

Professional Development Programme for Teachers on Secondary School Seminar on 'Differential Instruction and Teaching Strategies for Students with Special Educational Needs in Learning English Language of Senior Secondary Levels at Mainstream Secondary Schools in Hong Kong'

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Date: 25 February 2016 (Thursday)

Time: 9:00a.m. - 12:30pm

Venue: Room WP01, Podium EDB Kowloon Tong Education Services Centre

Understanding the difficulties of Students with Special Educational Needs in learning English Language of Senior Secondary Levels in Mainstream Secondary schools in Hong Kong

with particular reference to students with:

- Specific Learning Difficulties in Reading & Writing
- Autism Spectrum Disorder
- Attention Deficit Hyperactivity Disorder

Etiology

Autistic	Dyslexia	ADHD
Genetic predisposition	Genetic predisposition	Genetic predisposition
Environmental factors acting on the mother	Difference in brain structure (the language areas in the left hemisphere smaller than they are in a standard brain).	Brain function and structure Prefrontal cortex may be smaller Imbalance in the level of neurotransmitters
Environmental factors affecting the child (Newschaffer, 2002)	Difference in brain functions (the areas responsible for language skills work in an unpredictable way)	 Others: Exposure to toxic substances during pregnancy Being born prematurely Having a low birthweight Brain damage either in the womb or in the first few years of life Exposure to high levels of toxic lead Acquired brain injury due to trauma or disease

Different brain structures and functions of students with:

- Specific learning difficulties (Dyslexia)
- Autism Spectrum Disorder (ASD)
- Attention Deficit Hyperactivity Disorder (ADHD)

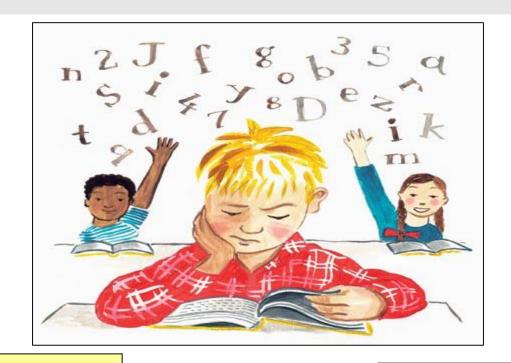
Specific Learning Difficulties in Reading and Writing (Dyslexia)

Definition of dyslexia

"A specific learning disability that is neurological in origin..."

"Specific and **significant impairment in the development of reading** skills that is **not** solely accounted for by mental age, visual acuity problems, or inadequate schooling."

Manifestation of Dyslexia



Difficulties in Phonological processing

Difficulties in Orthographic processing

Diagnosing dyslexia

 Cognitive ability > Reading ability (Cognitiveachievement discrepancy)

- Abilities are measured using standardized
 - Cognitive Tests
 - Achievement Tests

Difficulties in Phonological processing

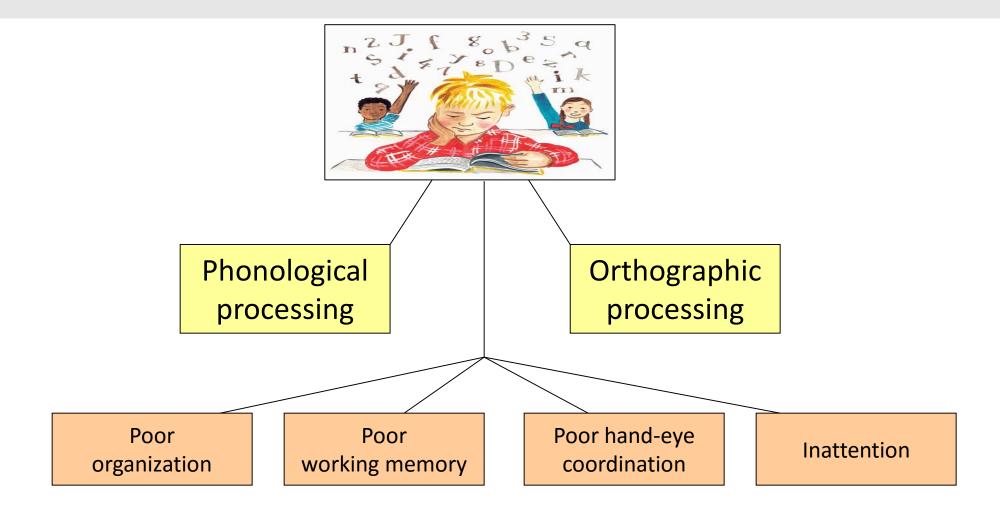
- Use of sounds in language to process written and oral language
- e.g. blending sounds to form words, noticing words that rhyme

