

**DYSLEXIA**  
Dyslexia Association of Sarawak

MIRI

## DYSLEXIA

### AND EFFECTIVE TEACHING METHODS

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DASwk

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MIRI LIBRARY, 5-6 March 2016

Program

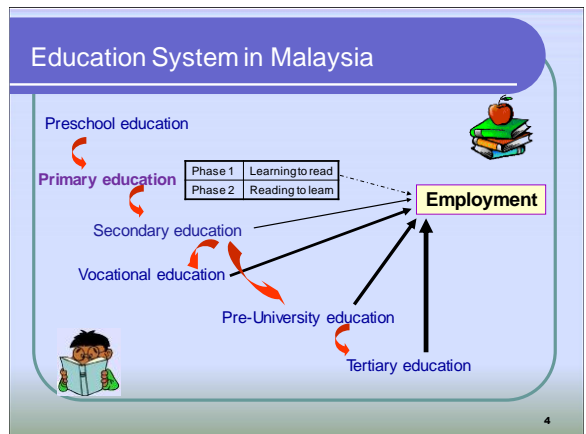
Day 1

8.30 am	Registration
9.00 am	What is dyslexia? Signs and symptoms of dyslexia Causes of dyslexia Break
10.30 am	Stories of some individuals with dyslexia
11.00 am	Sharing by Puan Diana bt Dato' Ibrahim Din, mother of a young boy with dyslexia Q&A Session
12.30 pm	Lunch
2.00 pm	Movie review of "Taare Zameen Par"
4.10 pm	Group discussion on movie review Q&A Session
5.00 pm	End of Workshop Day 1

Program

Day 2

9.00 am	How preschool teachers can help?
8.30	Characteristics of an effective instructional program for English for all students with and without learning disabilities
10.30 am	Break
11.00 am	Characteristics of an effective instructional program for Bahasa Melayu
12.00 pm	Q&A Session
1.00 pm	End of Workshop



### Some statistics in schools

#### In Malaysia

- 162 000 primary and secondary students cannot read, write and have age-appropriate numeracy skills<sup>1</sup>
- More than 11 000 primary school pupils in Pahang, with 765 in Primary 6, cannot read<sup>2</sup>
- Number of students who dropout from schools increases with each succeeding year<sup>3</sup>

	1995	2001	2003
Male	7 326	8 213	10 695
Female	5 670	5 384	9 865

- 85,000 Form One students can't read and write properly<sup>4</sup>

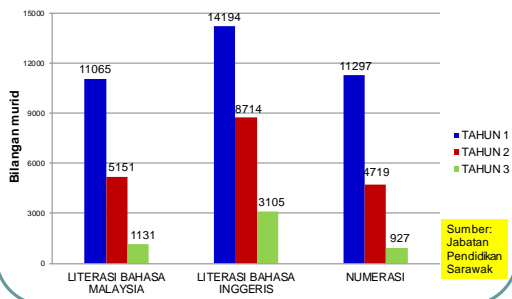
Sources: <sup>1</sup> 162 000 students can't read, write or even count. New Straits Times, 25 Mei 2006: 12  
<sup>2</sup> More than 11,000 primary school pupils cannot read. The Star, 23 November 2006: 29  
<sup>3</sup> Male dropout in primary schools alarming. The Borneo Post, 24 Februari 2006: 3  
<sup>4</sup> 85,000 Form One students can't read, write properly. Dep. Minister, The Borneo Post, 17 Sept 2009: 9

### The Star, 11 Oct 2011:20

2006-2010

### The Star, 10 Jan 2012:3

## Bilangan murid LINUS di Sarawak, 2015



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## Why does a significant number of students in primary and secondary schools cannot read?

There are four possible reasons for this:

1. They have **insufficient exposure** to reading activities and the language.
2. **Motivation problem** – do not find reading pleasurable, somehow reading has been associated with some fear, pain, discomfort or shame.
3. **Intellectual disabilities** – or mental retardation, though there are children with Down Syndrome who are reading and reading well.
4. Have **dyslexia** or symptoms of dyslexia.

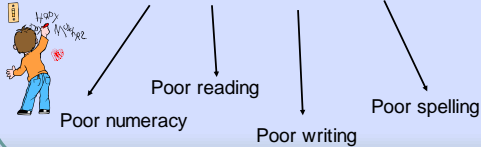


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## What is Dyslexia ?

