What is dyslexia?

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Inspiring Potential

Introduction

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This resource was developed by the National Centre of Literacy and Numeracy for Adults (http://www.literacyandnumeracyforadults.com/). It is part of a suite of resources on dyslexia.

The main purpose of these resources is to support the professional development of educators who are working to strengthen the literacy and numeracy skills of adults studying and working in New Zealand. The resources can also help inform adults with dyslexia and the people who support or work with them.

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What does the word 'dyslexia' mean?

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The word 'dyslexia' is derived from Greek:

dys = difficulty (with)

lexia = words

Dyslexia is…

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- a brain-based, persistent learning difference
- characterised by problems with reading, writing and spelling due to a deficit within the language system at the phonological level
- often associated with difficulties in concentration, verbal short-term memory, organisation and verbal processing speed
- often hereditary
- a continuum, so people can have mild, moderate or severe dyslexia
- often unexpected in relation to other cognitive abilities

In this resource we will ‘unpack’ some of these statements

Dyslexia is…

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- NOT caused by poor schooling, poor home background, or poor motivation for learning
- NOT caused by poor sight, hearing or muscle co-ordination, although it may occur with these conditions
- NOT caused by a lack of intelligence, and people with dyslexia have average or above-average intelligence; they often have considerable strengths in many areas

A brain-based learning difference

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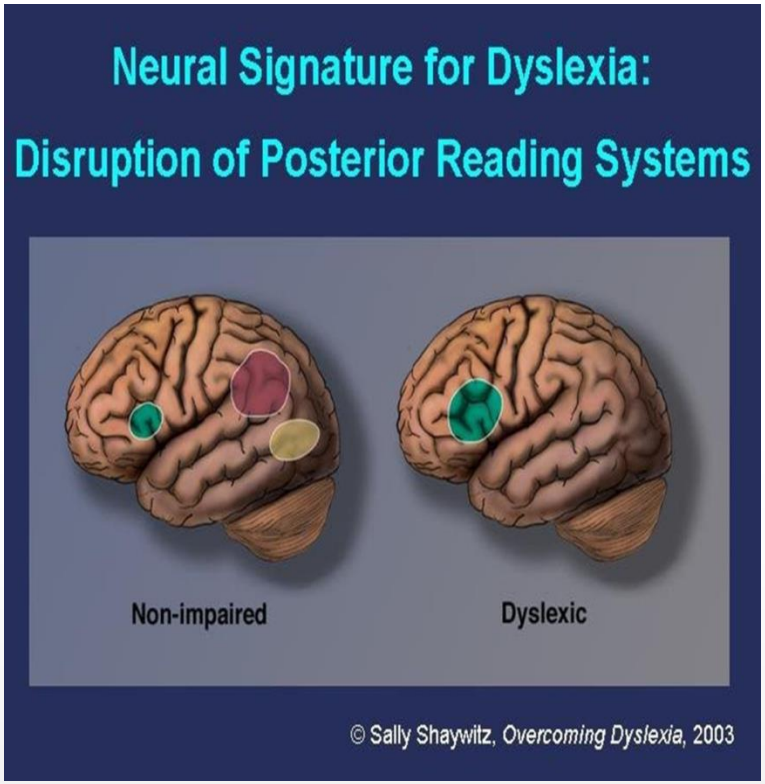
- The roots of dyslexia lie in the brain.
- There are 3 regions involved in reading – all on the left side of the brain. Fluent readers use this 'automatic' or fast route to reading.
- People with dyslexia tend to rely too much on the front part of the brain. There is under-activation in the back areas. This means they use a 'manual' or slow route to reading.
- Research shows that when people with dyslexia are taught well they will start to use the 'automatic' route to reading.



