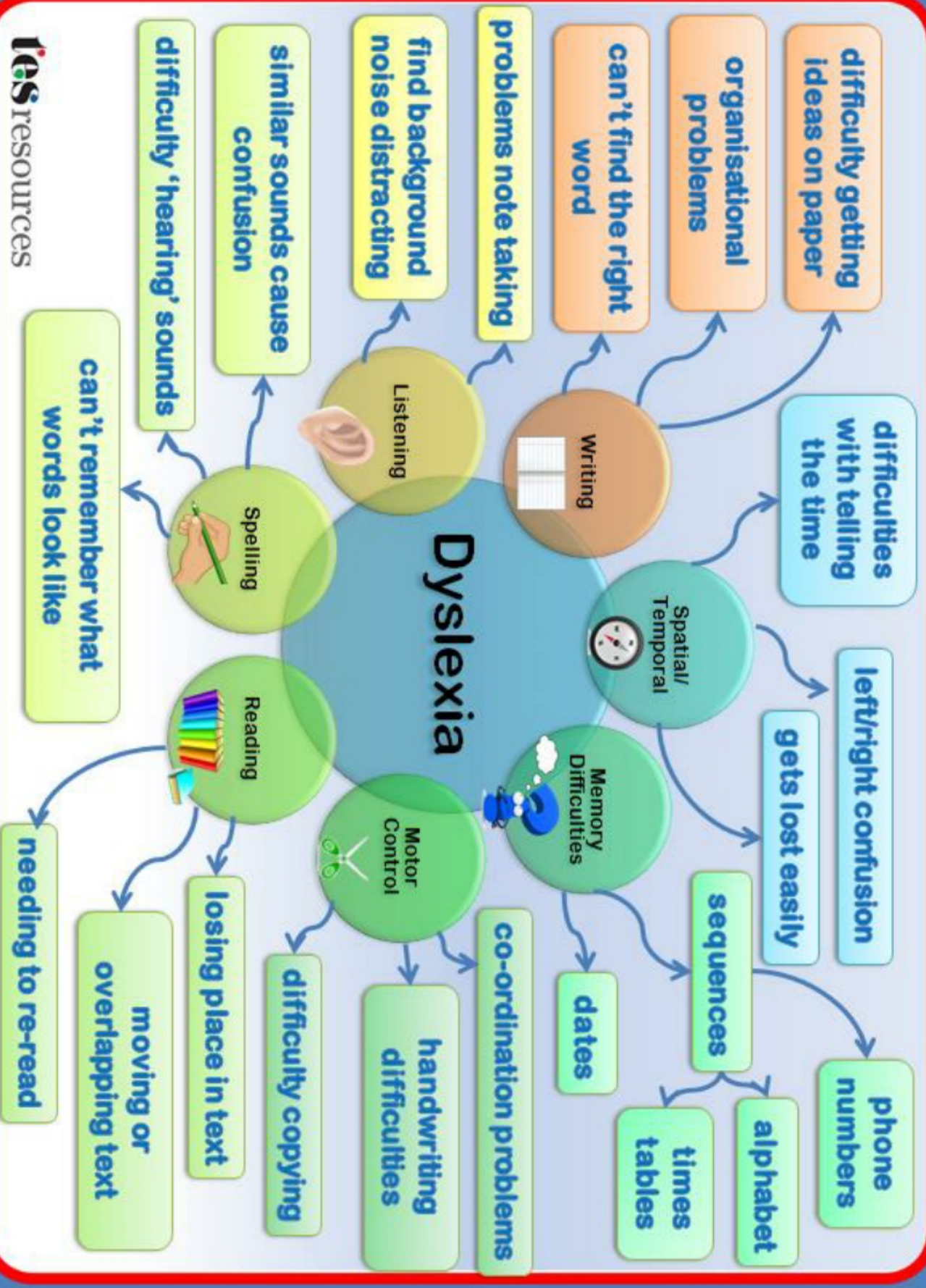





Literacy Barriers

(including Dyslexia, Dysgraphia
and Speech & Language)

Information Booklet









DYSLEXIA REDEFINED

"Dyslexia is a specific learning ability, neurobiological in origin. It is typically characterized by strengths that may include creative expression, athletic performance and scientific discovery. The individual with dyslexia often exhibits strengths in big-picture concepts, thinking outside the box, making unexpected connections and demonstrates an intuitive sense of understanding of people and navigating the natural world..."