– difficulty/problem (lexis) – words

difficulty with written/printed words despite average/ above average intelligence and adequate opportunities for learning

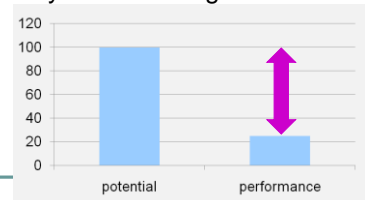


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## Key word

### Discrepancy

of what you know they can do ... and what they are achieving



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## Dyslexia ...

- is a specific learning difference
- is **neurological** in origin
- causes difficulties in learning to read, write and spell
- affects **short-term memory**
- affects mathematics, concentration, personal organization and sequencing
- tends to run in families
- is life-long

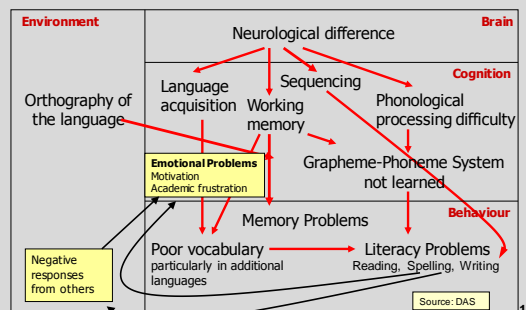


Percy, 1<sup>st</sup> documented case, 1896

International Dyslexia Association, 2002  
The Dyslexia Institute, 2002

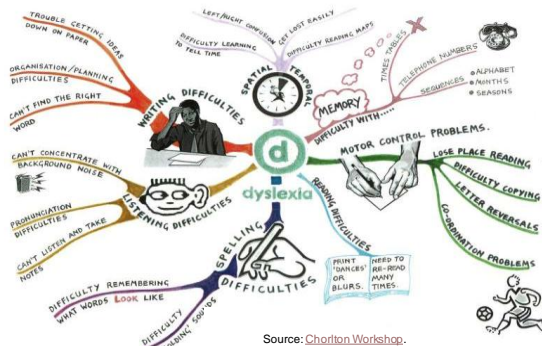
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## Morton & Frith's Causal Modelling Framework



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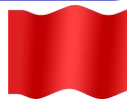
## Signs & Symptoms



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## Dyslexia: Signs & Symptoms 1

### Reading Difficulties



**Print 'Dances' and Blurs**  
 Trouble segmenting and blending  
 Misreading or omitting common small words  
 Reading slow and laborious  
 Need to reread many times  
 Easily lose place while reading

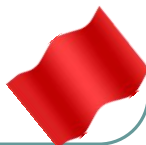


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## Dyslexia: Signs & Symptoms 2

### Spelling Difficulties

Difficulty with 'easy' or common everyday words  
 Difficulty remembering what words look like  
 Difficulty discriminating or 'holding' the sounds in a word



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## Dyslexia: Signs & Symptoms 3

### Listening Difficulties

Cannot listen and take notes  
 Trouble concentrating with background noises  
 Pronunciation difficulties with multi-syllabic words e.g. 'preliminary', 'aluminium animal'  
 Trouble finding the right word to say. Often end up saying 'thingy' and 'what's that thing I want to say?'



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## Dyslexia: Signs & Symptoms 4

### Writing Difficulties



Trouble getting ideas down on paper  
 Difficulties with grammar, sentence structure and/or punctuation  
 Difficulty getting writing into an organized plan  
 Cannot find the right word

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## Dyslexia: Signs & Symptoms 5

### Spatial/Temporal



Difficulty reading maps  
 Get lost easily  
 Left/Right confusion  
 Confusion with directional words – before/after, east/west, push/pull, under/over, .....  
 Difficulty learning to tell time as child

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## Dyslexia: Signs & Symptoms 6

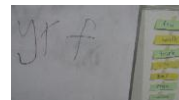
### Memory

Multiplication Tables  
Telephone Numbers  
Sequences: alphabet, months, season  
Facts, names, dates

## Dyslexia: Signs & Symptoms 7

### Motor control problem

Lose place reading  
Difficulty copying  
Hand-eye coordination problem  
Letter & numeral reversals  
Messy or poorly constructed handwriting



## Warning Signs & Symptoms in a Preschooler – 4-6 years old

### General

- Family history of similar difficulties
- May have walked early but did not crawl – was a “bottom shuffler” or “tummy wriggler”
- Persistent difficulties in getting dressed efficiently
- Persistent difficulty in putting shoes on the correct feet
- Unduly late in learning to fasten buttons or tie shoe-laces
- Enjoys being read to, but shows no interest in letters or words
- Often accused of “not listening” or “not paying attention”
- Excessive tripping, bumping into things, and falling over
- Difficulty with catching, kicking or throwing a ball
- Difficulty with hopping and/or skipping
- Difficulty with clapping a simple rhythm.