The 'Simple View of Reading'

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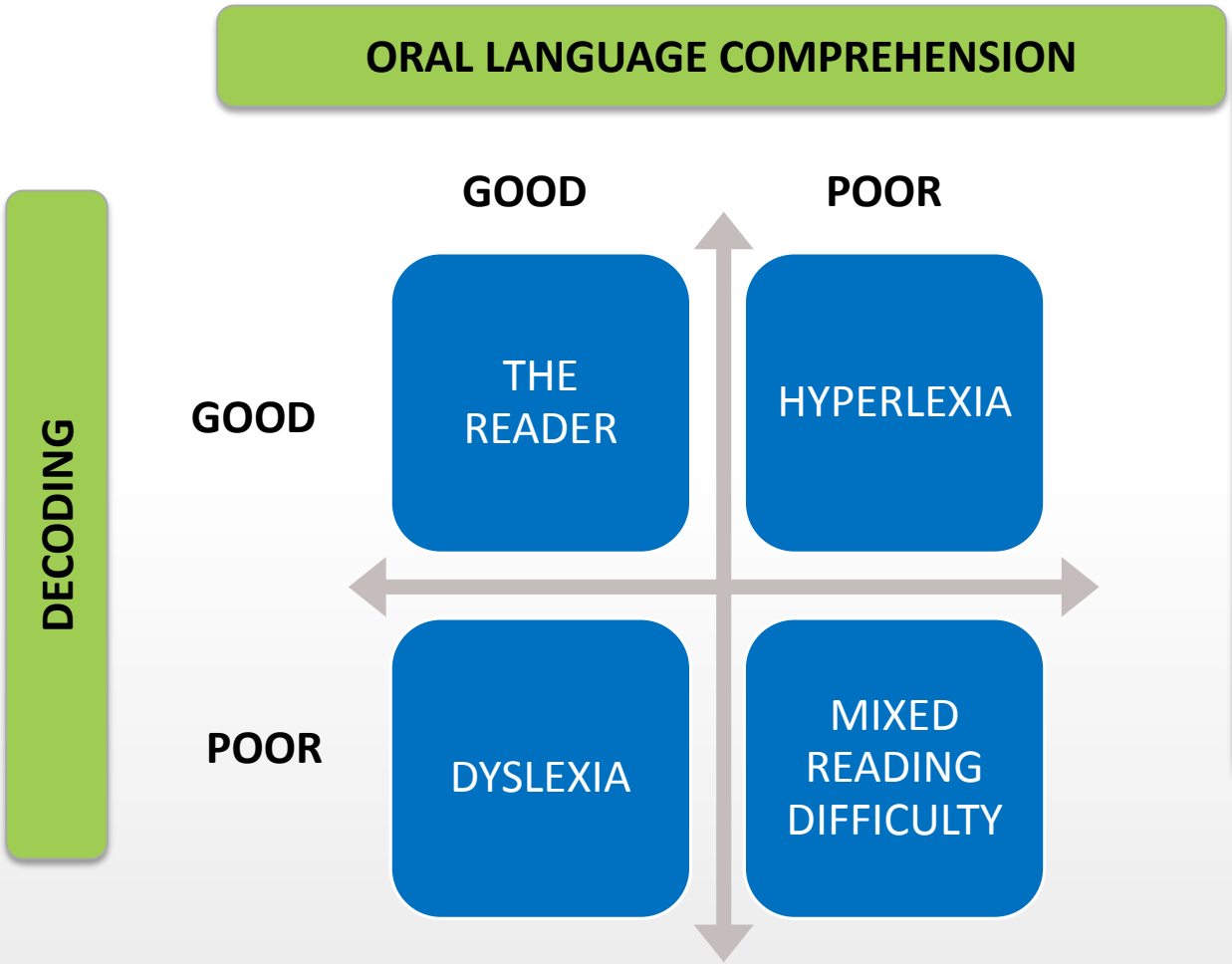
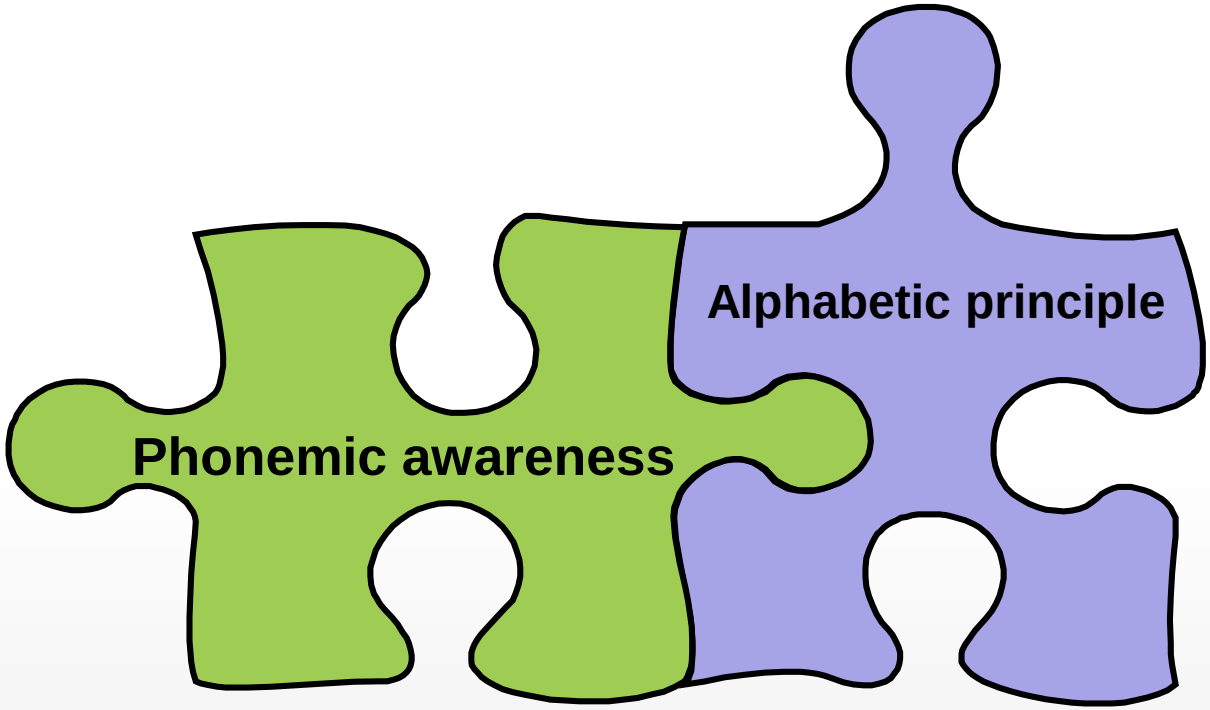