Cheri Rae



 Day 7

Dyslexia, Dyscalculia & Dysgraphia

Dyslexia is a learning difficulty that primarily affects the skills involved in accurate and fluent word reading and spelling. Characteristic features of dyslexia are difficulties in phonological awareness, verbal memory and verbal processing speed. Intelligence is not affected.

Developmental Dyscalculia (DD) is a specific learning disorder that is characterised by impairments in learning basic arithmetic facts, processing numerical magnitude and performing accurate and fluent calculations.

Dysgraphia is a learning disability that affects writing abilities. It can manifest itself as difficulties with spelling, poor handwriting and trouble putting thoughts on paper.

sources www.nhs.uk,
www.bdadyslexia.org.uk, www.idonline.org

20:15 14 94%

Search

Someone with dyslexia is struggling.

2 Motor Dysgraphia: This type is the result of low muscle tone and poorly developed fine-motor skills. In this case whether the person puts their thought to paper or copies from the board or book, it will be unreadable; however, isolated formation of individual letters may be somewhat more legible. Usually, spelling skills are typical.

3 Spatial Dysgraphia: In this case the sensory information entering the brain is interpreted incorrectly. A person will have difficulty identifying letters, numbers, shapes, and symbols and how to properly align them on paper. This type of dysgraphia most strongly affects spatial awareness. Individuals with spatial dysgraphia are not inclined to regard lines or margins and have inconsistent spacing between letters, words, lines and letter size, including the sizing of upper and lower case letters.

Designing for users with dyslexia



Do...

use images and diagrams to support text



align text to the left and keep a consistent layout



consider producing materials in other formats (for example audio or video)



keep content short, clear and simple



let users change the contrast between background and text



Don't...

use large blocks of heavy text



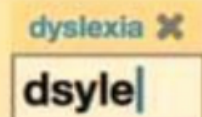
underline words, use italics or write in capitals

DON'T
DO THIS

force users to remember things from previous pages - give reminders and prompts



rely on accurate spelling - use autocorrect or provide suggestions



put too much information in one place



The Dyslexia Underground



DyslexiaBytes.org

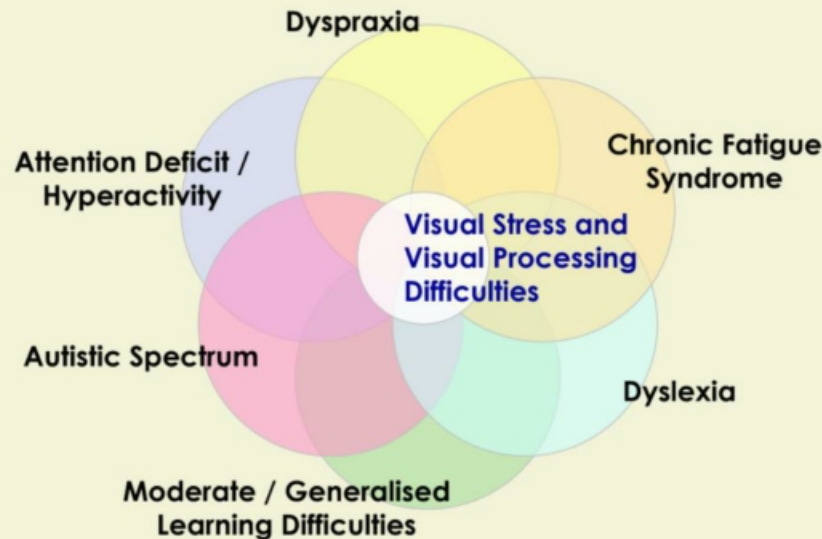
Dyslexia Bytes

Navigating the Deep Pathways of the Dyslexic Mind

Dyslexia Bytes

What are 'visual stress and processing difficulties'?

It is part of a family of specific learning difficulties – with many crossover points.