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## Warning Signs & Symptoms in a Preschooler – 4-6 years old

### Speech and Language

- Later than expected learning to speak clearly
- Persistent jumbled phrases; e.g. “*sirim kalam*” for “*kirim salam*”, “*tebby-dare*” for “teddy-bear”, “There is a sock in my hole” for “There is a hole in my sock”
- Use of substitute words or “near-misses” e.g. “lampshade” for “lamppost”
- Mislabelling – knows colours but mislabels them e.g. “black” for “brown”
- An early lisp e.g. “duckth” for “ducks”
- Inability to remember the label for known objects e.g. table, chair
- Persistent word-searching
- Confusion between directional words e.g. up/down, in/out
- Difficulty in learning nursery rhymes
- Finds difficulty with rhyming words, e.g. “cat”, “mat”, “pig”, “fat”
- Difficulty with sequence e.g. coloured bead sequence – later with days of the week or numbers.

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## Warning Signs & Symptoms in a Preschooler – 4-6 years old

	At Home	At School
Speaks like a younger child	Frequently mispronounces words - <i>aminal</i> for animal, <i>babana</i> for banana.	Does not talk as much or seem to know as many words as his/her peers.
Has trouble calling things by their right name	When asks for a fork, he/she hands over a spoon.	Struggles with learning and naming numbers, colours and the letters in the alphabet.
Struggles with rhymes	Unable to fill in the rhyming word in nursery rhymes (e.g. <i>One Two, Buckle my ...</i> ) and has even more difficulty making up rhymes on his/her own.	Does not recognize rhyming patterns, like <i>bug, rug, mug</i>
Can't seem to follow directions	Asked to get shoes and bag, only bag was taken.	Needs frequent reminders to follow classroom rules and routines.

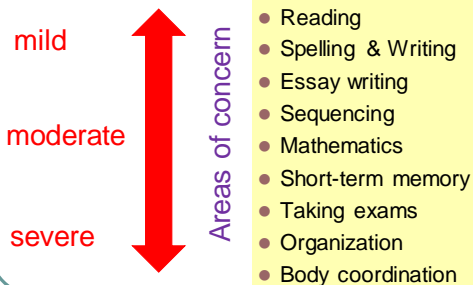
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## Strengths in a Preschooler with risk for dyslexia

- Quick “thinker” and “doer” – but not in response to instruction
- Enhanced creativity – often good at drawing – good sense of colour
- Aptitude for constructional or technical toys e.g. bricks, puzzles, Lego, blocks, remote control for TV and/or video, computer keyboard
- Appears bright – but seems an “enigma”

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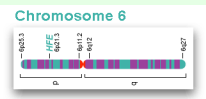
## Dyslexia is a spectrum disorder



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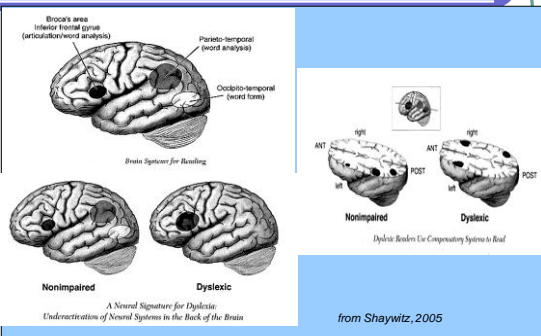
## Causes of Dyslexia

- Exact cause of dyslexia - still unknown
- fMRI shows that dyslexics use different areas of the brain to read
- Genetic disorder that interfered with the wiring of the brains before birth – candidate genes DCDC2 (in 6p21-p22) and Robo1 (in 3p12-q13)



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## Brain Imaging



## Left Brain

## Right Brain

| Logical  
 | Linear  
 | Rational  
 | Analytical  
 | Think in words  
 | Concrete  
 | Lyrical  
 | Critical  
 | Remember names

| Random  
 | Holistic  
 | Intuitive  
 | Synthesis  
 | Think in pictures  
 | Abstract  
 | Rhythmic  
 | Creative  
 | Remember faces

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## Dyslexia is a paradox

Its many deficits exist in a **sea of strengths** – thinking outside the box, intuitive and holistic view, imaginative and good with hands.

