

# UNDERSTANDING THE DEVELOPMENT OF EARLY WRITING SKILLS FOR CHILDREN AT RISK OF LEARNING DIFFICULTIES

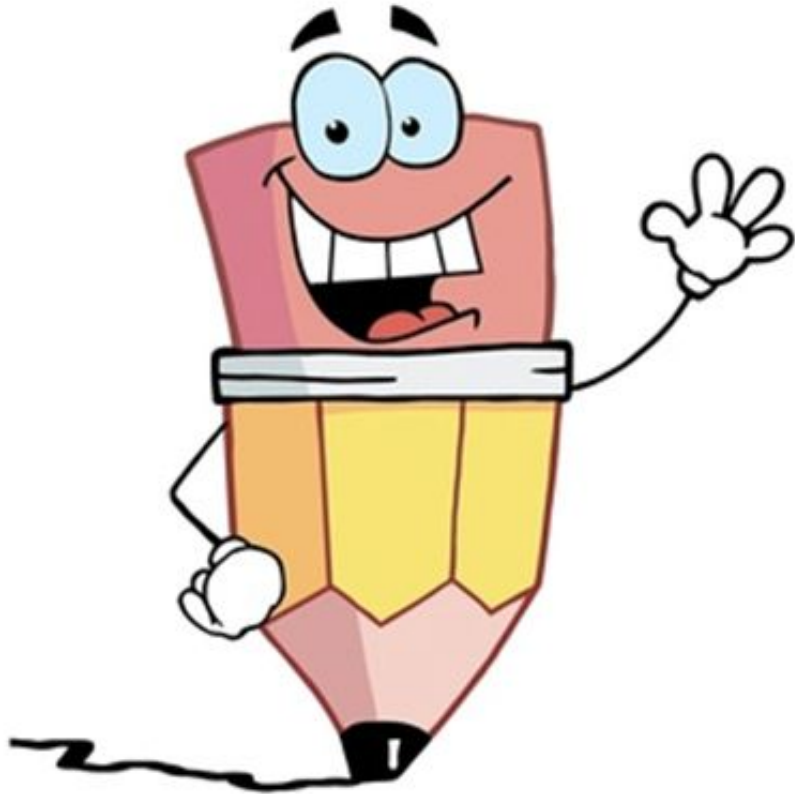
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UNLOCKING POTENTIAL

## Specialised Educational Services

*A division of the Dyslexia Association of Singapore*





**PRESENTED BY**

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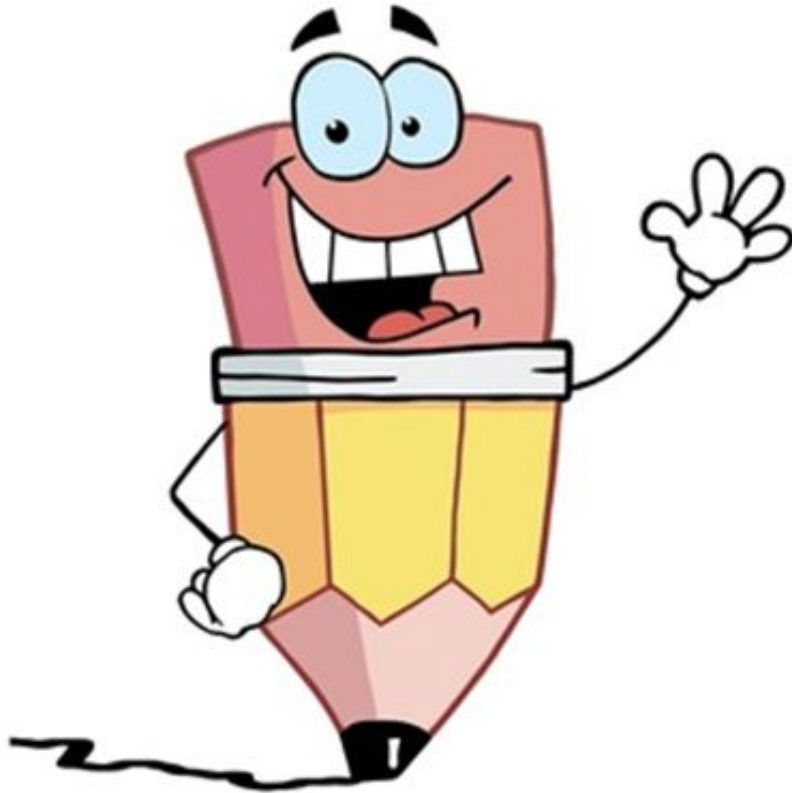
# WORKSHOP LINE-UP

INTRODUCTION

SPECIFIC LEARNING DIFFERENCES (SPLD) AND  
THE WRITING CONNECTION

THE MECHANICS OF HANDWRITING

FUN ACTIVITIES THAT SUPPORT WRITTEN  
EXPRESSION



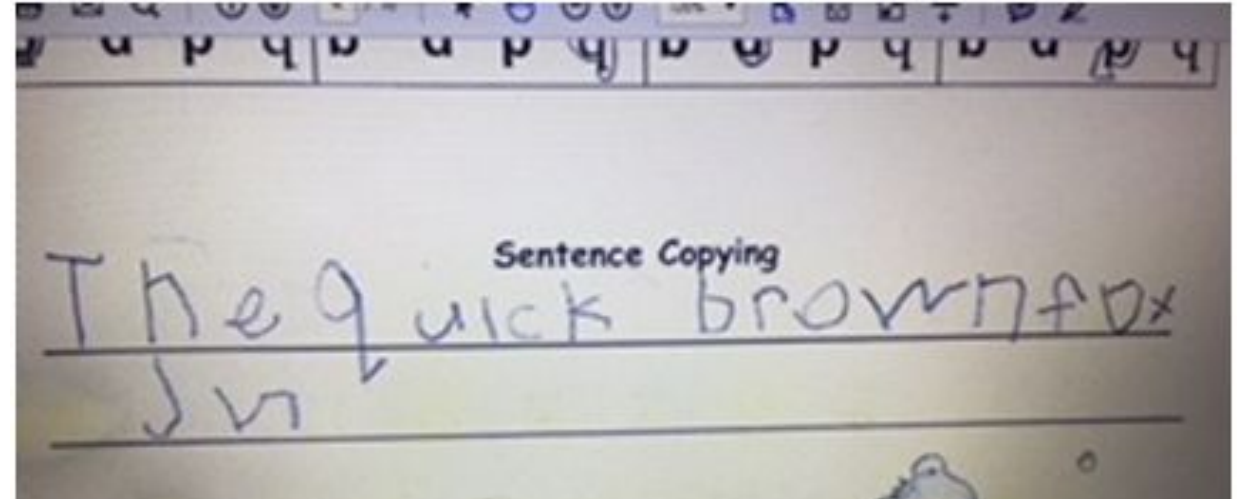
I **HATE** WRITING!



# Pencil Grasp Correction - Child A

- Joined DAS in 2017, when he was in K1.
- Unwilling to do written work due to an inefficient pencil grasp.
- Corrected pencil grasp in just one week.