/b/.../a/.../t/...
$$\rightarrow$$
 bat /c/.../a/.../p/... \rightarrow cap

Difficulties in orthographic processing

- Ability to represent the unique order and array of letters that define a printed word
- Notice the difference between the words "friend" and "freind"

Other related difficulties



^{**}These may or may not be present in students with dyslexia**

Impact on literacy development

Students with dyslexia have difficulties in processing

- language sounds (phonological) and/or
- written text (orthographic) thus leading to difficulties in:
 - ① converting letter-to-sound
 - ② spelling
 - ③ reading comprehension
 - 4 writing

Dyslexia in Chinese = Dyslexia in English?

Chinese dyslexics exhibit phonological processing difficulties in learning English as a Second Language ESL (Ho & Fong, 2005)

Phonological processing has been shown to be transferable across first and second languages, specifically from Chinese to English (Gottardo, Yan, Siegel 2001)

Difficulties are compounded by inherent challenges encountered by most ESL students

- logographic to alphabetic
- differences between Cantonese & English enunciations
- grammatical differences

Autism Spectrum Disorder -Two core deficits

Social Impairment Repetitive & rigid behaviours

Difficulties in Learning: Students with ASD

- Organizational difficulties
- Distractibility
- Sequencing problems
- Inability to generalize,
- Literal thinking
- Emotional Instability
- Selective attention
- Obsessive compulsive behaviors
- Poor compliance to the 'social rules of the game'

Difficulties in Organization

- Organization requires an understanding of what one wants to do and a plan for implementation which are complex, interrelated, and abstract for students with autism. When faced with complex organizational demands, they are frequently immobilized and sometimes never even able to begin their required tasks.
- Developing systematic habits and work routines have been effective strategies for minimizing these organizational difficulties.
- Use of checklists, visual schedules, and visual instructions concretely showing autistic students what has been completed, what remains to be done, and how to proceed is helpful

Distractibility

- Reacting to outside car noises, visually following movements in the classroom instead of completing the required work
- Identifying what is distracting to each student visual stimuli or auditory stimuli, responding to extraneous noises or visual movements as well as not focusing on central aspects of required tasks.
- Environmental modifications can be made, which might involve the physical make-up of a student's work area, the presentation of work-related tasks etc.

Difficulties in Sequencing

- Because sequences involve these relationships, students with ASD often cannot remember the precise order of tasks because they focus concretely on specific details instead of seeing the relationships between them.
- Useful strategies
- ✓ Consistent work routines are helpful
- ✓ Visual instructions highlighting sequences of events
- ✓ Systematic work habits e.g. from left to right

Difficulties with generalization

 Appropriate generalization requires an understanding of the central principles and the subtle ways in which they are applicable to other situations.

• Students with autism frequently have difficulty applying what they have learned in one situation to similar settings.

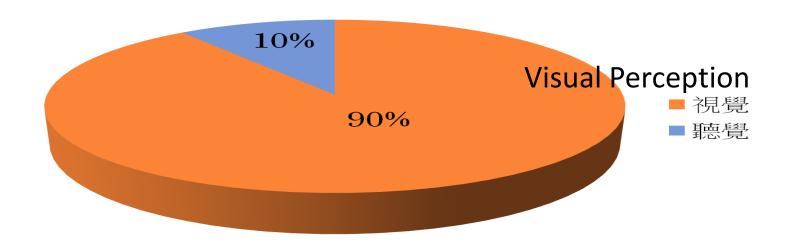
• Focusing on specific details, students with autism frequently miss these central principles and their applications.

Literal thinking

- Students with autism may be especially adept with mathematics, computers, and logic puzzles
- They tend to take things literally.
- They cannot fully understand metaphors, sarcasm, and figures of speech.
- Lacks sense of humor