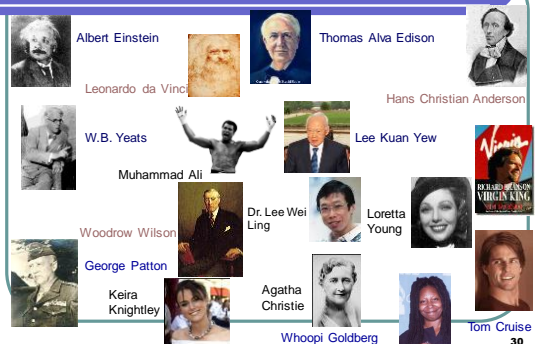
*Dyslexia is a gift*



blessed with  
 qñssəp wññ  
 DkormyW  
 © 1994 By Stacy Poulos

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## Famous people with dyslexia!



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## Some statistics

- Down Syndrome 0.001% (1/1000)
- Cerebral Palsy 0.29% (1/350)
- ADHD 1-20% (1/100 – 1/5)  
(3-5%, DSM IV, 1994)
- Dyslexia 5% (1/20) – 10% (1/10)**



Source: Centers for Disease Control and Prevention, US.  
www.cdc.gov

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## Research by UNIMAS (2004)



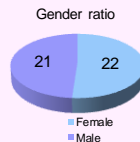
	Schools in Kuching	Number at risk for dyslexia	Gender	
			M	F
1.	SK A	4	3	1
2.	SK B	11	11	0
3.	SK C	6	4	2
4.	SK D	4	3	1
5.	SK E	12	11	1
6.	SK F	1	1	0
7.	SK G	6	5	1
8.	SK H	3	3	0
9.	SK I	7	5	2
10.	SK J	10	5	5
	(N= 1039)	64 (6.2%)	51 (ratio 4 : 1)	13

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## Dyslexia among university students (2009)

Public universities (n <sub>1</sub> =3267)	4.01%
Private universities (n <sub>2</sub> =1473)	4.31%
<b>All universities (N=4740)</b>	<b>4.11%</b>



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## Social-Emotional Implications of Poor Readers

Protracted difficulty in learning to read



can lead to

maladaptive mental and emotional habits

that endanger the  
general health of learning and well-being

Children who do not read by third grade often fail to catch up

A strong predictor of  
problems with the law

Are more likely to drop out of school, take  
drugs, or go to prison.



<http://www.childenofthecode.org/>

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## Other info about dyslexia

- Common problem
- Research in other countries → 4% - 10% student population
- Almost 15% students with reading difficulties in US dropout from school; only 2% complete secondary education
- Almost 50% youth with criminal records in Sweden are unable to read well
- Almost 50% youth with drug problems cannot read well

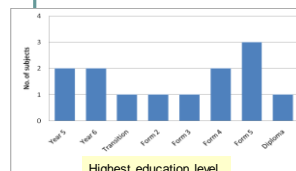
Sources: Prison Reform Trust (2003/2004). Report on 'Social Characteristics of Prisoners'.  
Lumb, L. (2005). Dyslexia within the prison service. <http://www.dyslexia-society.com/mag50.html>  
Svensson, I., Lundberg, I. & Jacobson, C. (2001). The prevalence of reading and spelling difficulties among inmates of institutions for compulsory care of juvenile delinquents. Dyslexia 7: 62-76.  
Alm, J. & Anderson, J. (1997). A study of literacy in prisons in Uppsala. Dyslexia 3: 245-246.  
Swaby, E.R.B. (1989). Diagnosis and Correction of Reading Difficulties. Allyn & Bacon.

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## Literacy among young prisoners in Sek. Integriti in Kuching (2010)



- Universal sample of 13 inmates
- All males
- 18 to 21 years old, mean age 19.8 years
- Imprisonment for 4 months to 2+years



3 did not complete primary school – 23%  
Another 9 did not complete secondary school – 69%

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## Youth jailed for breaking into STU headquarters

The Borneo Post 29/7/06 : 12

KUCHING: A youth was sentenced to two months in jail for breaking into the headquarters of Sarawak Teachers' Union (STU) at Jalan Rock here.

Nicholas Kueh Hui Kian, 25, pleaded guilty before Magistrate Maris Agin who convicted him under Section 436 of the Penal Code, which carries a maximum three years' imprisonment with or without a fine.

THE BORNEO POST

Jobless youth further remanded over 92.64g

Sarawakian

plead

guil

escap

OTA BAHARU: A unemployed

man, who escaped

custody while being treated at the

Universiti Sains Malaysia Hospital.