# Before correction....

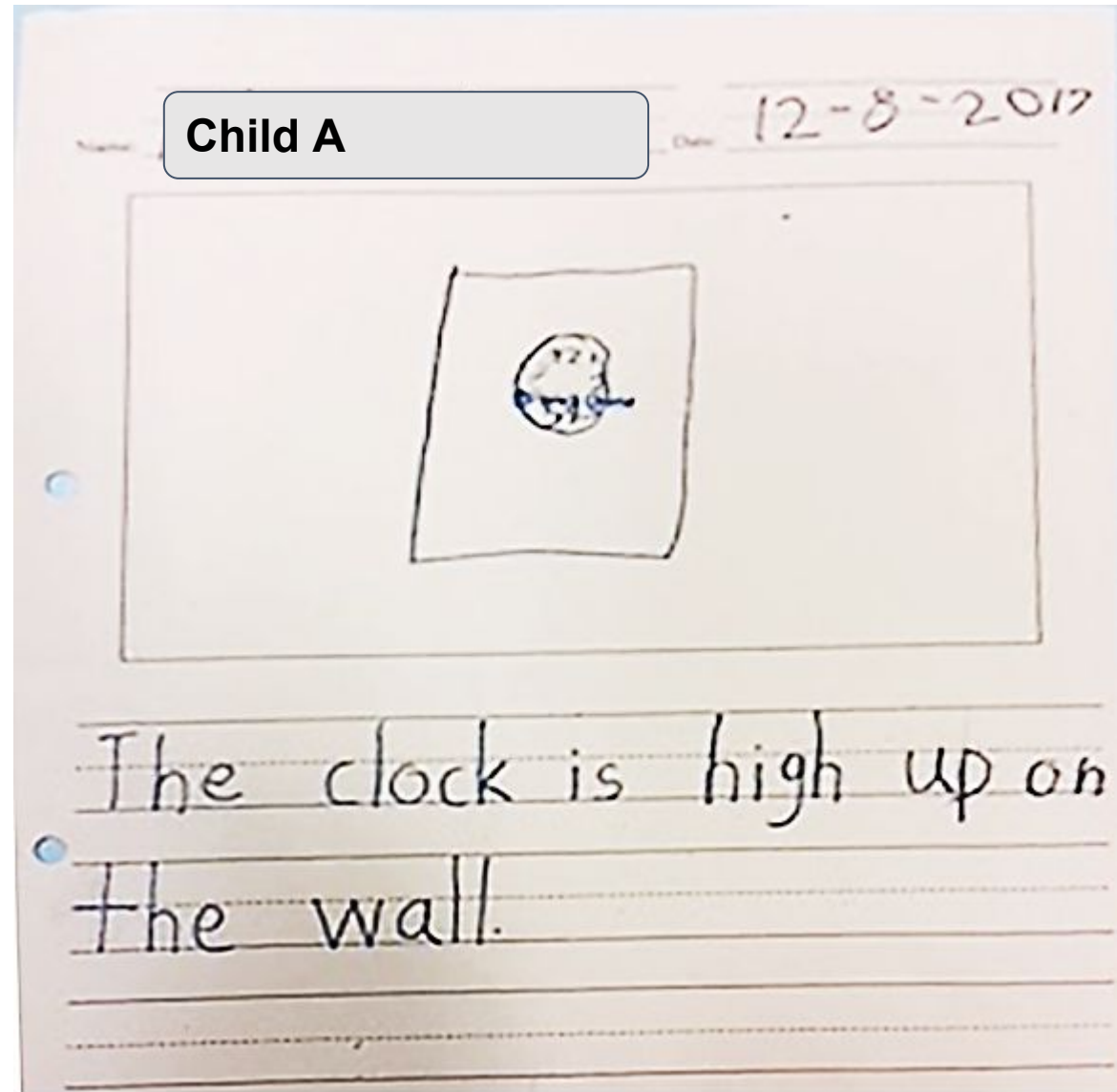
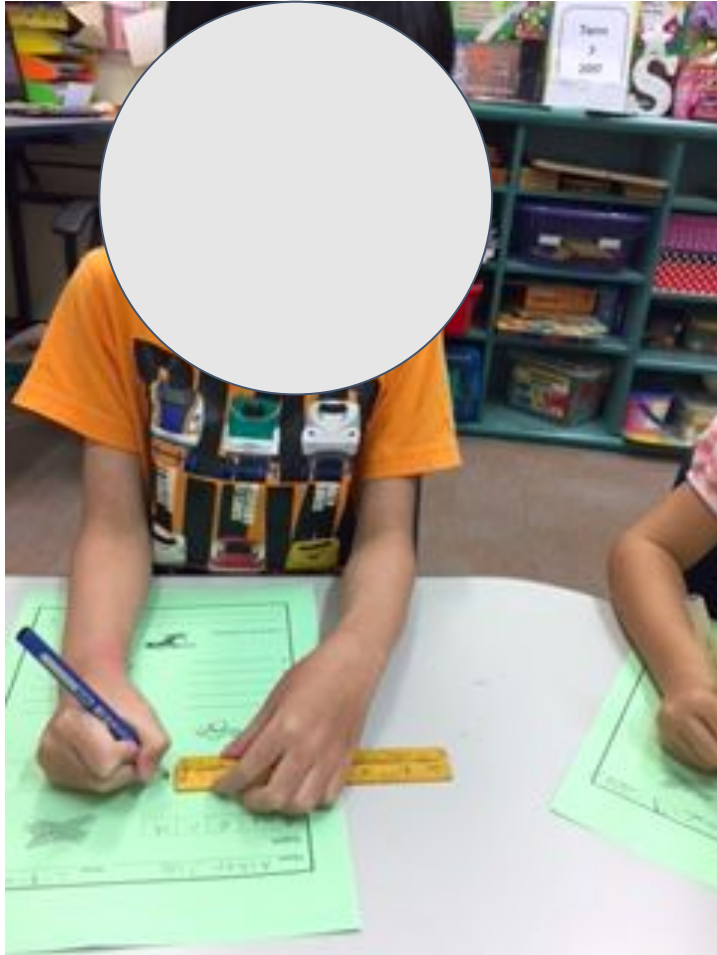


Handwriting sample  
(7 January 2017)

