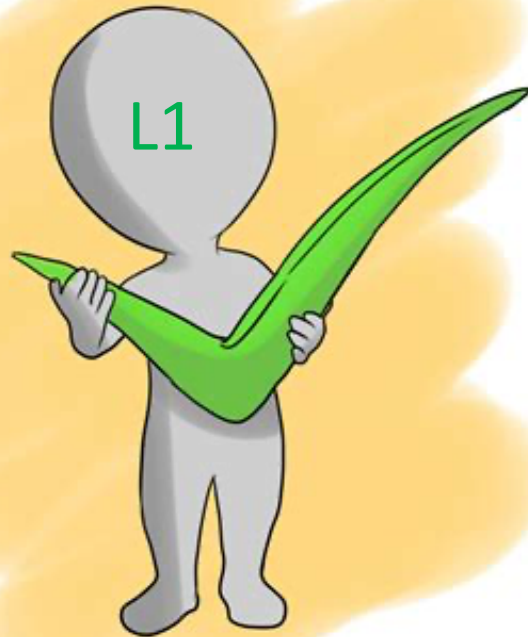
Hi I am L1, how can
I help you grow?

C
U
P



NO CALP

Dominant Language Role



- ✓ Similarities
- ✓ Differences
- ✓ Level of Transparency
- ✓ Orthography
- ✓ Prosody



Things to look for:

Level of Language Transparency

Native Language **X** Target Language

- ☐ Transparent languages are those where single phonemes map consistently on to single graphemes.
- ☐ Deep or opaque languages are increasingly inconsistent. For instance, English has more than 120 graphemes to represent 44 phonemes.



Dyslexic Children and Language Transparency

- Deep or opaque Languages like French, Danish and English, can be **harder** for students with dyslexia
- Transparent languages or languages that children are able to break words up into their component sounds and match up the sounds to letters are easier for students with dyslexia





Things to Take into Consideration when *Assessing* Bilingual Kids:

Kids with Transparent Language Background:

- ✓ Have less difficulty with word level decoding accuracy
- ✓ Phonemic Awareness problems may be less pronounced
- ✓ May show fewer errors when spelling words

BUT

- Will have a hard time reading fluently
- Will have difficulty blending
- Will have a hard time rhyming

A Common Misconception Among Educators!

Phonological awareness is an important factor to be considered when assessing students; however, it is not necessarily the key factor in recognizing dyslexia in a transparent language.

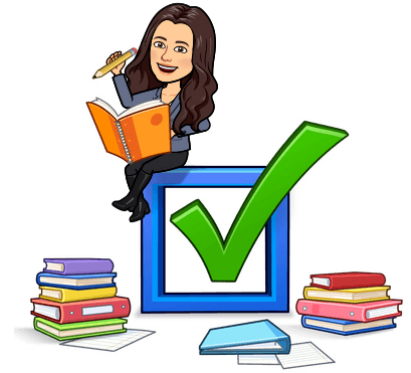


Orthographic Depth Across Languages

Orthographic Depth

Syllabic Structure	Shallow					Deep
	Simple	Finnish	Greek Italian Spanish	Portuguese	French	
Complex		German Norwegian Icelandic	Dutch Swedish		Danish	English