Not everyone who has a reading difficulty has dyslexia. People with dyslexia are poor decoders, but understand oral language well. They can make meaning from a text when listening, but may have difficulty when reading.

(Gough & Tunmer, 1986)

Two parts of the puzzle
for beginning readers



People with dyslexia often struggle with these two initial steps in learning to read.

Realising that spoken words are made up of separate sounds

Linking the sounds and the letters

Phonological awareness

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- Phonological awareness is 'the ability to hear, recognise and manipulate the sounds that make up spoken words' (TEC, 2008, p. 4). It plays a critical role in learning to read and spell.

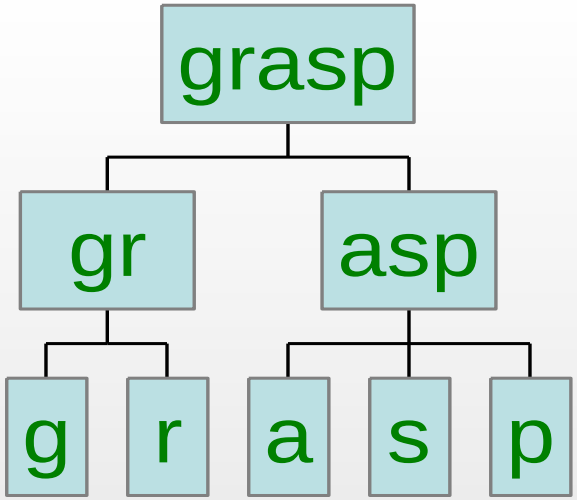
- To become a reader you must develop a conscious awareness of the phonological structure of spoken words: syllable, onset-rime, phoneme.

- There are three different levels of phonological awareness, which are increasingly 'fine-grained' (TEC, 2008, p. 18).