NOTE: It is still disputed as to whether it forms a standalone condition or an aspect of other conditions.

>> 1. Layout

A complicated, stylish design might make the

with reading difficulties.

(1) Make sure readers can find their way around a text easily. Number the paragraphs or sections to help with navigation.

(2) Avoid squeezing too much text onto one page. Use two pages if you have to. Use 1.25 – 1.5 for line spacing.

(3) Keep columns well spaced to avoid readers going across rather than down. Lines between columns can help.

(4) Headers

Use headers to introduce new subtopics and demarcate different parts of a text.

text more appealing initially

but on closer inspection, can confuse those

>> 2. Fonts

WRITING IN CAPITALS CAN QUICKLY TIRE THE BRAIN BECAUSE
YOU HAVE TO SPEND MORE TIME
CONVERTING THE LETTERS BACK TO HOW WE HAVE LEARNT TO READ.

Some fonts like century gothic, and comic sans, are nice and easy to read because they are simple and mirror *handwriting* - especially letters such as 'a' and 'g'.

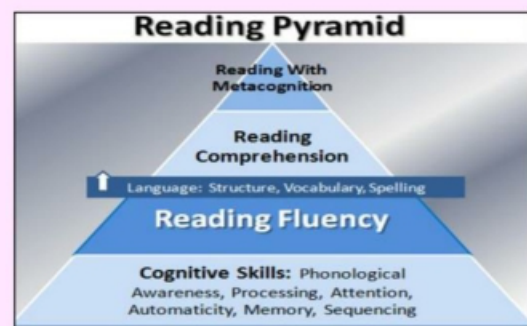
Others require MORE CONCENTRATION as our ~~eyes~~ and ~~BRAINS~~ work extra hard to clean up the FANCY FEATURES.

14pts is generally viewed as the optimum size for ease of reading. 12pts is OK, but anything lower will strain the eyes.

With anything bigger, readers tend to view it as childish!

>> 3. Images

- Use images that reinforce the messages in the text, to give poor readers clues.
- Be careful not to crowd the text with images. Too many images will distract from the text.
- Sometimes a diagram can be used as a back-up or a complete replacement for the text.



>> 4. Colour

Contrast lets you determine an edge. It is vital in recognising shapes. It enables you to distinguish letters and read words.

Too little contrast in the foreground and you will suffer eye strain when trying to focus too hard. This includes reading in low light.

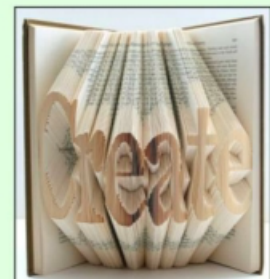
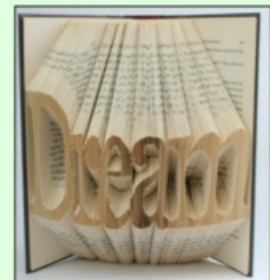
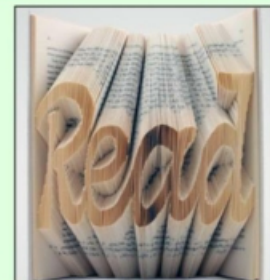
Too much contrast in the foreground and you will suffer from eye strain because of the harshness and glare.

Too much black text on a white background is said to cause this. Reading this kind of text for sustained periods will gradually damage your eyesight.

Using a pastel coloured background, where possible, is much easier on the eyes.

>> 5. Language

- Vocabulary is a term for familiarity with and understanding of words. Sometimes new vocabulary needs **pre-teaching** before use within the context of a text.
- Deliberate **repetition** of key vocabulary can be useful. Students typically begin to grasp new vocabulary after the third time of experiencing it.
- Try to keep sentences simple - **one key point per sentence** is recommended for KS3 and KS4 students.



>> 6. Tools



Use a ruler to track lines and keep place.



Use a highlighter pen to identify tricky words.

Use coloured overlays if you rely on black and white texts which cannot be adapted.

