

# Working with learners with Dyslexia

24 April 2015



All images © Mat Wright



# What is dyslexia?

If we say dyslexia is a syndrome – what do we mean by a syndrome?

# Dyslexia

Identified by an established group of signs and symptoms

# Dyslexia

## Indicators (there are more)

- a difficulty processing written language
- discriminating or 'holding' sounds
- problems decoding when reading
- confusing or omitting sounds when spelling

bav ib duts omed obcornin adowl

dav

puts

opco

abowl

id

omep

rnin



David put some popcorn in a bowl

**Lets try some exercises to show  
us what having dyslexia means...**

Say the colour NOT the word....

**Green**



Blue



Red

**Pink**



**Yellow**



black

orange

**Pink**



**blue**





**Yellow**



Purple

Pink



**Black**

**Red**



White

Yellow

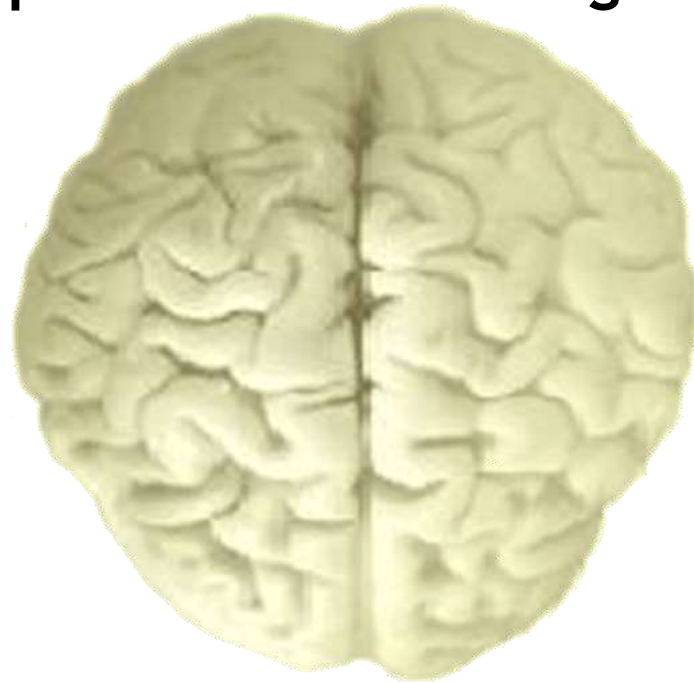


# 'In terms of specialised functions there is an important difference between the left and right halves of the brain'

Neuropsychological Treatment of Dyslexia D.J. Bakker

## Left brain hemisphere

- Language
- Facts
- Analysis
- Time orientation
- Sequencing
- Structure
- Mathematics
- Listening



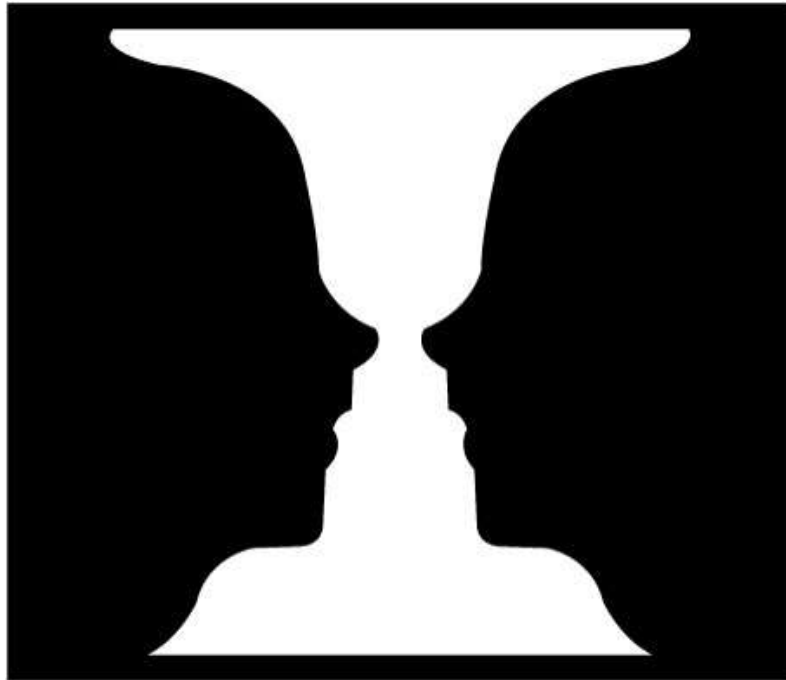
## Right brain hemisphere

- Pictures
- Feelings
- Humour
- Artistic
- Musical
- 3-D visual/spatial
- Patterns
- 'Whole picture'