Types of Assessment

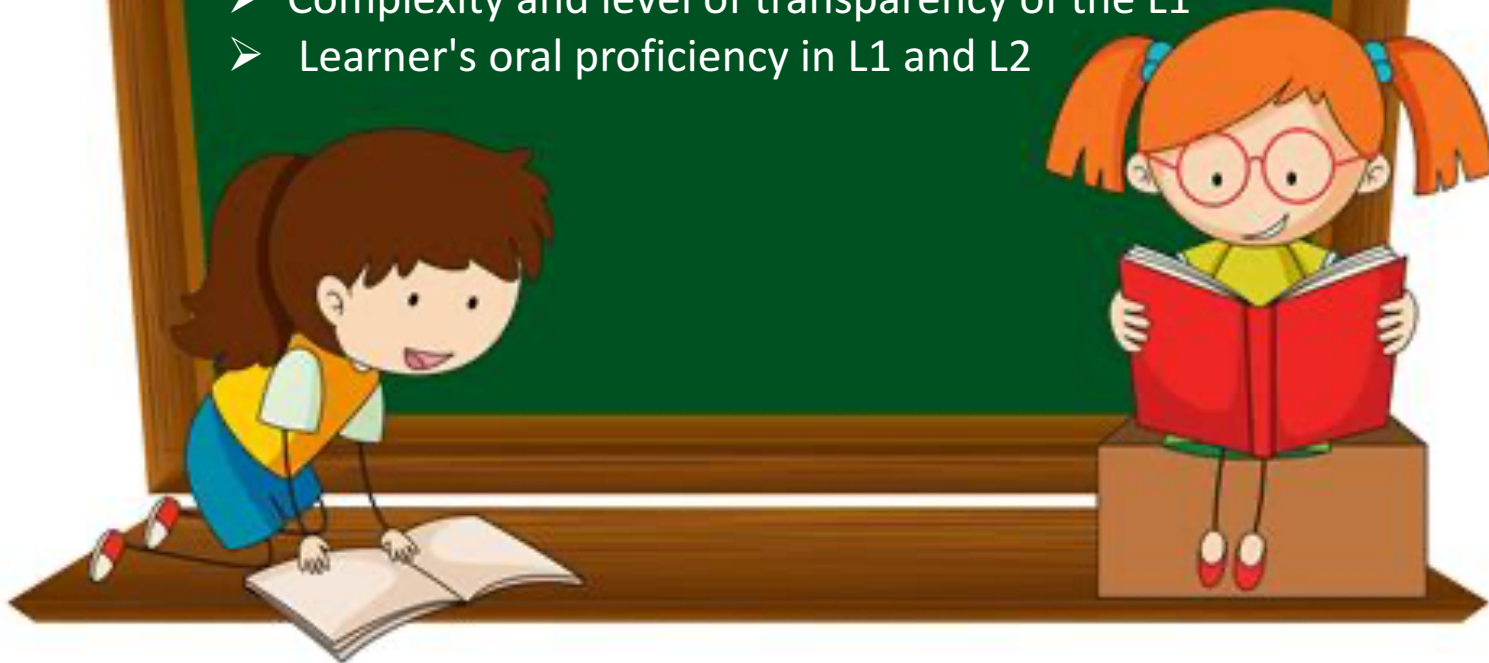


Type of Orthography	Assessment Measures
Transparent	Phonological short-term memory (repeat non-sense words) Rapid Naming
Opaque	Standard phonological processing skills Rapid Naming
Non-alphabetic	Rapid Naming Visual Memory

Things that CAN affect the child's cognitive skills profile when considering risk of dyslexia

IMPORTANT!

- L1 Literacy level
- How L1 reading skills are related to L2
- The strengths and weaknesses evident in L1
- How L1 strengths and weaknesses will cross over to the development of L2
- the orthography of L1 and L2
- Complexity and level of transparency of the L1
- Learner's oral proficiency in L1 and L2





WHY?

Is this Important?

What is **Dyslexia**?

*Dyslexia is a common learning difficulty that can cause problems with **reading, writing, and spelling**. Here are some difficulties dyslexic children have:

- read and write very slowly;
- confuse the letters of words;
- put letters the wrong way round;
- have poor or inconsistent spelling;
- have difficulty with information that is written down.



Dyslexia Around the World



Approximately
15% of people
have dyslexia

Dyslexia occurs
in people of all
backgrounds

Men and
women are
equally likely to
have dyslexia

80% of the
children with a
learning
disability have
dyslexia

25-40% of
children with
dyslexia also
have ADHD

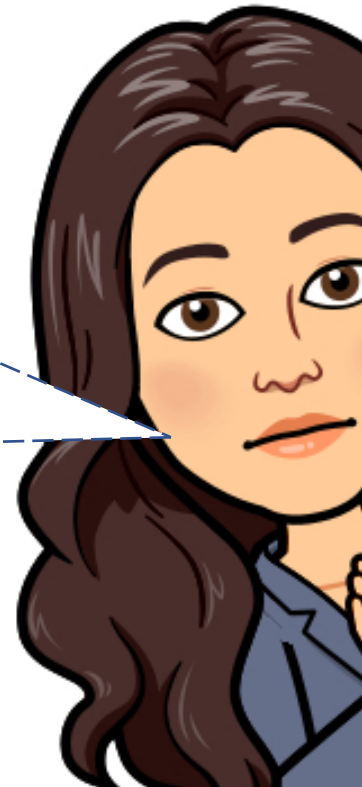
No two dyslexics are exactly alike, and dyslexia ranges from mild to moderate and from profound to severe. But dyslexics do **share patterns of observable behavior**



So, what is the best Approach for a more Accurate Diagnosis?