# Method recommended to Mum



...after correction

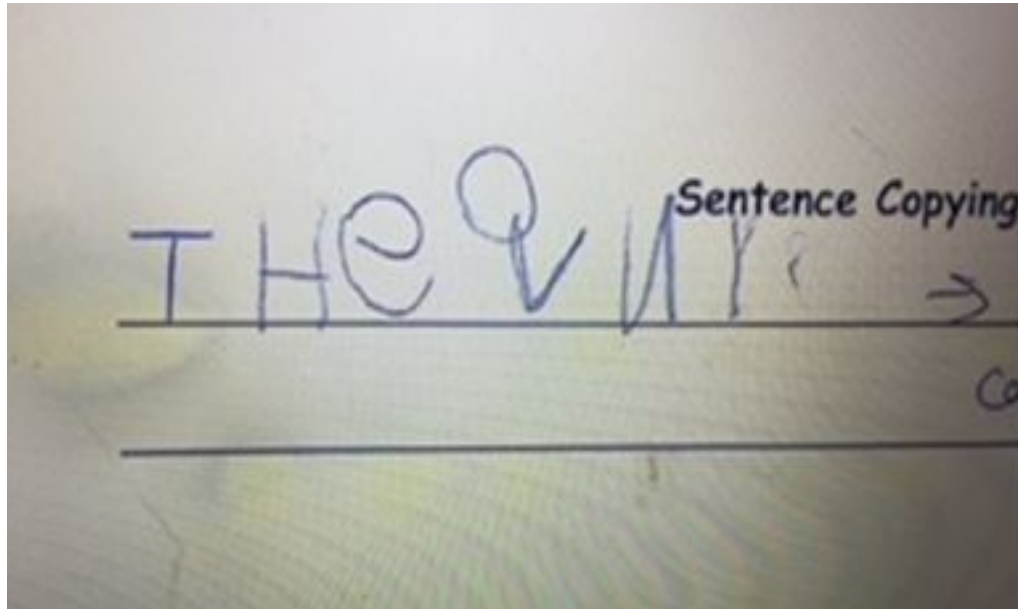




# Struggles with handwriting - Child B

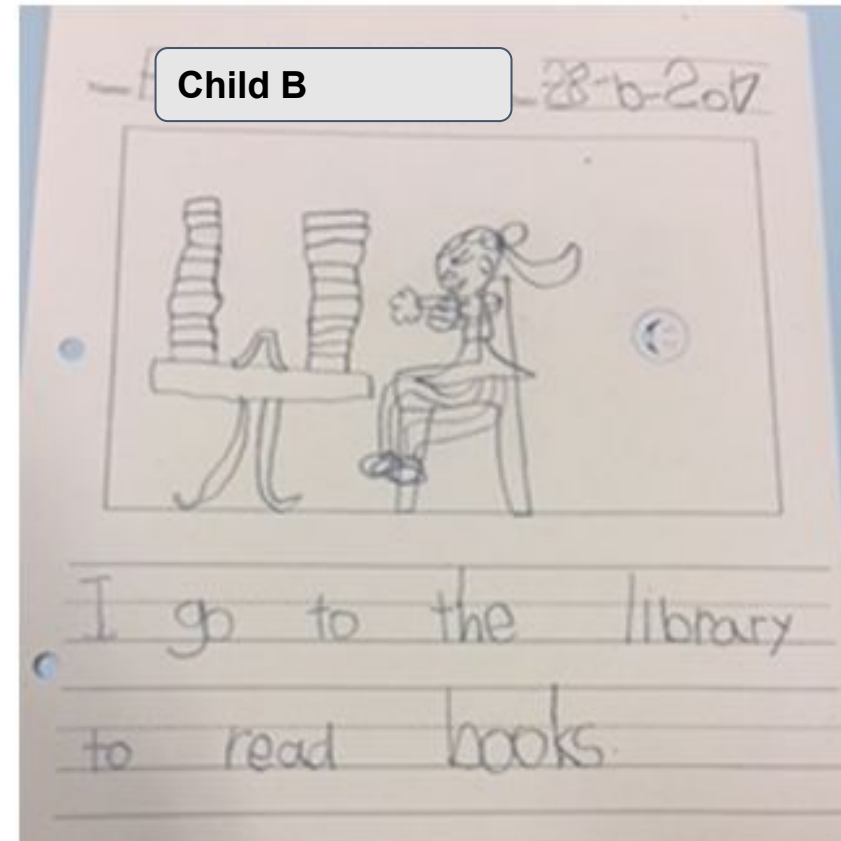
- Joined DAS in 2017, when she was in K1.
- Writing was slow and laborious.
- Overcame her struggles with a combination of sitting posture correction, fine motor and multisensory writing activities.

# Before



Handwriting sample  
(7 January 2017)

# After



Handwriting sample  
(28 October 2017)

# Specific Learning Differences and the writing connection



# Specific Learning Differences (SpLD)

SpLD is an umbrella term used to cover a range of frequently co-occurring difficulties:

- Dyslexia
- Dyspraxia
- Dysgraphia
- Attention Deficit Hyperactivity Disorder (ADHD)

# Specific Learning Differences (SpLD)

- Not linked to intelligence or motivation.
- Brain is wired differently affecting how information is learned and processed.

How one learns things differently

# Dyslexia

Dyslexia is a type of specific learning difficulty identifiable as a developmental difficulty of language learning and cognition.

It 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 processing speed.



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# Effects on writing

- Difficulties with **identifying,**  
**sequencing**      **cat = act = tac**  
**manipulating**    **hot = hat / snail = nail**  
letter sounds will impact spelling during writing.
- Presence of letter reversals -    **bed = deb**

# Dyspraxia

Dyspraxia is a neurological disorder which **affects the planning, coordination, and sequencing of gross and/or fine motor movement.**

It may thus impact a diverse range of activities where motor skills are involved, such as walking, jumping, writing and even speaking. It is a lifelong condition that may vary in its presentation across individuals and over an individual's course of life.



# Effects on writing

- Difficulties in fine motor coordination and execution impact the ability to use a pencil correctly.
- Difficulty in coordinating to hold a paper with one hand while writing with the other.
- Results: makes writing messy and frustrating.

# Dysgraphia

(Specific Learning Difficulty in written expression)

Dysgraphia is a specific learning difficulty characterised by **difficulties in handwritten expression**, especially in areas of spelling, grammar and punctuation, as well as the clarity and organisation of written expression. Additional signs of dysgraphia include **messy handwriting, inconsistent spacing, poor spatial planning on paper**, amongst others.

# Effects on writing

- Difficulty with forming letters, putting spaces between letters and words. Writing becomes messy and slow.
- Difficulty with getting thoughts onto paper in an organised way as child is not able to write thoughts down as fast as they think.

# Attention Deficit Hyperactivity Disorder (ADHD)

ADHD is a neurodevelopmental disorder originating from childhood. Characteristic features of ADHD are symptoms of **inattention and/or hyperactivity-impulsivity** that often occur in two or more settings (e.g. at home or school; with friends; during other activities) and affect their performance in school as well as their relationships with others.



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# Effects on writing

- Distractibility and overactivity make handwriting very time consuming.
- Making impulsive decisions can cause poor spelling, weak vocabulary choices and simple sentence structures.
- Difficulties with planning and organising during writing.

# How can I tell and what next?

- Watch for delay in developmental milestones.
- Speak to the school teacher
- Learn about the signs and symptoms of SpLDs.
- Consult specialists who can pinpoint and diagnose the condition.

# Early Identification and Intervention

“Education is the passport to greater opportunities in life. For the child with special needs, the prognosis of his adult life is highly dependent on the quality of his education in his preschool and ensuing school years.