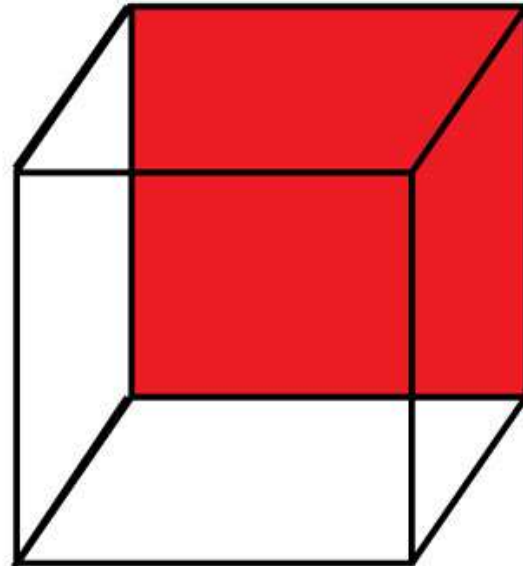
This is true for the majority of people.



# Ambiguous stimuli



(a)



(b)

Source: Kim and Blake, 2005.

Ambiguous stimuli pose choices for interpretation. It all depends on how the image is perceived and whatever preconceived notions you may have.

# So, what is dyslexia?

It is generally agreed that the difficulties associated with what we call dyslexia are caused by the brain processing in a **different** way than the majority

It is naturally occurring – i.e. a part of human diversity

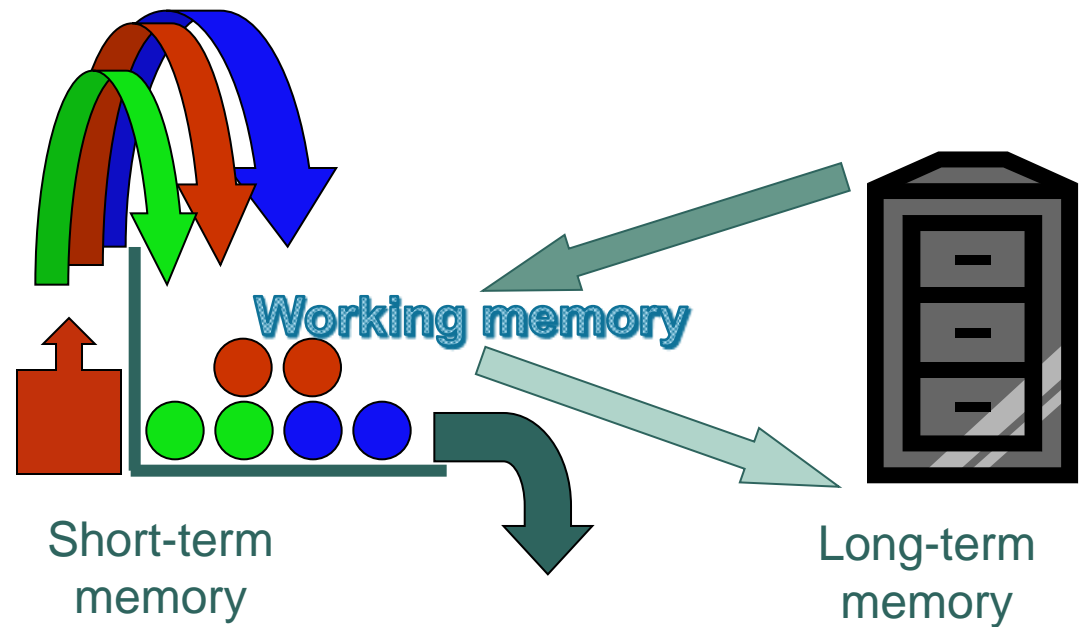
- independent of intelligence
- affects at least 10 per cent of the population
- 4 per cent severely
- often not identified at school
- Many may not know they are dyslexic

**It is a syndrome – a group of symptoms. If a pupil has enough of the symptoms/signs – then he/she is considered to be dyslexic**

# Dyslexia

## Problems:

- Capacity
- Speed of processing
- Storing in long-term memory
- Retrieval
- Manipulating information
- Misunderstanding



# Dyslexia

A difficulty processing written language

discriminating or 'holding' sounds

confusing or omitting sounds when spelling

Sequencing/working memory/decoding?