A combination of approaches and methods combined with the 4 I's:

- Interview
- Investigate;
- Intervene and;
- Get INFORMED!





Commonalities Among **Dyslexics** *Regardless of Language Background*

Dyslexic children during the early years:

- ✓ **Have a hard time learning to tie their shoe laces**
- ✓ **Have difficulty reading a clock with hands**
- ✓ **Confusion with left and right**
- ✓ **Struggle with rhyming exercises**
- ✓ A history of family members with reading problems
- ✓ Have had multiple ear infections
- ✓ Have weak phonemic awareness skills
- ✓ Read very slow
- ✓ Are poor spellers
- ✓ Struggle sounding out words

Dyslexic Early Signs

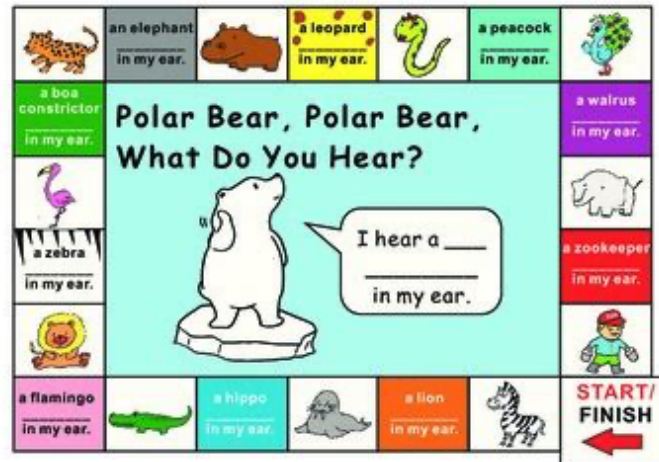
- ☐ Speech delay; language doesn't seem to be occurring as it should.
- ☐ Often the child can understand language normally but expressive language may be delayed.
- ☐ Delay in establishing a dominant hand
- ☐ Confusion with left and right
- ☐ Odd pronunciations or saying sounds in the wrong sequence (e.g., pa-skett-i (spaghetti), am-i-nal (animal), em-i-ny (enemy), a-lu-ni-mum (aluminum))
- ☐ Difficulty with word retrieval;
- ☐ Trouble finding the word one wants to use (e.g., "That thingy")
- ☐ Trouble with rhyming words
- ☐ Early difficulty with letter names and sounds