Learning preference for students with ASD





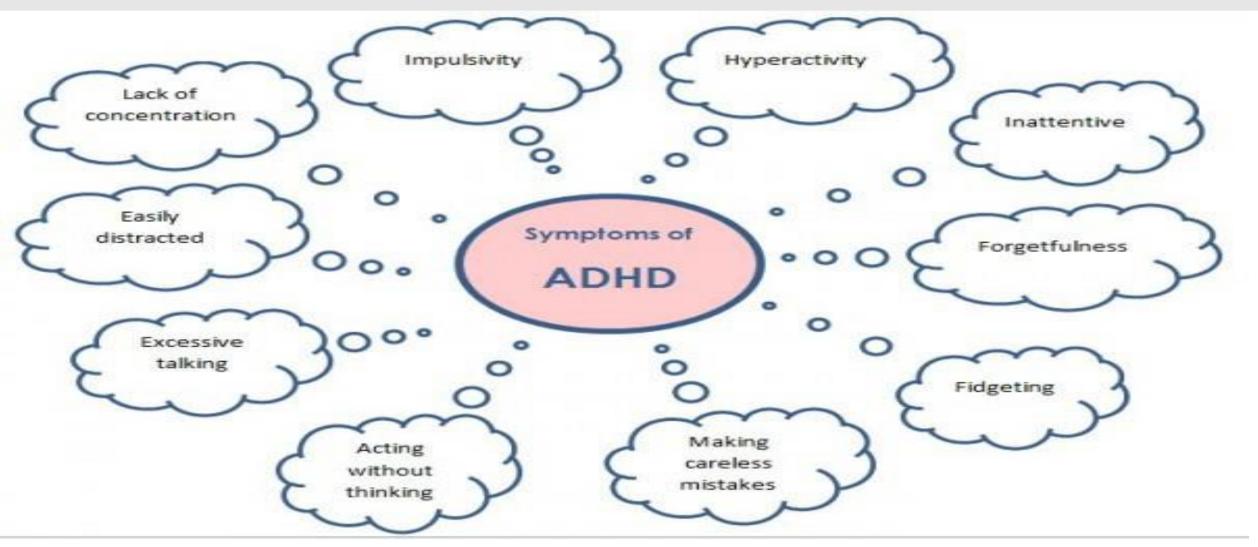
(Hodgdon, 1999)

Attention Deficit Hyperactivity Disorder (ADHD)

Subtypes of ADHD

- 1. predominantly inattentive type
- 2. predominantly hyperactive-impulsive type
- 3. combined type

Characteristics of ADHD



Medication ?

- Effectiveness (80%)
- Has to monitor the type of medication and its dosage
- Know the possible side effects
- Keep a log to monitor effectiveness

Selected Stimulant Medications Used in the Treatment of ADHD

Medication	Frequency	Peak Effect	Duration of Action
Amphetamines Short Acting:			
Dexedrine Adderall	b.i.d. or t.i.d. b.i.d. or t.i.d.	1-3 hours 1-3 hours	5 hours 5 hours
Long Acting: Dexedrine Spansule	q.a.m.	1-4 hours	6-9 hours
Adderall XR	q.a.m.	1-4 hours	9 hours

Methylphenidates			
Short Acting:			
Ritalin	t.i.d.	1-3 hours	2-4 hours
Focalin	b.i.d.	1-4 hours	2-5 hours
Long Acting:			
Ritalin SR	q.a.m. or b.i.d.	3 hours	5 hours
Metadate CD	q.a.m.	5 hours	8 hours
Concerta	q.a.m.	8 hours	12 hours

Source: Adapted from Greenhill, L., "Are the New Stimulants Really Better?" AACAP Annual Meeting, Oct. 2001.

Comparison of intervention effects

Medication + Behavior therapy > Behavior therapy alone Medication + Behavior therapy > Medication alone

Thinking

Prioritizing / Time Management

Organization

Working Memory

Self-Regulation

Task Initiation

Flexibility

Behavioral Control

Difficulties of Students with Different Special Educational Needs (SEN) in learning English Language of Senior Secondary Levels in HK

Reading 1 (Paper 1) 1.5 hours (20%)

Level 2 General comprehension

The main idea of a simple paragraph is understood when this is clearly signalled.

Fact is distinguished from opinion in simple texts when this is clearly signalled.

Specific comprehension

Explicitly stated information is understood in simple texts.

The meaning of words is identified when a simple and familiar context is given.

Awareness of style

Basic stylistic features can be recognized.

Level 3 General comprehension

The main theme or ideas of a paragraph are identified if a text is straightforward.

Explicitly expressed views and attitudes are identified.

Specific comprehension

Explicitly stated information is understood in fairly complex texts on familiar themes.

Straightforward inferences are made.

The meaning of words and phrases is identified when a familiar context is given.

Awareness of style

Tone and mood are interpreted in simple texts.

Writing (Paper 2) 2 hours (25%)

Level 2 Writing

Content

There are some examples of relevant content.

Some features of familiar genres are used.

Language and style

Simple sentences are well formed.

Most basic punctuation is used correctly.

Grammatical accuracy is sufficient to make some sentences comprehensible.

Simple vocabulary is appropriate and most is spelt correctly.

Organization

The structure of the writing can be discerned when the genre and text type is simple and familiar.

There is some evidence of paragraphing.

There are some simple links between sentences and paragraphs.