Auditory processing?

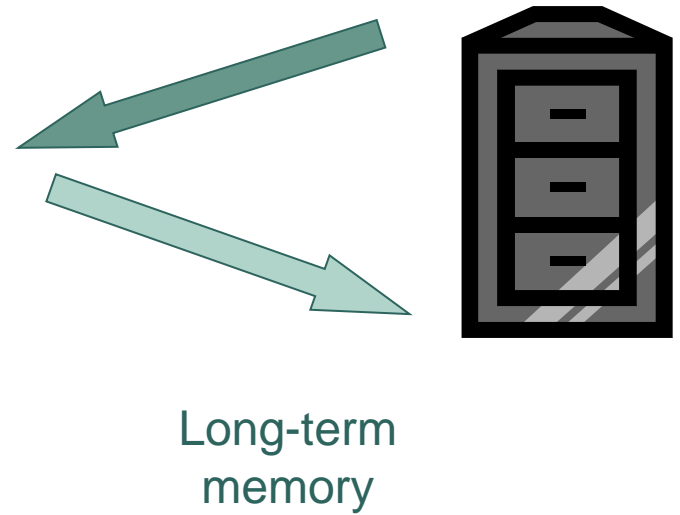
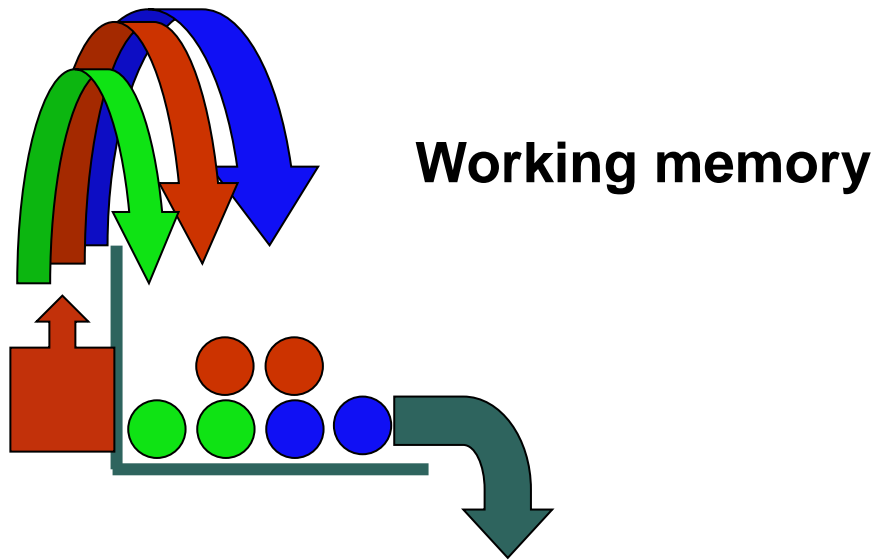
Visual processing?

Sequencing?