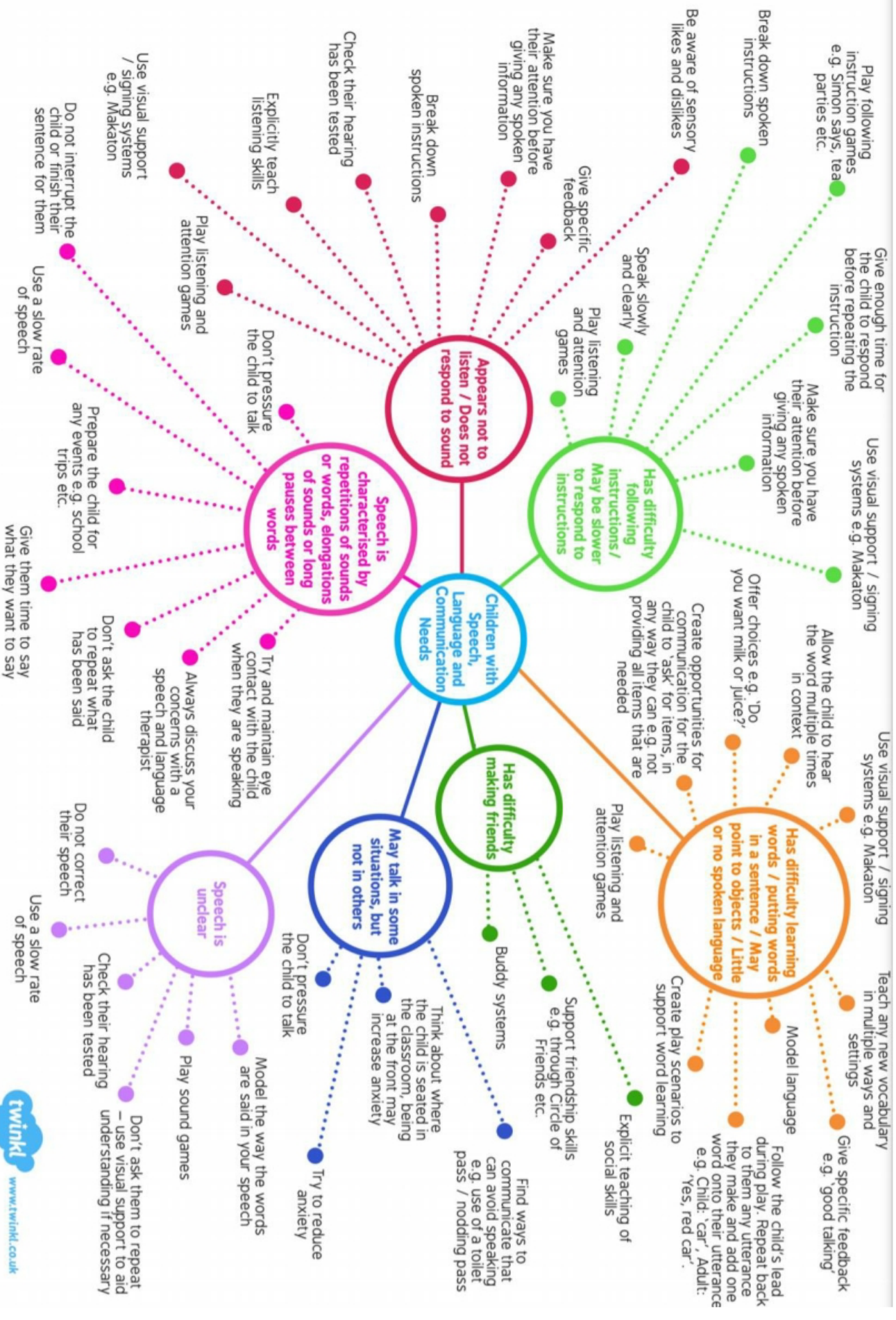


>> 7. Group Reading

Group reading can be a daunting activity for many students, regardless of their reading skills. To make this easier for them (and for you), establish the following as **a routine with every text**.