Level 3 Writing

Content

Most of the content is relevant.

Several examples of creativity and imagination are evident in the writing.

Language and style

Simple sentences, and some complex sentences are well formed.

Basic punctuation and some basic grammatical structures are accurate.

Common vocabulary is used appropriately and spelt correctly.

There is some evidence of use of register, tone and style appropriate to the text type.

Organization

Some sections of the writing are coherent and appropriate to the genre and text type.

Paragraphing is effective in parts.

Cohesion between some sentences and paragraphs is successful.

Listening & Integrated Skills (Paper 3) @2 hours (30%)

Level 2 Listening

General comprehension

The main idea of a simple spoken text is identified when it is clearly signalled.

Fact is distinguished from opinion in simple spokentexts when it is clearly signalled.

Specific comprehension

Explicitly stated information is understood in simple spoken texts when delivered at moderate speed in familiar accents.

Literal language is understood when the context is clear.

Awareness of sound patterns

Simple emotions can be recognized from the speakers' delivery.

Integrated Skills

Some Data File instructions are followed in part.

Some relevant information is located and transferred from simple texts.

Relevant content is included in the writing task when its relevance has been clearly signalled in the text(s).

Short and simple sentence types are used accurately enough in writing to convey meaning.

Some features of familiar genres are used.

There is some evidence of paragraphing.

Level 3 Listening

General comprehension

The main theme or ideas of a spoken text are identified when they are straightforward.

Explicitly expressed views are identified.

Specific comprehension

Explicitly stated information is understood in fairly complex spoken texts when delivered at moderate speed in familiar accents in familiar situations.

Straightforward inferences are made from literal language.

Awareness of sound patterns

Straightforward attitudes of speakers are identified based on stress and intonation.

Integrated Skills

Some Data File instructions are understood and followed appropriately.

Most relevant information is located, understood and transferred appropriately from straightforward texts on familiar themes.

Some of the content relevant to the writing task/purpose is included. Some fairly complex written sentences are accurately constructed and punctuated.

Register, tone and style are appropriate in straightforward, familiar types of writing, and features of familiar genres are used.

The organization is coherent in parts of the text.

Speaking (Paper 4) (10%)

Level 2 Speaking

Pronunciation and Delivery

Pronunciation of familiar words can usually be understood within the overall context.

Stress and intonation are used appropriately with simple utterances.

Fluency is evident in response to very simple prompts on familiar topics.

Communication strategies

Basic expressions and strategies are used to respond purposefully to others.

Vocabulary and language patterns

A small range of simple vocabulary is used appropriately. Some basic language patterns are used accurately in brief exchanges.

Ideas and organization

Some relevant simple information and ideas are expressed successfully.

Some ideas and information are expanded on briefly.

There is brief participation in conversation when prompted.

Level 3 Speaking

Pronunciation and Delivery

Pronunciation of most words can be understood. Some stress and intonation patterns help convey meaning. Fluency is evident in response to prompting.

Communication strategies

Some expressions and strategies are used to respond purposefully to others.

Vocabulary and language patterns

A range of simple vocabulary is used appropriately. Simple language patterns are used accurately and appropriately. Errors do not usually impede communication.

Some ideas and information are relevant and expressed clearly.

Detail is added to some responses.

Conversational exchanges are sustained when prompted.

Difficulties of Students with Different SEN in learning English Language

	Reading	Writing	Listening(integrated)	Speaking
Dyslexic				
Autistic				
ADHD				

Difficulties of Students with Different SEN in learning English Language

	Reading	Writing	Listening(integrated)	Speaking
Dyslexic	 Speed (Fluency) Accuracy Understanding the questions Insufficient time 	 Speed (Fluency) Accuracy Limited Vocabulary Poor spelling Insufficient time 	 Speed (Fluency) Accuracy Understanding the questions Poor spelling Insufficient time 	Comprehending the text and questions
Autistic	 Fixate at certain questions Mismanage time Misinterpret real meaning of questions Cannot make inferences 	 Misinterpret real meaning of questions Narrow Focus Mismanage time Weak narration 	 Mismanage time Misinterpret real meaning of questions Cannot make inferences 	 Follow group Interaction rules Not answering the exact points Side tracking Passivity/Over- assertiveness Selective interest
ADHD	 Mismanage time Easily distracted Impulsively misread/leave out questions 	 Disorganised Carelessness Misinterpret question Fleeting attention 	 Fleeting attention Cannot focus on the taped text Carelessness 	 Cannot follow the rules of the group interaction Cannot follow the flow of the discussion Cannot regulate emotions Impatient

Thanks