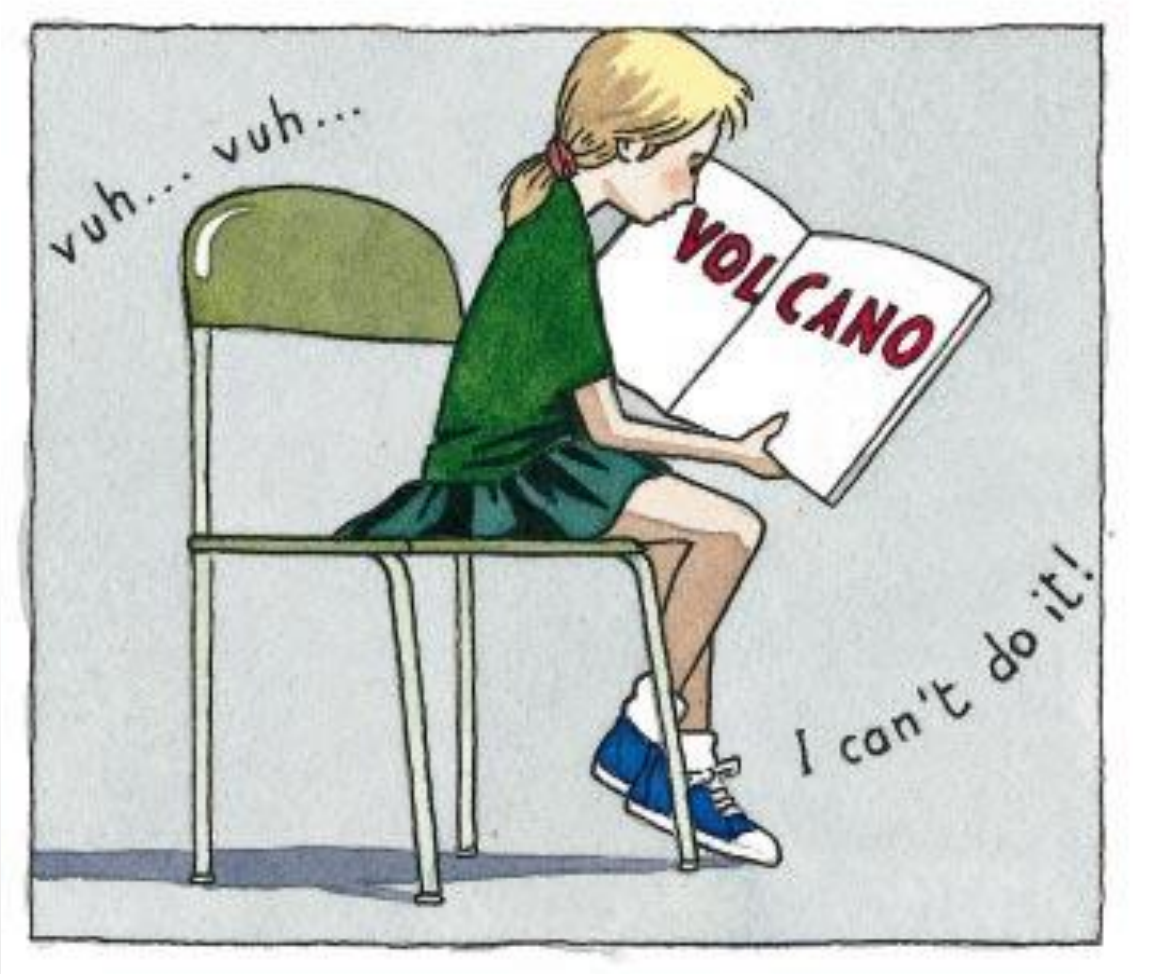
Syllable awareness

Onset-rime awareness

Phonemic awareness



The paradox of dyslexia



(Shaywitz, 2003)