**Early identification and intervention are pivotal to the prognosis of the child with special needs.”**

1st Enabling Masterplan (2007-2011, 3-9)  
Ministry of Social and Family Development

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# DAS - I wish you knew



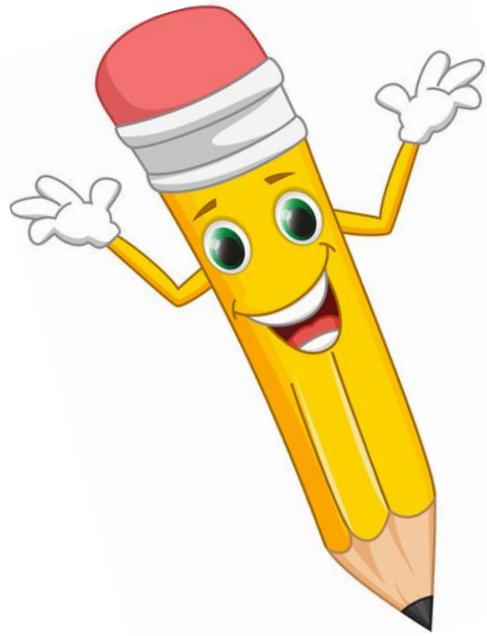
Link: [https://www.youtube.com/watch?v=7vtNnbh\\_L7I](https://www.youtube.com/watch?v=7vtNnbh_L7I)

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# The mechanics of handwriting

# The mechanics of handwriting



*“Handwriting is a complex skill of using language by pencil grip, letter formation, and body posture. There are many skills involved in handwriting including vision, eye-hand coordination, muscle memory, posture, body control, as well as pencil grasp and letter formation.”*

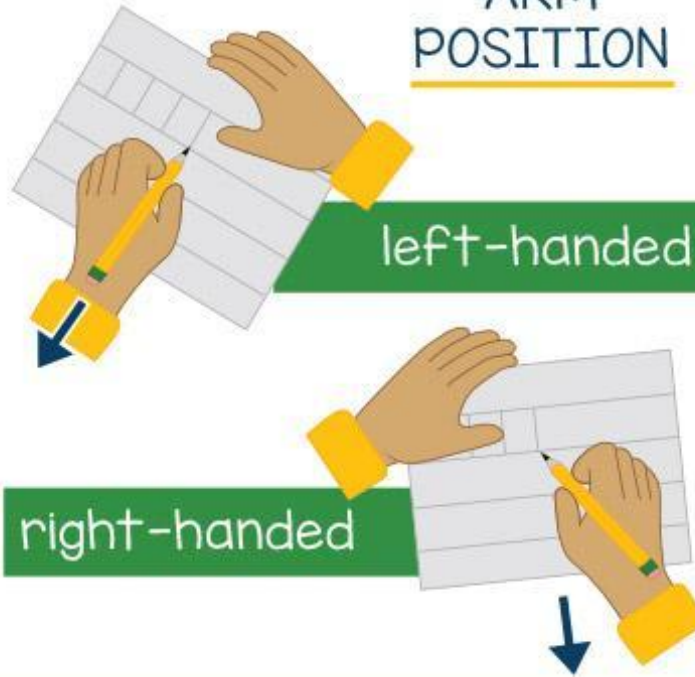
(Gruetman, 2017)

# CHECK YOUR CHILD'S HANDWRITING POSITION

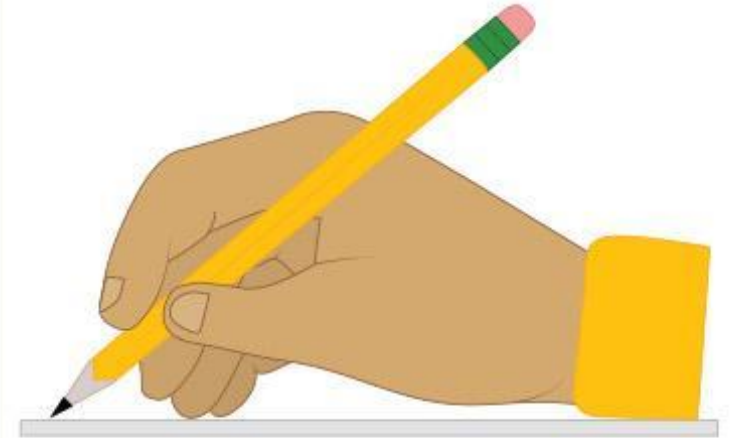
## BODY POSTURE



## ARM POSITION



## PENCIL GRIP



[blog.allaboutlearningpress.com/dysgraphia](http://blog.allaboutlearningpress.com/dysgraphia)

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<http://minds-in-bloom.com/advice-from-ot-why-good-sitting-good/>

<http://occupationaltherapy.com.au/the-importance-of-good-sitting-posture-for-handwriting/>

# Mechanics of writing: Core Strength

- Muscle surrounding the abdomen, pelvis and back
- It is the foundation for children to be able to assume and maintain an upright posture while standing and sitting without support
- Directly impacts a child's ability to use an efficient pencil grip and produce neat, legible work

# Activities to Improve Core Stability

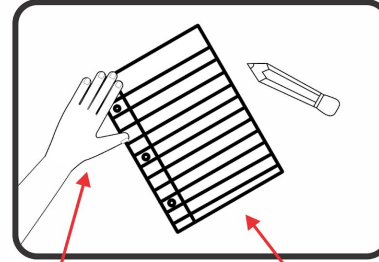


**Wheelbarrow Race**



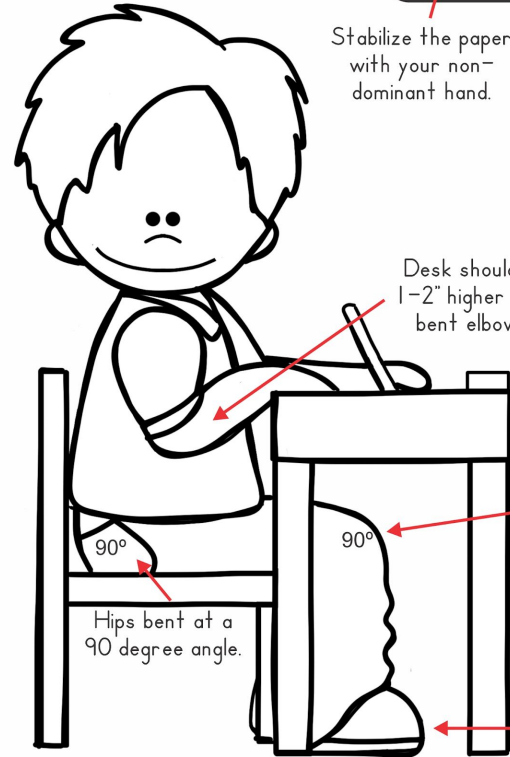
**Animal walk**

# PROPER POSTURE



Stabilize the paper with your non-dominant hand.

On the desk, the paper should be angled. Angle it so that the right side of the paper is slightly higher for right handed students.



Desk should be 1-2" higher than bent elbows.