- 1) Number the paragraphs or parts of the text. This will help everyone in **keeping track**.
- 2) Ask for **volunteers** amongst the group (at first this might be very few, but it will grow with time.)
- 3) Give each volunteer a number. The sizes of each part will likely vary – providing a good opportunity to **differentiate**.
- 4) Give students a few minutes to read and rehearse their part. Ask them to **underline any tricky words** – go round and clarify them.
- 5) Begin reading as a group – **praise** every effort!



WRITING AT HOME

a guide 'where to start'

UNDER 3 YEARS OLD

- Give you child as much or as little time as they need for each learning experience.
- Follow your child's interest. If they don't want to draw, paint etc. Don't make them. If they want to draw a pink dinosaur, or a rainbow zoo let them.
- Encourage them to use their imaginations.
- Write for a purpose, make a card, draw a picture for people in your street or family friends, make signs for imaginative play or for around the house, if you went somewhere exciting (say a zoo) gently encourage your child to draw a picture of their experience, help them to label it. Once completed put on display.

3-5 YEARS OLD

- Allow your child choice about which, and the timing of the play experiences and activities, they want to participate in, always encourage them to follow their interests.
- Encourage your child to 'make marks'. Before your child can write they will make letter-like shapes. As above get them to do this whenever they show interest.
- Write for purpose. When ready encourage them to write their name whenever possible, copy familiar words like mum, dad, dog, brother, sister, grandma, grandpa etc. Encourage your child to 'write' about experiences (this might be them drawing a picture, you labelling them and your child reading it back).

6-8 YEARS OLD

- Encourage your child to write whenever appropriate, they might fill out their name on forms, write cards, keep a diary or gratitude journal, thank you notes, shopping lists, recipes, create stories for you to read, make pictures for around the house etc.
- When you are writing show them, explain that being able to write is an important skill for adults to have (even with computers). Talk about your experiences with learning to write.
- Bring writing into your child's play, if you have magnetic letters in the house encourage them to make words with these, if they set a 'shop' encourage them to make signs, money, lists, labels etc. You may like to provide them with a letter chart to help them with this.
- Start to point out that an 'author' writes for a purpose. When reading discuss the beginning, middle and end of a story. Talk about who the story was written for? Read Non-Fiction texts and discuss the different language used compared with Fiction.

9+ YEARS OLD

- Continue to encourage to write for purpose (ideas as above).
- Encourage your child to write (and read) different genres. Often children develop a preferred genre and they don't like to try writing/reading other styles. Genres might include realistic fiction, historical fiction, science fiction, fantasy, mystery, poetry, tall tale, fairy tale, myths, fables, legends, informational, biography or autobiography.
- If you watch a movie or your child has finished a novel discuss it together, encourage them to write down their ideas and then you might even write an online review for it.
- Computer Literacy at this age becomes important. Give them practice typing on a device (if possible). Encourage them to write using the computer, you might use word, Google Docs, Canva, or an app of their choosing (remember they will know more apps than we do).

TIPS FOR ANY AGE

- Make sure your child has the resources that they need. Set them up a space in the house where they can 'do their work'. Ensure they have pencils, paper, textas, pens etc.
- Always value writing and show a positive attitude towards it.
- Keep a family board and write messages to each other on it.
- Provide your child with Post it Notes so they can write themselves reminders, or you notes.
- When reading discuss the writing process. What was the Author thinking? Why was this book written? Note the types of language used.

READING AT HOME

a guide 'where to start'

UNDER 3 YEARS OLD

- Follow your child's lead as much as possible and allow your child choice about which play experiences and activities, they want to participate in.
- Give you child as much or as little time as they need for each learning experience.
- Read stories with your child, making sure they can see the pictures and following the words with your finger, making them sweep left to right. Ask them 'what do you think might happen next? Make the noises in the book? Discuss the pictures.
- Make a collage based on the setting of one of their favourite stories.
- You might get them to draw a picture of their favourite part of the book.

3-5 YEARS OLD

- Allow your child choice about which, and the timing of the play experiences and activities, they want to participate in.
- Read stories with your child. Talk about the Author and Illustrator. Point to the words as you read. Get them to attempt to read to you (only if they show interest). Ask them to retell the story you, start with what happened on a page and then build up to the whole story.
- Encourage your child to illustrate their favourite part of the book. Help them to notice characters' features by pointing these out, begin to discuss and brainstorm describing words.
- Share your favourite childhood stories together, tell them why it was your favourite.