According to the brief facts of the case, their act of stealing was caught on the CCTV system installed at the factory.

The metal pieces were also recovered at a scrap metal company, which bought them for at least RM200.

In yet another

was

three

public.

year-old unemployed youth charged with

alleges statutory rape

BORNEO POST 3/8/06 : 4

A Form 3 student who reportedly has been having an intimate relationship with her boyfriend has become pregnant and her father took her to lodge a police on Tuesday night claiming statutory rape.

Within an hour the police arrested the 16-year-old boyfriend who is a school dropout whereas the girl was taken to hospital for medical examination.

Irrelevant case on Tuesday night, the police arrested a 30-year-old woman after they found her hiding a packet of substance believed to be ice drug in her bra.

She was arrested with a man two years her junior when the police found them in a hotel room at Jalan Khoo Pheng Leong.

Are these persons sad cases of lost potentials??

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## Be alert for non- or poor readers

Victor Hugo

"He who opens a school door, closes a prison."

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Captain James Anthony Tan  
Pilot and world record holder

### Difficulties

- From between the ages of 6 – 9 years old, he struggled with reading and writing
- "When I was a kid, trying to learn, read and write was tough. Staying focused and disciplined was hard work. It is usually fun for a child to explore about life and learn. But for me, it was a struggle and learning to read or write was tough. The letters are jumbled in my mind. I was unable to recognize words, difficult to pay attention, was fidgety and stammered in school."
- When aged 17 years, took an aviation course in Western Australian Aviation College - had to work 5x harder than other course mates
- Became an accomplished pilot at aged 21 years and won the youngest pilot to fly a single piston engine aircraft in an expedition across 14 different countries (13 804 nautical miles) award in the Malaysia Book of Records, and the youngest person to circumnavigate solo by aircraft in the Guinness Book of Records and bestowed with 'Man of the Year 2013' Award by World Record Academy as youngest pilot to fly around the world

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Captain James Anthony Tan  
Pilot and world record holder

### Social-emotional impact

- Frustration
- Feeling ashamed

### Coping strategies

- Work harder (staying focus and be disciplined)
- Visualization

### Strengths

- James was very active in outdoor and sports activities – has a Professional Association of Diving Instructors license
- He sees in himself strengths he shared with other famous dyslexics like having a great imagination and being a global picture thinker, has a strong will power and perseverance and is a good problem-solver



Vincent Low Sun Wing  
Chief Illustrator / Graphic Designer  
Grey Group Kuala Lumpur

### Difficulties

- Had difficulties in Maths, English and BM subjects (from primary to secondary school)
- In the workplace, still has problems with writing & reading
- For example, filling in a timesheet. Although he took the whole day to do this, he was still unable to finish it

### Social-emotional impact

- Really hated reading, found it very tired to read
- Frequently caned by teachers and even the Headmaster.
- Didn't do any homework and didn't want to go to school (always escape from class and school)
- Terrible words used by teachers – 'stupid'
- In Form 2, he joined a group of friends who were gangsters until Form 5. They accepted him and he joined them to ponteng class. They took 'weeds' (ganja) and he experimented once
- Felt very left out, alone and excluded by friends. Unhappy because other students liked to bully him and he didn't fight back
- Felt confused



### Coping strategies

- Joined a group of friends who accept him
- Focus on his strengths which is art, drawing and music

Graduated from The One Academy with Diploma in Illustration

### Strengths

- Found solace in drawing. Loved to draw
- Focus on his strengths and talents which are in tae kwan do, playing musical instrument and art
- Over the years of being a professional illustrator, he is a complete crafter with the eye for details – has a solid art background and strong art direction and design in print, illustration, TV and photography; including but not limited to digital imaging, storyboards and character design
- Perceives himself as having the traits of good advertising person, very dedicated to his work, dependable with good working ethics and great with people too
- Strong self-motivation - Always want to draw something not ordinary, so will try and try, and if successful, will feel like striking a jackpot

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## Kes jenayah kanak-kanak meningkat

DARI MUKA 1

tanpa mengambil kira kepanduan mereka dalam bidang lain yang melibatkan psikologi golongan itu di tahap rendah disebabkan

[illegible]

Pengasingan pelajar kurang bijak ke kelas tercorot dikenal pasti antara punca kanak kanak berumur antara 10 hingga 18 tahun terabit jenayah. Ini disebabkan faktor pengaruh negatif rakan sekelas yang boleh mewujudkan persekitaran tidak kondusif untuk pembangunan mental mereka.