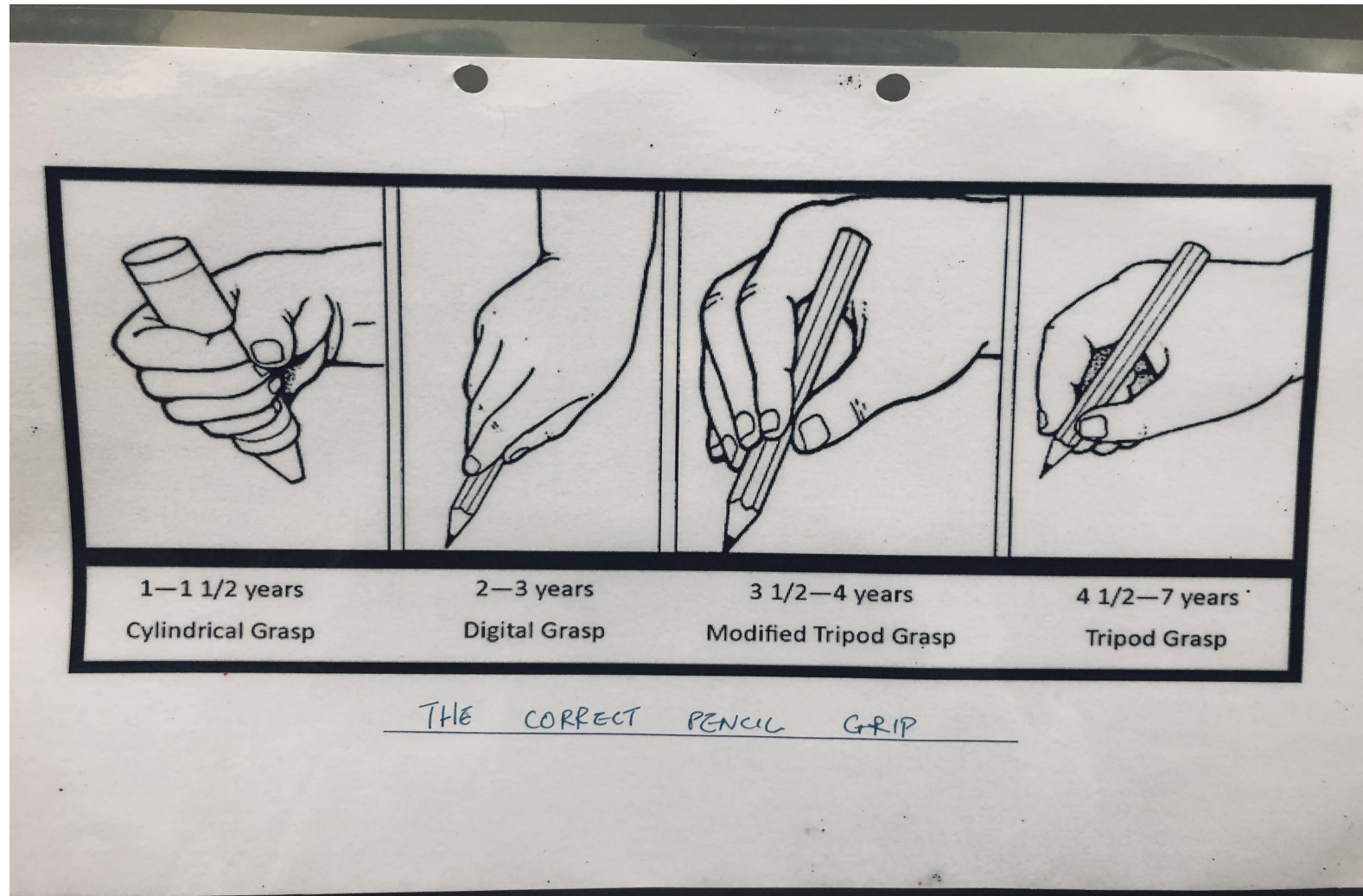
Hips bent at a 90 degree angle.

Knees bent at a 90 degree angle.

Feet flat on the floor.



# Pencil Grasp at different stages





# Mechanics of handwriting: Finger dexterity

- Dexterity (fine motor skill) is coordination of small muscles.
- Includes synchronization of fingers and hands – with the eyes
- Dexterity aids in manipulation of objects (in activities: maneuver buttons, pencils, zippers, etc.)
- Involves finger isolation & separation of two sides of the hand

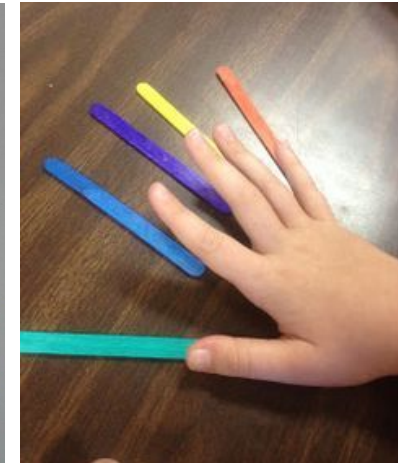


# Finger Isolation

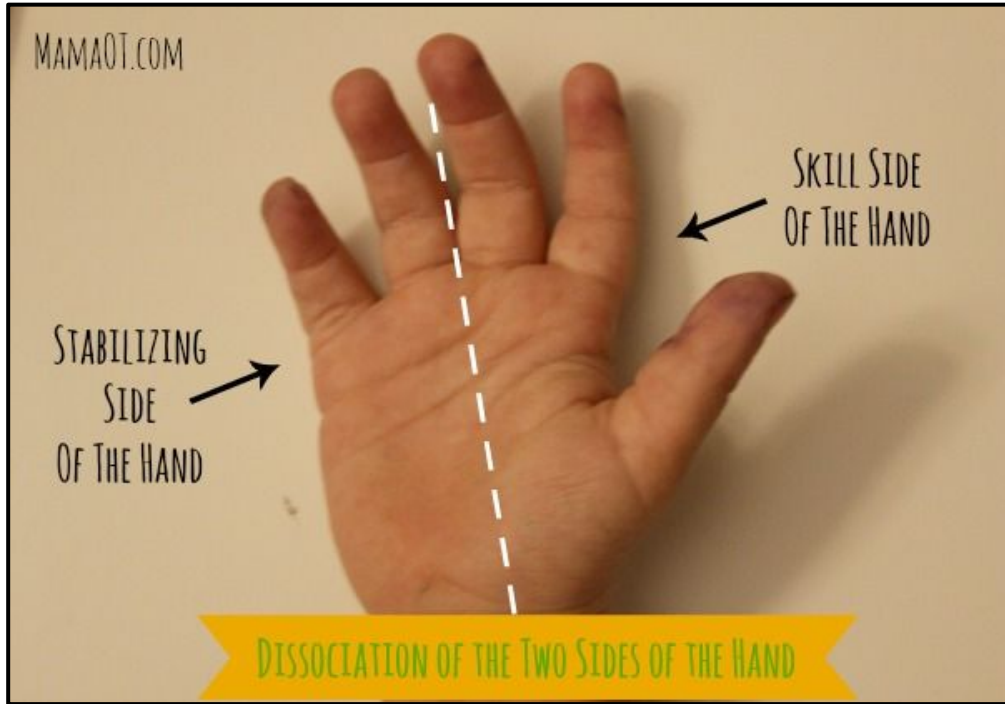


<http://www.theotttoolbox.com/2016/01/motoric-separation-of-the-hand-fine-motor-skills-to-ys.html>

# Improve Finger Isolation



# Separation of two sides of the hand



# Improve Hand coordination & muscles



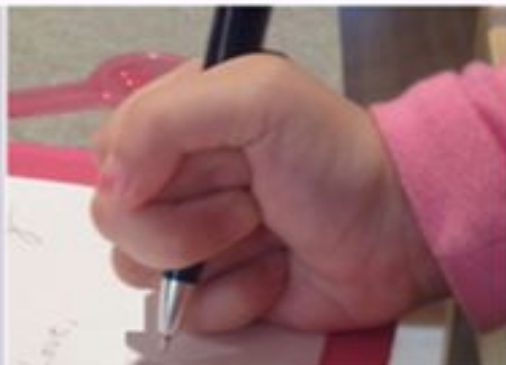
# Finger exercise



## INEFFICIENT GRASP

### Inter-Digital Brace

The pencil is held between the fingers of the hand.