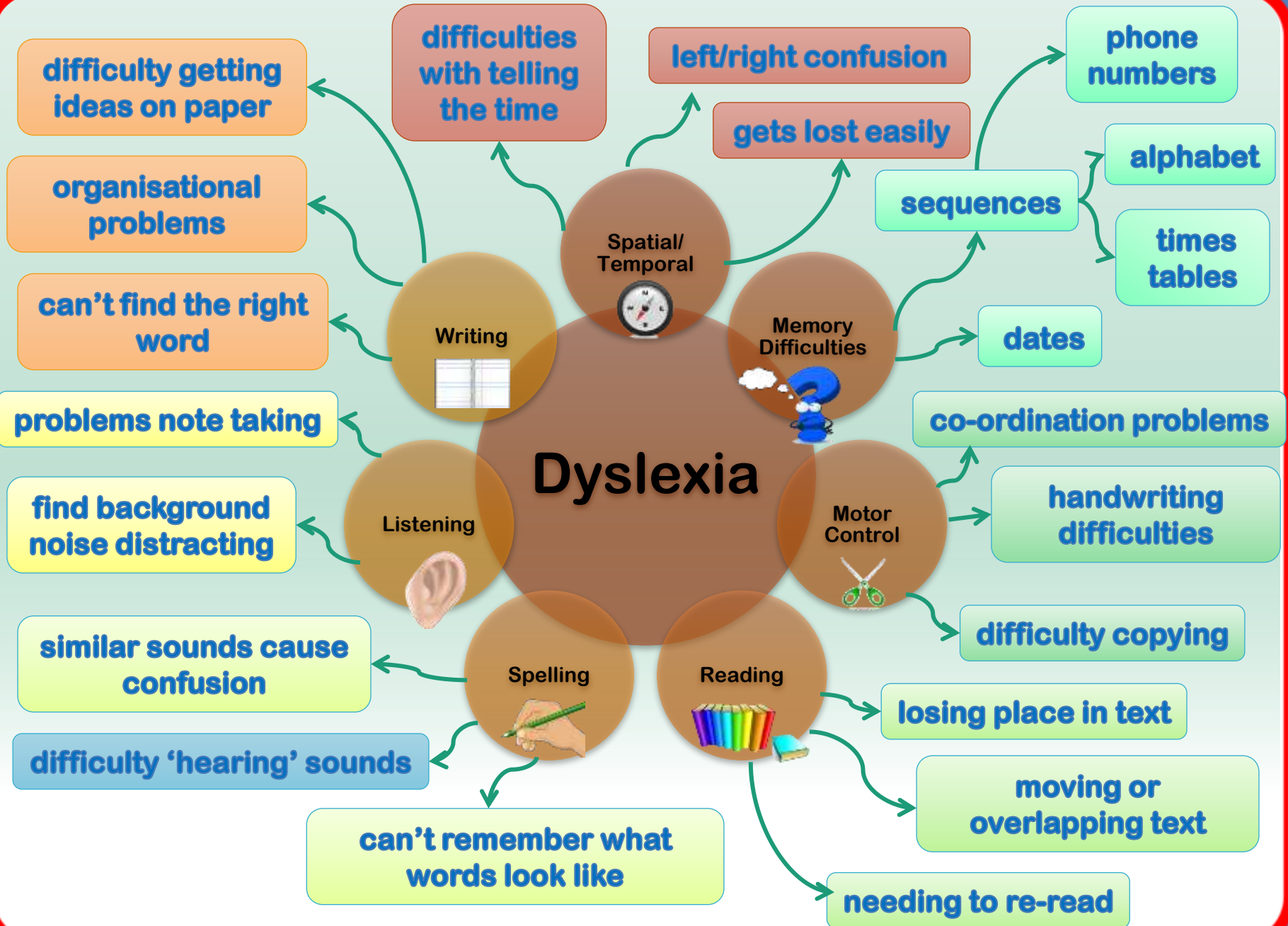
Speed of processing?

Catastrophic loss

# A critical part of learning is working memory



# Dyslexia



# So how can Dyslexia be both a strength and a weakness?

**Musical**

**Thinking**

**Creative**

**Dramatic**

**Good at sport**

Biological/Neurological: brain is 'wired' differently

**Imaginative**

Dyslexic people use their brains in a different way.. Which can be good!

**Sociable**

**Artistic**

Genetic – can be inherited, often 'runs in the family'

**Talkative**

**Good at Design**

Dyslexia is real and people have to find different ways to live with it...

**Good at making things**

# This girl is dyslexic and this is how it affects her...



I have difficulties reading, writing, spelling.

I have some difficulties with maths.

Sometimes I find it difficult to concentrate.

I get letters or numbers mixed up.

I have problems meeting deadlines or being on time.

I can be quite forgetful.

Have good and bad days.

But I'm really good at subjects like art, music, drama, sports, building/designing.



# Dyslexia also gives her lots of good things...



Inventive thinker.. I come up with new ideas!