26
free

**RHYMING BINGO
BOARDS**



**I LEFT it
RIGHT
There!**

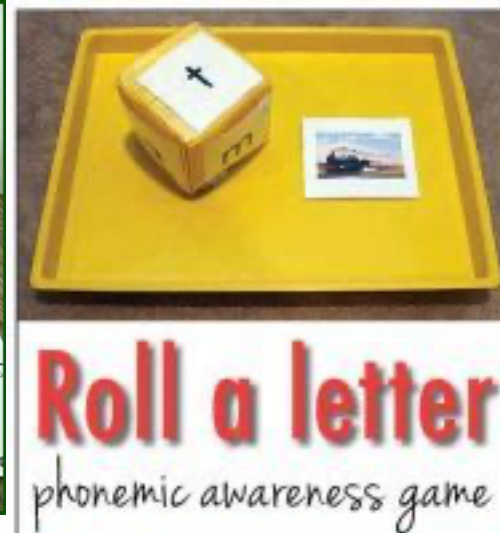


A Harvest Left-Right Game

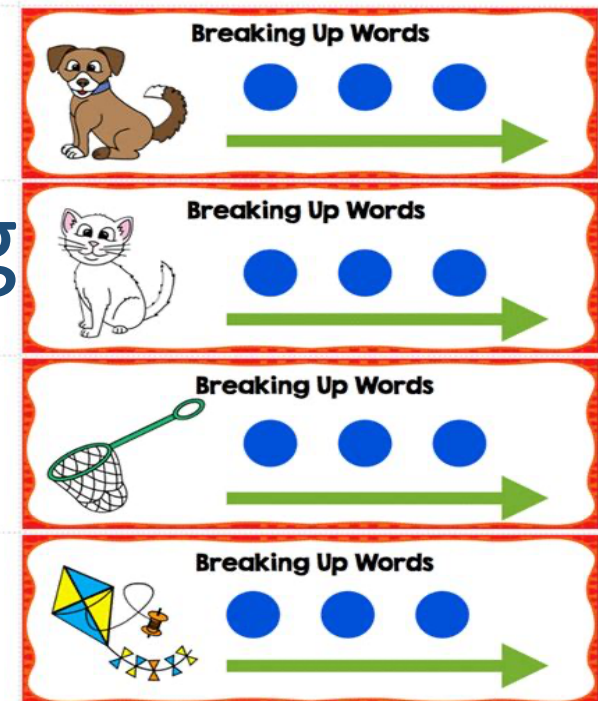
Have all the players form a circle and hand out gifts or treats evenly spaced around the group. A narrator reads out the story, emphasizing the words **LEFT** and **RIGHT**. Each time one of those words is spoken, all the gifts are passed around in that direction. When the story ends, anybody holding an item can keep it.

Dyslexic Signs During the Elementary Years!

- ☐ Difficulty memorizing arbitrary sequences such as days of the week and months of the year, or sequences in solving math problems
- ☐ Misspelling their own names
- ☐ Letter and number reversals after first grade
- ☐ Difficulty learning their address
- ☐ Difficulty learning their phone number
- ☐ Difficulty learning the names of letters
- ☐ Difficulty learning the sounds of letters
- ☐ Difficulty learning the multiplication tables
- ☐ Not learning to tie shoelaces until after age 6
- ☐ Continuing difficulties with retrieving the correct word when speaking
- ☐ Issues with directionality (i.e., being left/right confused)
- ☐ Issues with dominance (i.e., right-handed or left-handed)
- ☐ Poor handwriting skills
- ☐ Extremely poor spelling



Assessing & Playing

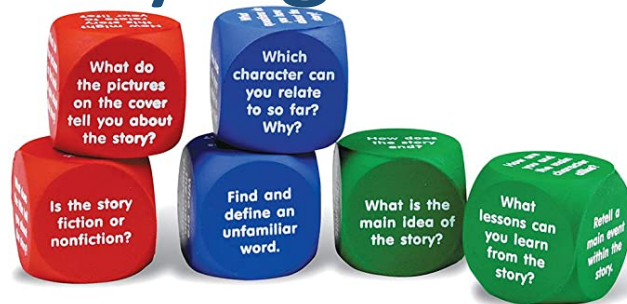


Dyslexics Sings in the High School Years!

- ☐ Life-long lousy spelling
- ☐ Dread of reading aloud
- ☐ Weak written expression
- ☐ Slow reading rate
- ☐ Poor test-taking skills
- ☐ Difficulty remembering people's names or retrieving known information (e.g., song titles)
- ☐ Difficulty learning foreign languages
- ☐ Bad sense of direction
- ☐ Difficulty reading musical notes from a score



Assessing & Playing





Wrapping it up

- ❖ There are different levels of Bilingualism
- ❖ The first 5 years are CRUCIAL
- ❖ Language Foundation is KEY
- ❖ BICS and CALP proficiency need to be investigated
- ❖ CALP 1 X CALP 2
- ❖ The 4 I's (Interview, Investigate, Intervene and get Informed).
- ❖ Assessments can be fun!





Questions?



FREE ONLINE EVENTS

The Impact of Bilingualism on Dyslexia

Presented by Karla Garjaka, Ed.D.

October 7 · 5-7 PM HST



Bring the Science of Reading to Life in the Classroom

Presented by Really Great Reading

October 10 · 9AM-4PM HST



**Dyslexia 24/7 Panel Discussion for Parents, Teachers
and Other Professionals**

October 21 · 6-7 PM HST



**Celebrate Halloween! Interactive Virtual Group for
Kids in Grades 5-8 with Learning Differences**

October 26 · 6-7 PM HST

DYSLEXIA AWARENESS MONTH 2020

MORE INFORMATION/REGISTER: HI.DyslexialDA.org · info.HI@DyslexialDA.org · (808) 538-7007

Please complete a brief survey:

<https://tinyurl.com/web4hida>



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