### Thumb Tuck Grasp

The thumb is tucked under the first three fingers or wrapped around them.



### Key or Lateral Pinch Grasp

This grasp has the thumb positioned across the index finger closing the web space between the fingers



### Hyperextended Index Finger

Tripod grasp where the index finger is extended too far at the DIP (distal interphalangeal joint) due to excessive pressure.



# Importance of a good pencil grasp

- Stress on joints of the hands
- Fatigue or pain during writing task
- Lack of stability and mobility
- Compromised writing speed



*Attempting to change a functional adapted grip into an ideal grip might make handwriting difficult and tiring for the child.*

# Tips and strategies





# Rubber band

1.



2.

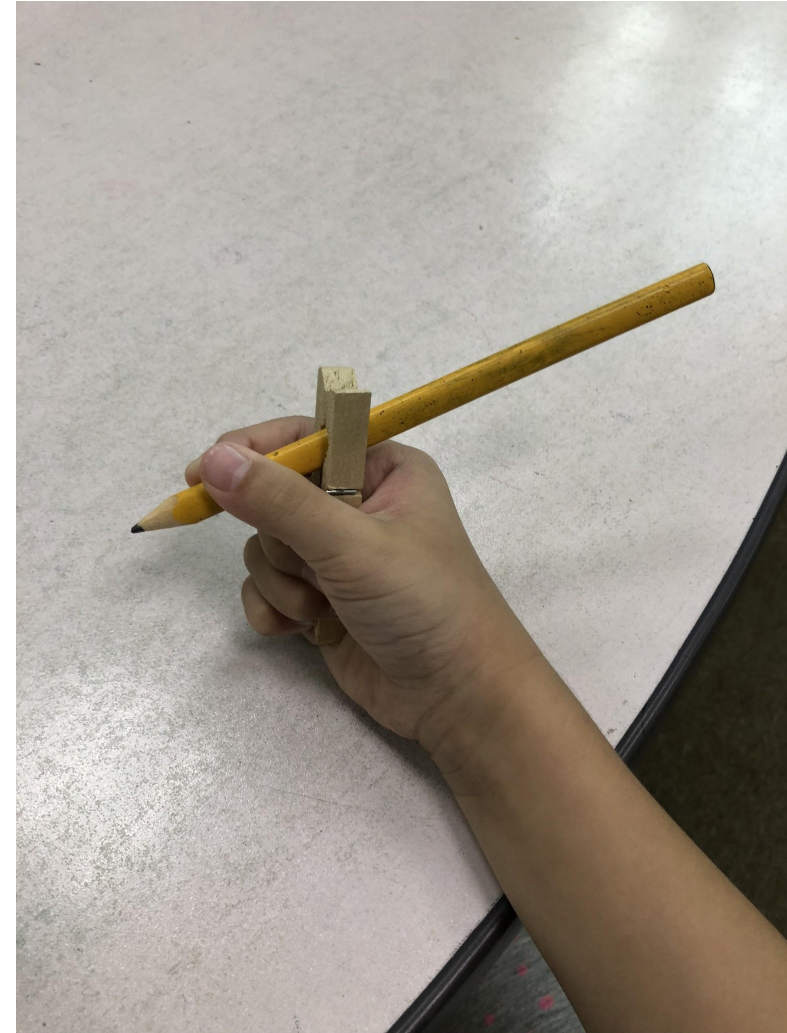


# Peg

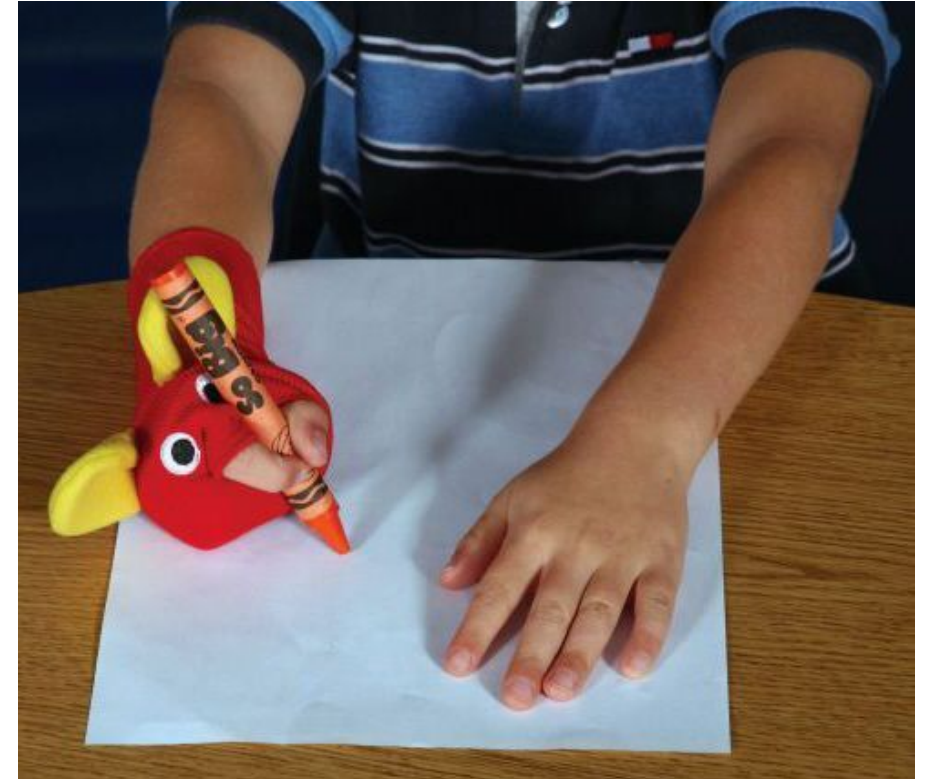
1.



2.



# Sock



# The sock method - Pencil Grip

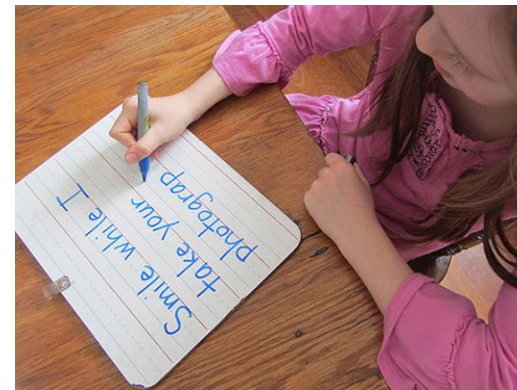


Link: <https://www.youtube.com/watch?v=XSdNHjR0-nE>

# Fun Writing Activities



Here are some activities to encourage our children to do.