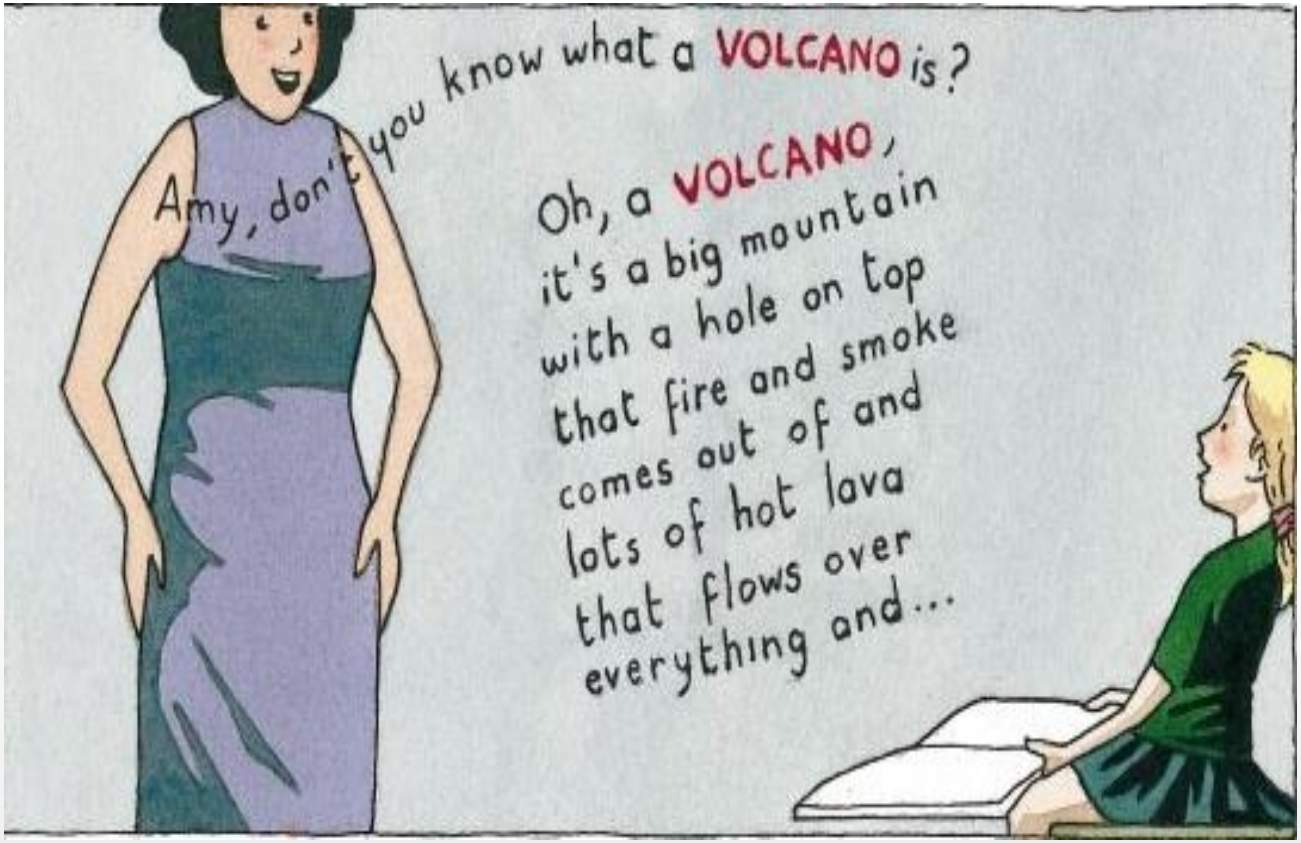
She is trying to decode the word by sounding it out, but she can't…

The paradox of dyslexia

…so then she looks at the picture for a clue and guesses the word, because she can't sound it out.

(Shaywitz, 2003)