6-8 YEARS OLD

- Read to/with your child DAILY
- Point out important features about a book Eg. the words, and pictures, the front cover, the Author and Illustrator, the spine, the contents page and the title.
- Encourage your child to predict what will happen in the story. Why do they think this?
- Explore new or interesting words using a dictionary.
- If you child is confident in their reading, allow them to read without interruption. Fluency is gained with confidence.
- Model using different voices when reading to your child. Point out why you chose to use 'that' voice. For example the character was sad, so I used my sad voice.
- On completion discuss the book. Did they like it? Recap what happened? Ask clarifying questions. Give it a rating out of 10.

9+ YEARS OLD

- Encourage your child to read daily. Model this behaviour.
- Discuss news and current events together. Subscribe to a 'kids news' outlet like *KidzNews* or *Time for Kids*. Ask questions like 'what do you think caused the event?' Etc.
- If your child has a preferred Author help them find another of their books or series.
- Help your child to use a dictionary to look up words they don't understand.
- If you can, try to read the books with your child (or before them) so you can have deep and meaningful discussions around the plot, characters, messages and your personal opinions.
- High Schools tend to use 'Text Ebooks' get your child familiar with these by borrowing Ebooks from your local library. Podcasts and Audiobooks are also a great resource.

TIPS FOR ANY AGE

- Visit your local library often, encourage your child to pick new books, as well as familiar ones. You might also borrow magazines or use their online services to access outbooks or download eBooks.
- Make reading part of your daily routine.
- Model Reading yourself, be it a book, the newspaper, magazines, signs, recipes etc.
- Make Reading in your home fun, use funny voices, share stories, act parts out etc.
- Encourage your child to read BOTH Non-Fiction and Fiction books.

Sentences are the Building Blocks of Writing



"sentence level work is the engine that will propel your students from writing the way they speak to using the structures of written language."

Skills to Develop (in order)

- Sentence defining and ordering
- Correcting run-ons
- Practice with 4 types
- Develop questions
- Develop more complex sentences using conjunctions & clauses
- Sentence combining

Examples

Oral Exercise
"created the first written alphabet- is this a fragment or sentence?"
we need to add the who

Written Correction:
The Ancient Egyptians mummified their dead and they honored the dead by building pyramids and they believed they would take their treasure into the afterlife so they stored gold with the mummies.

Change the statement to a question:
The culture of Ancient Greece influenced many other civilizations

Give students the answer and they write the question
Ex: Hammurabi's Code
What was the first code of law developed by humans?

Complete the sentences
Ancient Egypt was a great civilization because
Ancient Egypt was a great civilization but
Ancient Egypt was a great civilization so

Combine the sentences using an appositive:
Rameses is considered to be the the greatest pharaoh of Ancient Egypt.
He build many cities and temples.

remember...

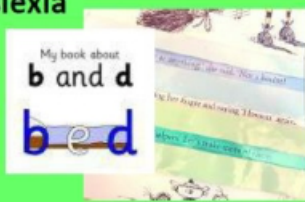
Embed explicit writing instruction in content
Teach in the context of student writing
Content drives rigor

Easy tips for students struggling in or with learning difficulties in Literacy

Reading:

- Cover the lines above and below, using white card or coloured reading slide (even wide lolly sticks)
- Use bigger font
- Try to avoid black text on white paper. Use pastel coloured paper
- Use fonts such as calabri, arial and tahoma
- Break texts down into smaller parts and give breaks
- Read WITH the child to ease anxiety
- Practice sight words with flashcards etc
- Lots of praise whenever a task or goal is completed

Dyslexia



Because Dyslexia effects the way children see and interpret text, things such as changing font and font size can help. Printing text on light coloured paper is also beneficial. Helping these children make connections with words is essential.