# Benefits of Writing

- **Enhances cognitive development:**

15 minutes a day, improves writing skills & comprehension

- **Builds self-confidence**

become confident writers

- **Solid foundation for school success**

influences student's reading, writing, language use and critical thinking.



# Benefits of Writing



- **Helps reading skills**

- positive correlation between better handwriting skills and improved academic performance in reading and writing

- **Improves motor functioning**

- along with cognitive development, helps in the mechanics of ideation, text production, punctuation, planning, spelling and grammar

# Written Expression

*“The process of learning to write begins in infancy. The positive oral and written language experiences children have at home, daycare, preschool, and kindergarten contribute to the developing capacity to communicate in writing.”*

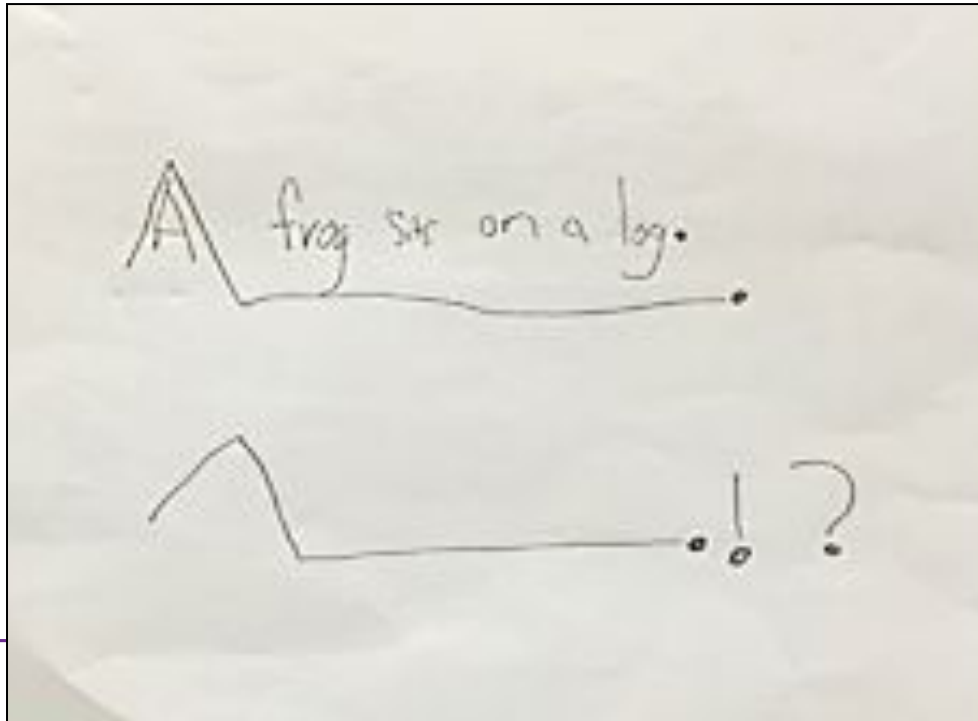
*(Maehr, 1991)*



# From Interactive reading to Interactive writing

- **Sentence frame**

- A sentence starts with a capital letter and ends with a full stop, exclamation mark or a question mark.



Unit 1, skill 1

SENTENCE FRAME



3 kinds of thoughts

- Declarative (.)
- Interrogative (?)
- Exclamatory (!)

# Next, Interactive Writing with a story that has been read more than once.

- Simple organisers to find story elements using the

**5W**

**Who?**

**Where?**

**When?**

**What?**

**Why?**



**1H**

**H= How?**

Name: Quinton Date: 8-2-18

Book Title: What a Bad Dog

How Fluffy kept Mom's dog quiet?

Where Home? Yes

Where the ... side

How Fluffy? long tail

What Fluffy heard? was

How Fluffy showed that he was good? showed that he was good

# Writing Resource: Graphic Organiser

- Next, prompts like '**characters, setting, problem, & solution**' can be added.
- Can be a repetitive activity with different books.
- They can start forming sentences with the characters
- For example, 'the character/s (who); when did the story take place(setting)
- Give personal opinion

Name: \_\_\_\_\_ Date: \_\_\_\_\_

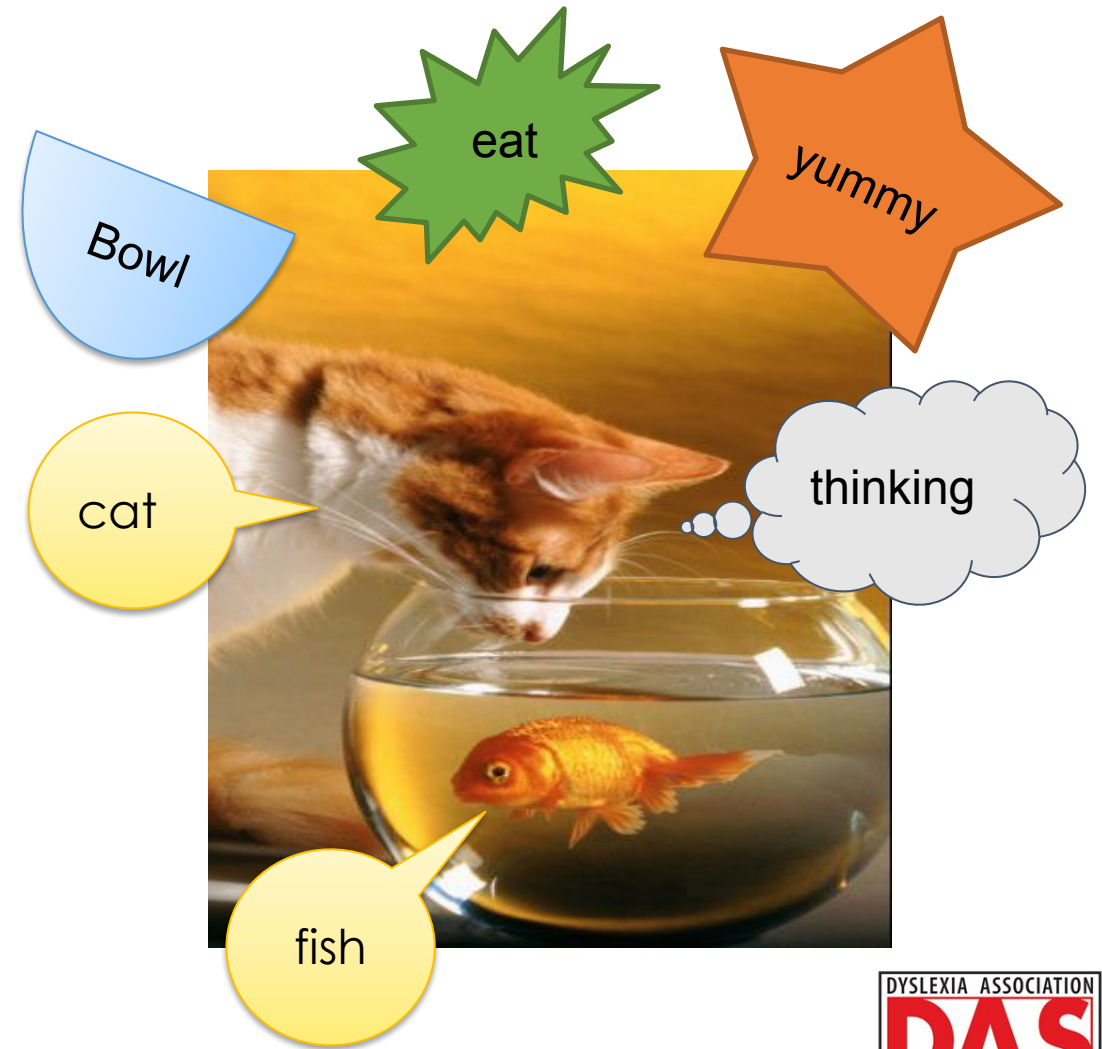
Title: \_\_\_\_\_

Characters	Setting
Problem	Solution

The story makes me think of: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# Other fun ways to get your child interested in writing.

