

Whole School Approach in Inclusive Practices

Special Education I

Dr. Kean Poon

What are the five domains of development?

- The Individuals with Disabilities Education Act (IDEA) recognizes five developmental **domains**:
 - ✓ Adaptive
 - ✓ Cognitive
 - ✓ Communication
 - ✓ Physical
 - ✓ Social/Emotional

Adaptive Development

- Self-Help Behaviors
- Social Behaviors

Cognitive Development

- Attention
- Perception
- Processing
- Memory

Communication Development

- Hearing
- Language
- Speech
- Vision

Physical Development

Social or Emotional Development

Major types of special educational needs include:

- ☐ Hearing impairment
- ☐ Visual impairment
- ☐ Physical impairment
- ☐ Intellectual disability
- ☐ Emotional and behavioural difficulties
- ☐ Attention deficit and hyperactivity disorder
- ☐ Autism Spectrum disorder
- ☐ Speech & language impairment
- ☐ Specific learning difficulties
- ☐ Gifted

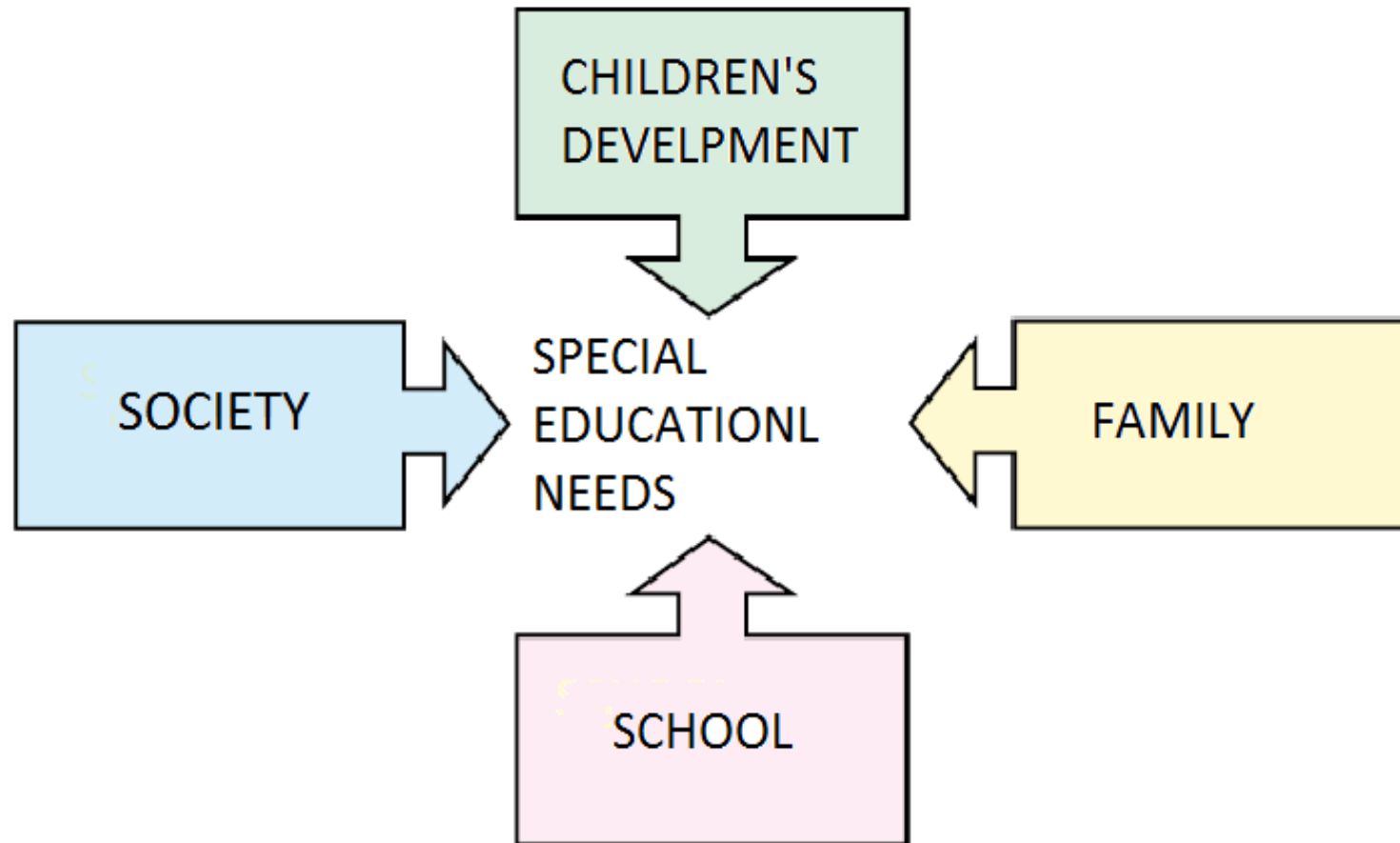
- ✓ Adaptive
- ✓ Cognitive
- ✓ Communication
- ✓ Physical
- ✓ Social/Emotional