Writing/spelling:

- Fine motor skills activities like tracing and cutting
- Tracing laminated alphabet cards
- Breaking down large written tasks into smaller more achievable goals (eg: a paragraph or sentence at a time)
- Decide on what the objective for the lesson is - If it is content, be lenient on spelling
- Does the child need to copy the whole text or can they highlight a printed version or only copy key words/phrases?
- Use manipulatives for spelling such as phonic/letter cards. Children can spell out the word using the card, then write & read the word.
- Use play doh to create HFW
- Use images to create connections with words
- Lots of praise whenever a task or goal is completed



If your child is a **RELUCTANT WRITER**

@movementmatters

play more with clay,
putty,
or play-doh

allow for breaks
& alternate with gross
motor movements

offer an
oral sensory tool
while writing

experiment
with alternative
seating options



encourage writing
on a
vertical surface

Debate

Assumes there is one right answer
(and you have it)

Style is combative, attempting to prove
the "other side" wrong

Listens to find flaws and counter argue

Critiques only the other position

Defends your own views at all costs

Encourages search for differences

Creates a winner/loser and
discourages further conversation

Involves no focus on feelings, often
actively seeking to belittle or offend

Dialogue

Assumes others have pieces of an answer
and you can craft a solution together

Style is collaborative, seeks to find
common understanding

Listens to understand

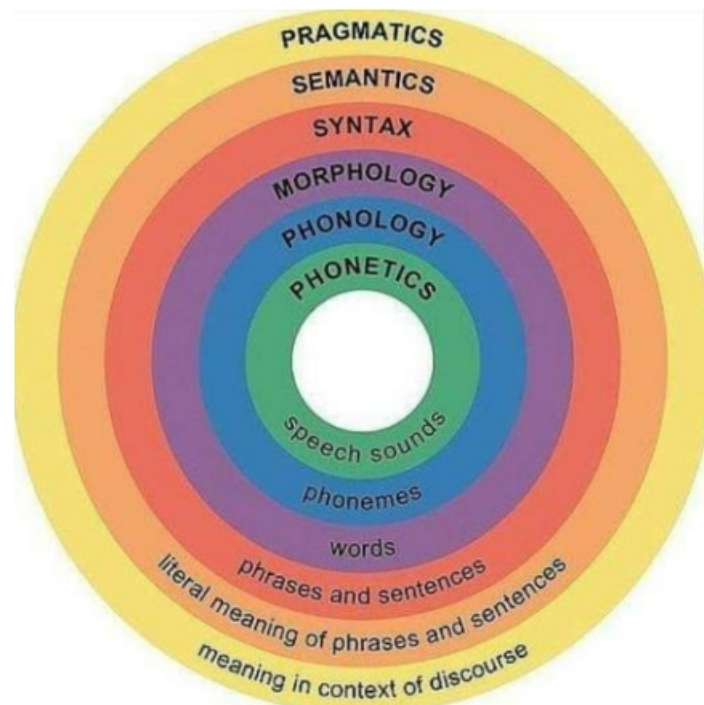
Critiques all views, including your own

Allows others' thinking to improve your own

Encourages search for basic agreement

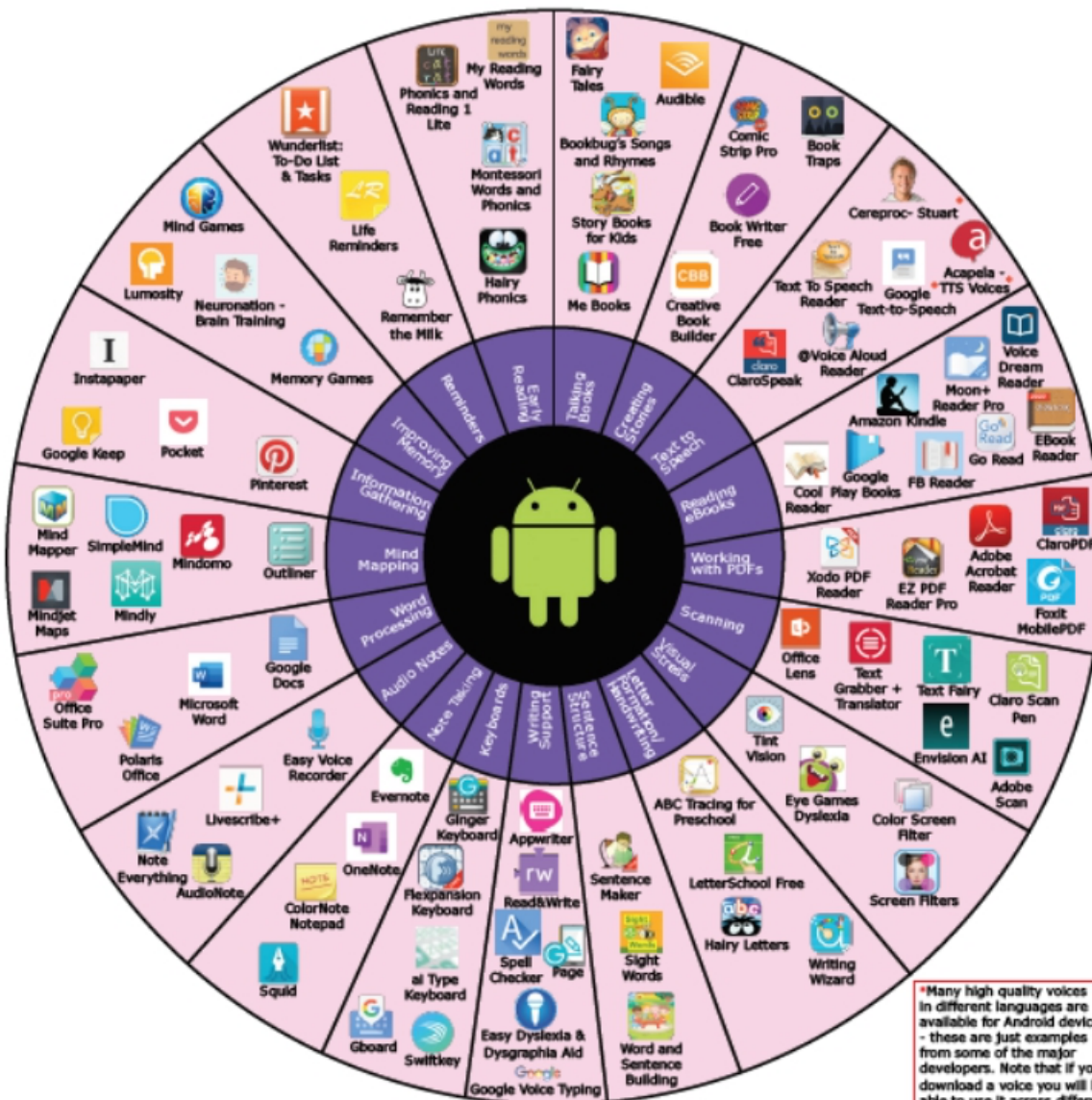