- **Pictorial writing prompts**
- brainstorm related words  
words/phrases
- Paste Picture and write a few words  
or sentences ( as the child wishes)
- Create story / little booklets



# Pictorial Writing Prompts

Speech / thought bubbles

- a fun way to ignite interest
- encourage all words and ideas



# Reasoning Prompts

Encourage children to pen their opinions on paper.

Start with 3 reasons ( Why? )

Teachable moments for different objectives. For examples: 'adjectives'

or as reinforcement or extended activity for Sight Word 'because'

My Opinion about **Bugs**

I \_\_\_\_\_ (do/do not) like bugs.

Let me tell you why.

Reason 1:	Reason 2:	Reason 3:

I think bugs are \_\_\_\_\_

# Personal recounts

## Introduction of:

- - Simple transition words: **First, Next, Last**
- - Catchy first sentence (hook)
- - Conclusion or ending

Other transition words:

**One day, later, then, first of all, suddenly, whenever, while and so on.**

Name \_\_\_\_\_

## Personal Narrative

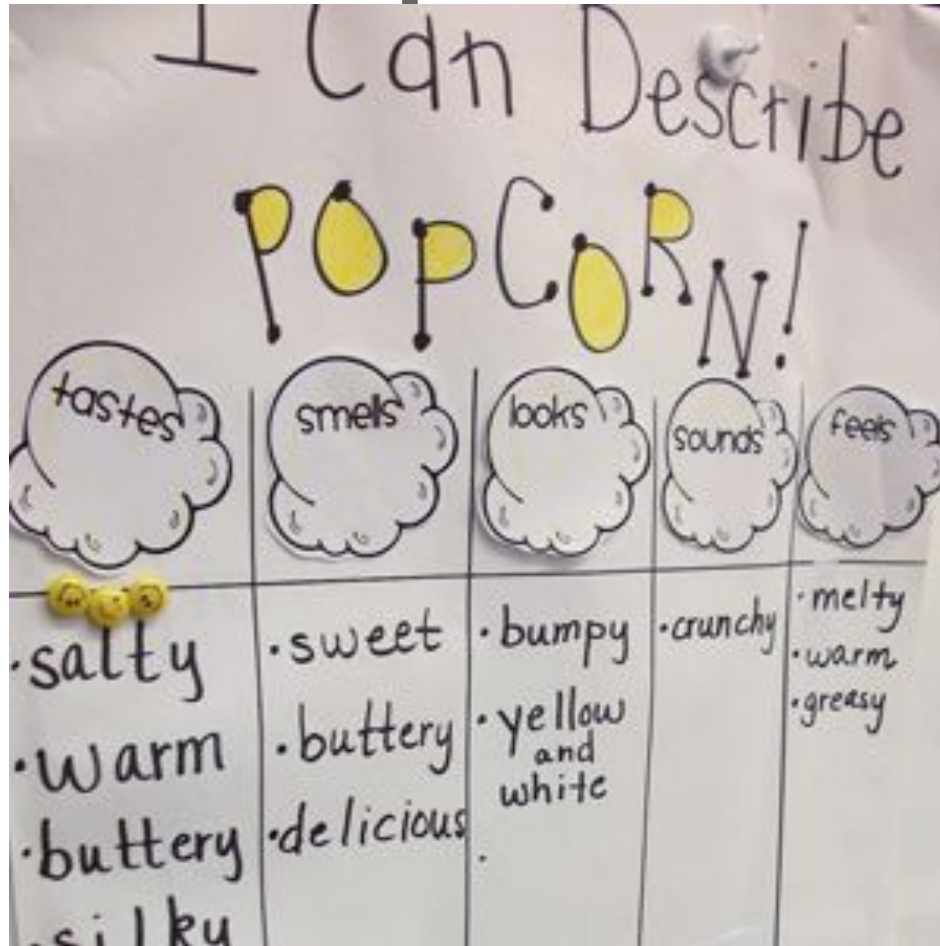
Title: \_\_\_\_\_  
Topic: \_\_\_\_\_  
Purpose: \_\_\_\_\_

Catchy first sentence to capture your reader's attention:  
\_\_\_\_\_  
\_\_\_\_\_

First, _____ _____	Next, _____ _____	Last, _____ _____
--------------------------	-------------------------	-------------------------

Conclusion: \_\_\_\_\_  
\_\_\_\_\_

# 5 Senses Description Prompts





# Other exciting ways to sustain students' Interest

- Lesson 1: Brainstorm & Complete organizer; becomes tired
- Lesson 2: A new Project with same organizer
- Create a Booklet with Title and Author's Name

# Student's Work - Narrative Writing



# Make writing part of daily routine



# Make writing part of daily routine

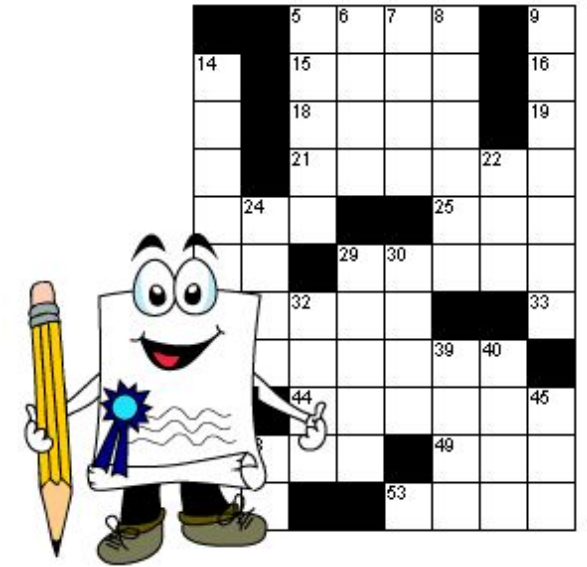
- Sentence starters card (e.g. I want to \_\_\_\_\_)
- Drawing map of the house together and writing labels and signs.
- Hiding items and getting children to identify the names and pen them down.
- To do list; Plan own timetable
- Writing cards/ notes /lists (e.g. favourite things)
- post-it notes/ name tags or stickers



# Other Fun Writing Activities

Finally games like:

- crossword puzzles/ word ladders/word games
- Writing letters to family members  
(provide samples of letters to model)
- Cut and paste pictures (magazines, newspapers) to make
- a story booklet



# Conclusion/Recap

Specific Learning Differences  
and the Writing Connection

Mechanics of Handwriting

Fun Writing Activities  
(supports written expression)

# Thank you



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