Excellent trouble shooter...I'm good at solving problems

Creative.. I love music art and drama

Good communicators... I'm good at explaining my ideas

Vivid imaginations

Curiosity... I love finding out about new things

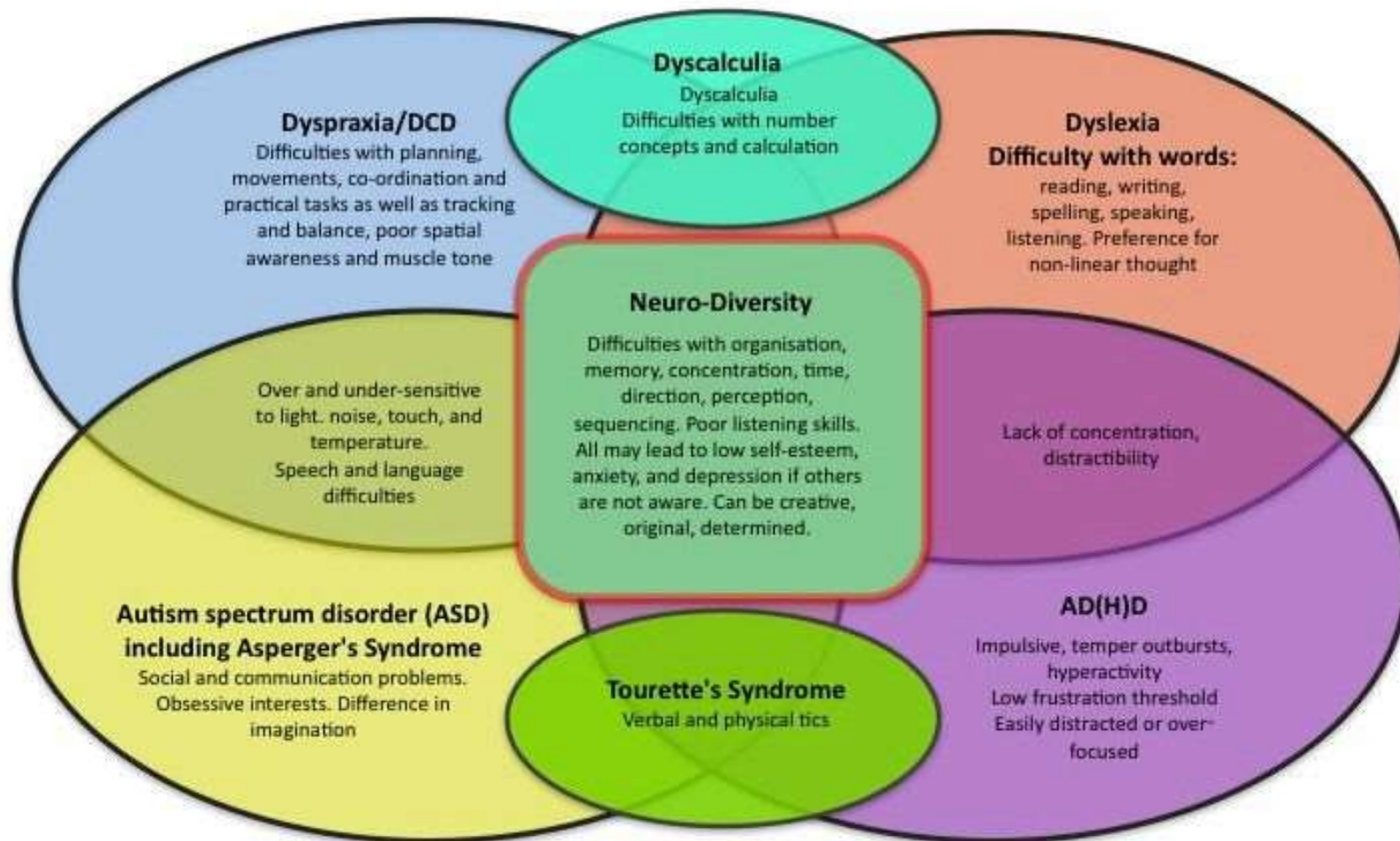
...



# Neurodiversity

## The Make-up of Neuro-Diversity

This is a document for discussion, concentrating mainly on the difficulties of those with neuro-diversity. It must however be pointed out that many such people are excellent at maths, co-ordination, reading etc . We are people of extremes.