The paradox of dyslexia

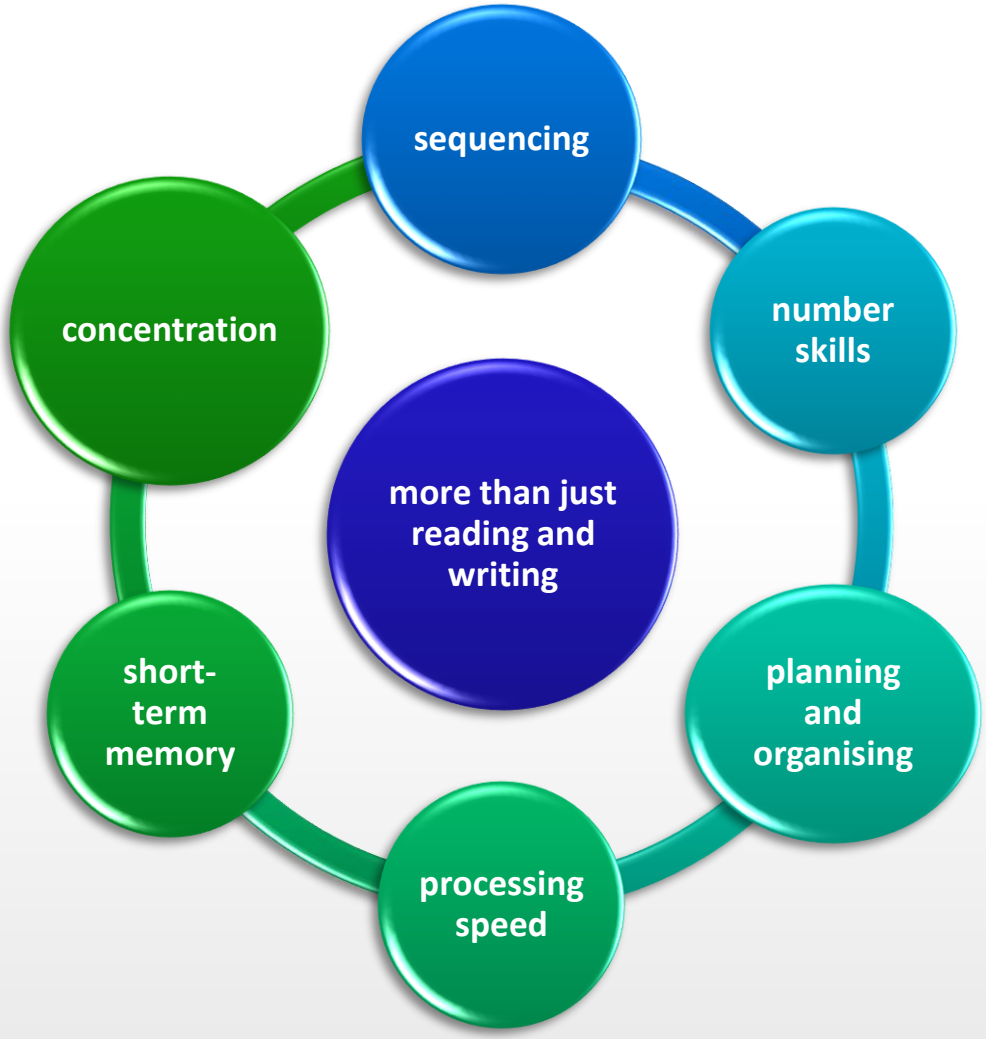


The teacher misinterprets the situation and is surprised, because she knows the girl is intelligent. Dyslexia is an 'unexpected' reading difficulty.

(Shaywitz, 2003)

The bigger picture

Dyslexia can affect people in many ways



What is it not?

Calling it a 'learning disability' or a 'disorder' is not helpful. It's better described as a learning difference, because people with dyslexia can learn, they simply learn in a different way.

What is it not?