Creates an open end, leaving the topic
open for further discussion

Involves a real concern for the other,
doesn't actively seek to alienate or offend



[illegible]

Android Apps for Learners with Dyslexia/ Reading and Writing Difficulties



This is one of a series of 'App Wheels' produced by CALL Scotland, available from the address below. It focuses on Android Apps to support reading and writing. Note that some apps address a range of difficulties. To save space, we have not placed individual apps into multiple categories. Links on the electronic version are 'clickable', taking you to the Google Play Store.

This is not a comprehensive list, but an attempt to identify relevant, useful apps and to categorise them according to difficulties faced by people with dyslexia. Unlike the iPad, there is little consensus on the 'best' Android apps for education, so we would be happy to receive suggestions for inclusion in future versions. Email suggestions to call.scotland@ed.ac.uk.

iPad versus Android

The iPad is well established as an educational tool, but Android tablets (and smartphones) are becoming increasingly popular.

- Android tablets are generally less expensive than iPads.
- There are more educational apps available for iPads, than for Android devices.
- There is less 'quality control' over Android apps so some don't work properly, or perform in unexpected ways.
- Many Android devices cannot be upgraded to the latest version of the operating system so some apps won't work on them.
- The Android operating system is less tightly controlled than the Apple iOS, so some apps, e.g. voices, can work across most apps in an Android device, unlike the iPad where voices other than the iOS system ones have to be downloaded separately for each app.