Created by Mary Colley

# Early identification and good teaching

## Early identification and good teaching

A lot of what happens in schools disadvantages dyslexic learners

## Classroom Support

Be aware of the warning signs of working memory failure

Monitor the child

Reduce amount of information to be stored

Reduce difficulty of processing

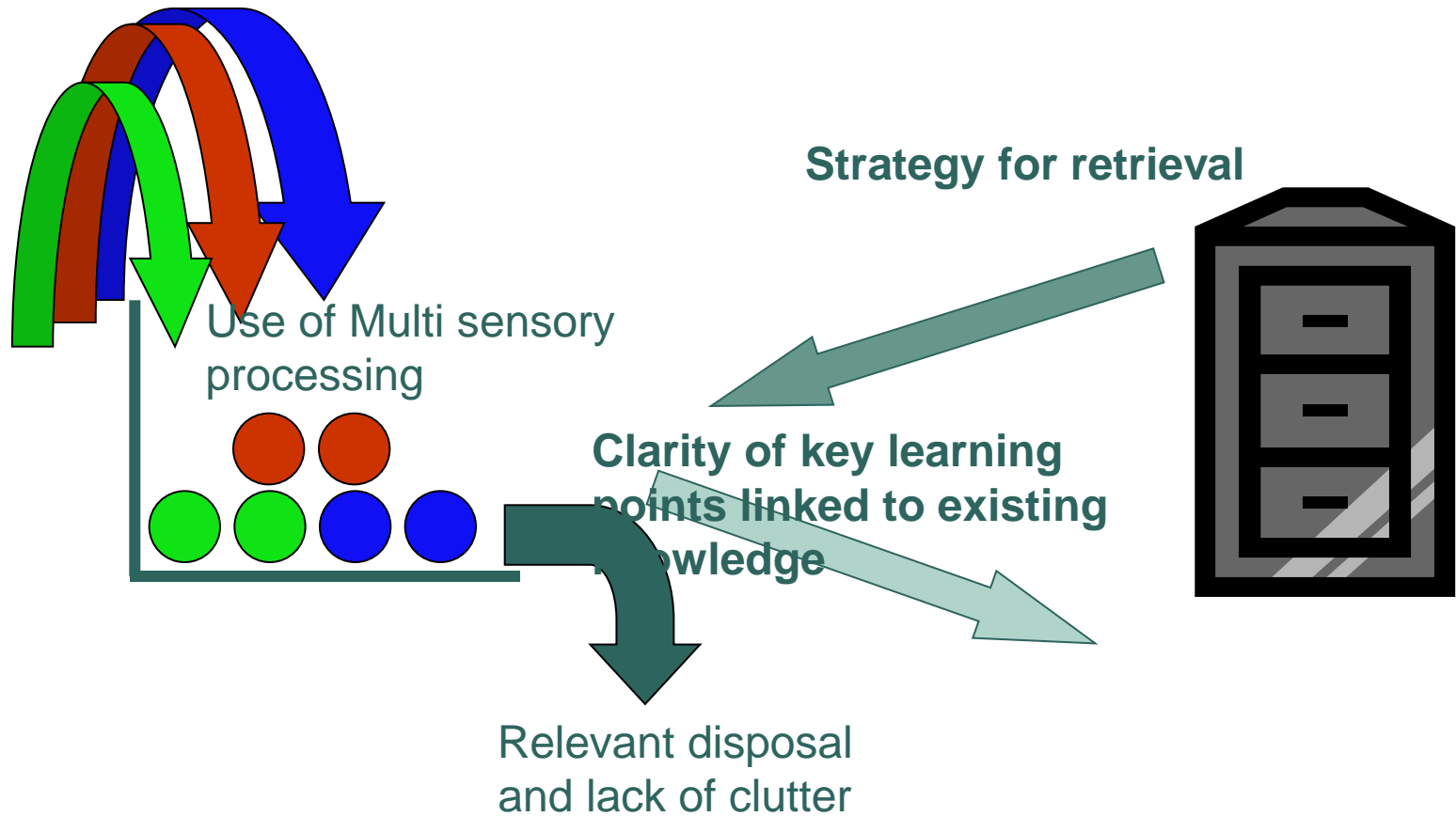
Be prepared to re-present important information

Encourage the use of memory aids

Help the child to use strategies

Eliot, Gathercole et al (2010)

# How do we help dyslexic learners



# Opening up the super-highway into learning



# How can I take account of different learning styles?

Learners have tendencies towards different learning styles and you need to present information through a variety of channels. They may learn more effectively through:

Kinaesthetic channels  
Visual channels  
Auditory channels  
or through a combination of all three.

Ensure that teaching accommodates learning styles.