NOT a sign of low IQ

NOT caused by poor teaching

NOT caused by lack of motivation

NOThing to do with laziness

The positive side of dyslexia

People with dyslexia have many strengths

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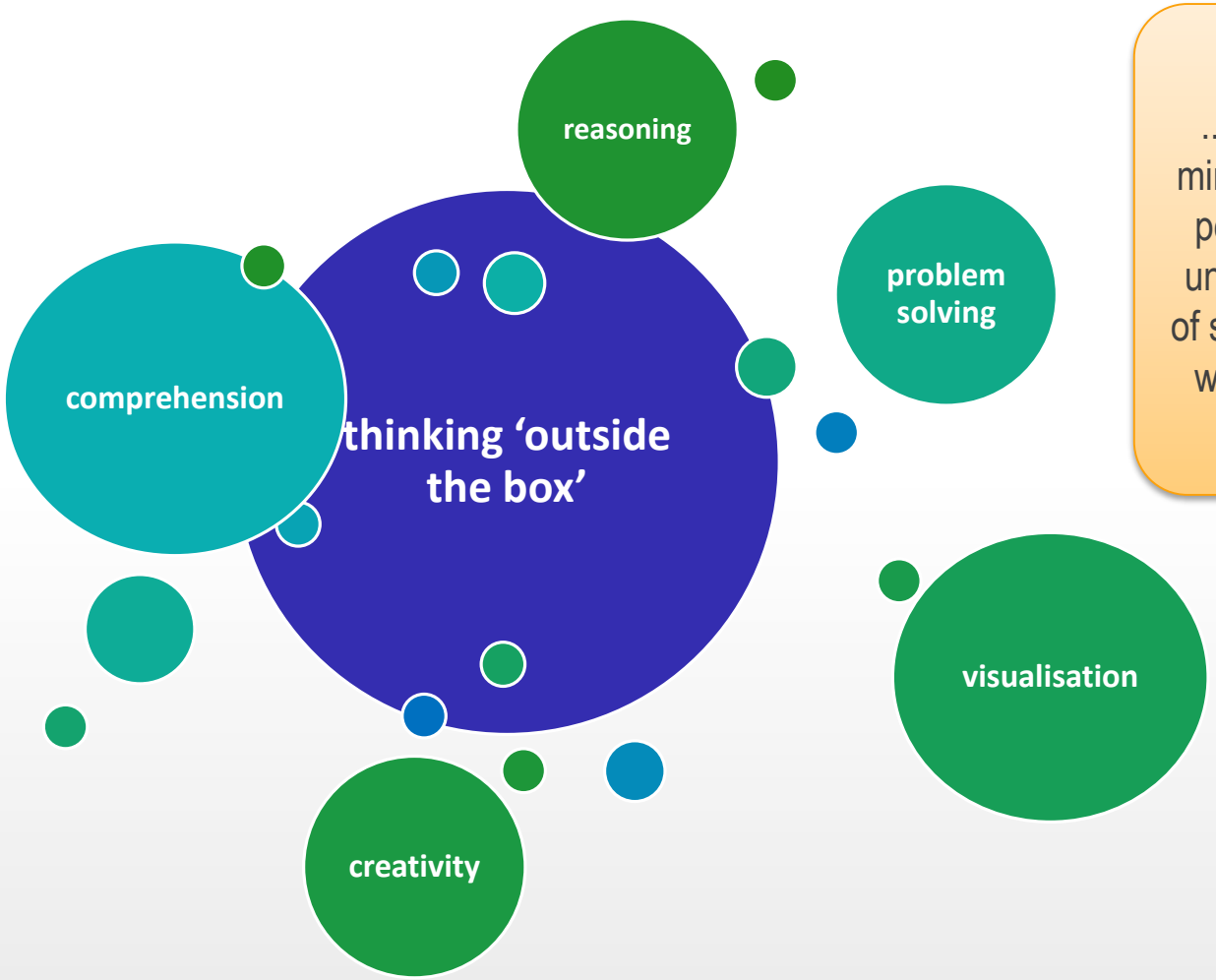

..but keep in mind that every person has a unique pattern of strengths and weaknesses.

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Links

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The Dyslexia Foundation of New Zealand
http://www.dyslexiafoundation.org.nz/

SPELD NZ
http://www.speld.org.nz/dyslexia.htm

The National Centre of Literacy and Numeracy for Adults
http://www.literacyandnumeracyforadults.com/resources/355696

International Dyslexia Association
https://dyslexiaida.org/

British Dyslexia Association
http://www.bdadyslexia.org.uk/

The Dyslexic Advantage
http://www.dyslexicadvantage.org/

Clips

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This interactive clip 'Defining dyslexia' is part of our suite of resources on dyslexia

This clip by Dr Kelli Sandman-Hurley is about neurodiversity:
https://www.youtube.com/watch?v=zafiGBrFkRM

Professor John Stein on creativity and dyslexia:
https://www.youtube.com/watch?v=m0Okr9HdMVk

Dr Sally Shaywitz on dyslexia:
https://www.youtube.com/watch?v=rxUn4ggvgKI&feature=youtu.be