## How can I help learners who are more kinaesthetic?

Kinaesthetic learners respond well to:

- active involvement
- movement
- hands-on activities
- designing and creating
- role play and drama

Remember to use vocabulary which stresses touch and movement:

- feel, touch, grasp
- solid, impression, get hold of
- make contact, catch on to
- slip through, tap into, throw out



# How can I help learners who are more visual?

Visual learners respond well to:

- diagrams
- graphs and charts
- pictures
- mind maps
- extensive use of colour
- wall charts
- posters
- videos
- performances

Remember to use vocabulary with a visual theme:

see, look, appear, view, show,  
reveal  
clear, foggy, sharp  
focus, imagine, picture,  
vivid, snap shot, crystal clear

# How can I help learners who are more auditory?

Auditory learners respond well to:

- spoken word
- rhythm, rhyme and varied tone of voice
- audio tapes
- discussion
- sound effects
- verbal rehearsal

Remember to use vocabulary which stresses auditory activities:

- listen, hear, sound, silence
- tell, tune in, make music
- be all ears, be heard, ring a bell

*car*



Right-brain and left-brain  
the word "car"

# Supporting Writing – a 5 stage model



- **generate** ideas
- **sort** ideas into themes
- **organise** the themes
- **sequence** the themes into paragraphs
- **rehearse** the plan by talking it through

**The key to successful learning is the ability to organise thoughts.** We teach you how to do it visually.

# Supporting Writing – Generating ideas

## DUMP: GENERATE IDEAS

- Dump —or brainstorm— ideas about the topic
- Emphasise “**get it out**” not “get it right”



# Supporting Writing – Sorting ideas

## ORGANISE: SORT IDEAS

- Re-arrange the DUMP words into groups
- Sort the groups by shared features



# Supporting Writing – organise ideas

## MAP: ORGANISE IDEAS

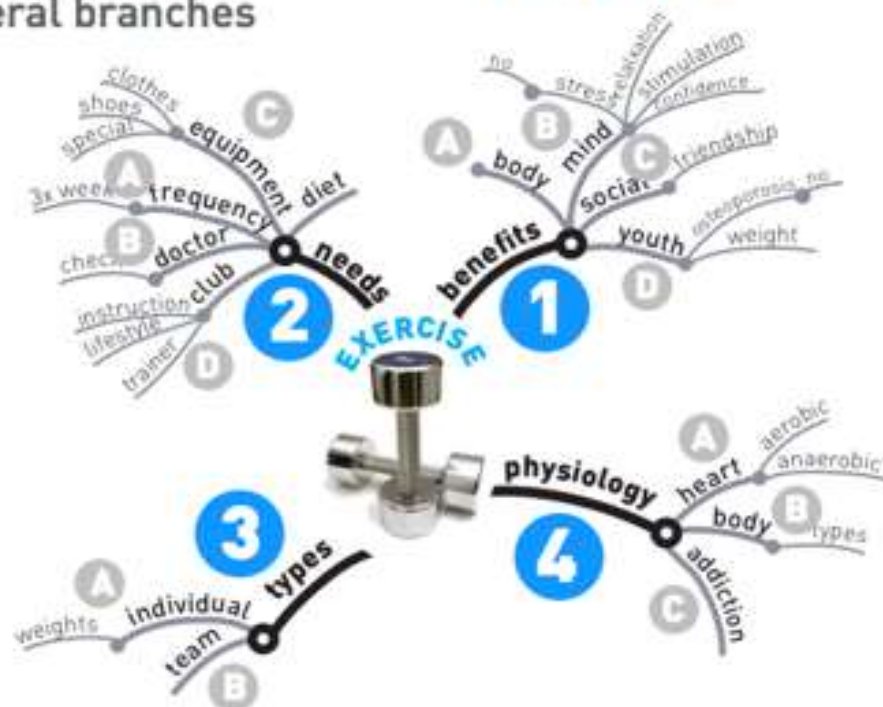
- **Organise** the groups of words **hierarchically**
- Find the main words to **label** the main branches
- Find the **next level** of words (smaller branches)
- Continue until all words are organised
- Add more words too



# Supporting Writing – sequence

## SEQUENCE THE PARAGRAPHS

- Put the branches into the **order** you will use them
- Each main branch can be a **paragraph** or section of several branches





# Supporting Writing – rehearse



## REHEARSE THE COMMUNICATION

- Place the map between the pair
- In pairs, and in sequence, **explain** personal maps to one another
- **Add additional details** as you talk about them



# Supporting Writing – begin writing

## WRITE OUT THE PLAN

- Place the map **in front** of the pupil
- Write according to the **plan**
- Include the **extra details** mentioned in the talk