Nature and Cause of SEN

Different causes may account for a student's disabilities or special educational needs.

Some are in born or hereditary, others are the result of an accident or illness.

Nature and Cause of SEN



Nature and Cause of SEN

One of these causes is brain damage. Brain cells may be born defective, or damaged to such an extent that the individual's intellectual, motor or **sensory functions** are impaired. Brain damage may occur at any stage of development as a result of genetic factors, effects of drugs, infectious diseases, or injuries, etc.

Nature and Cause of SEN

- There are also environmental causes.
- Students with behavioural and emotional problems, or without **motivation** in learning, etc. are mostly related to environmental factors.
- An unstimulating and **deprived environment** may have constraints on intellectual development. Yet a stimulating environment will normally be conducive to its development.

How do children look at each other?

- Do children form opinions about other people based on their appearance, posture, language, and so on? Why and in what ways?
- **Video**

Stereotypes

- The ability to distinguish friend from **enemy** helped early humans survive, and the ability to quickly and automatically **categorize** people is a fundamental quality of the human mind.
- Categories give order to life, and every day, we group other people into categories based on **social and other characteristics**.
- We attribute a defined set of characteristics to a group based on their appearance or our **assumptions**.
- This is the foundation of **stereotypes**, **prejudice** and, ultimately, **discrimination**.

An exaggerated belief

- A *stereotype* is an exaggerated belief, image or **distorted truth** about a person or group — **a generalization that allows for little or no individual differences** or social variation.
- Stereotypes are based on:
 - images in mass media,
 - reputations passed on by parents, peers and other members of society.
- Stereotypes can be positive or negative.

Prejudices

- A *prejudice* is an opinion, prejudgment or attitude about a group or its individual members.
- Prejudices are often
 - accompanied by ignorance, fear or hatred
 - formed by a complex psychological process that begins with attachment to a close circle of acquaintances or an “in-group” such as a family.
 - aimed at “out-groups”

Prejudices and Discrimination

- We stereotype people when we are **unable or unwilling to obtain all of the information** we need to make a fair judgment about people or situations. In the absence of the so called 'total picture,' to stereotype people in many cases allow us to 'fill in the missing pieces of information.'
- *Discrimination* is **behavior** that treats people unequally because of their group memberships. Discriminatory behavior often begins with **negative stereotypes** and **prejudices**.

What can you do to breakdown negative stereotypes?

- **Learned at an early age**

The first step may be to admit biases are learned early and are counter to our commitment to **just treatment**. Parents, teachers, faith leaders and other community leaders can help children question their values and beliefs and point out subtle stereotypes used by peers and in the media. Children should also be surrounded by cues that **equality matters**.

What is Communication?

- What is Speech?
- What is Language ?
- What is Literacy ?
- Do you agree?
 - Almost everyone knows a language.
 - Not everyone is literate.



Communication

- Use of language and or speech to convey a **message** to other people.
- 93% of information transmitted in conversation is done so non-verbally
- Communication requires a sender and receiver.
- Receiver – needs to be able to receive it in the first place. They need to hear, listen and understand the message and then show they have understood it through their response.
- Sender – needs opportunities to communicate, an ability to formulate a message in thought and to then convey the message in an appropriate form.



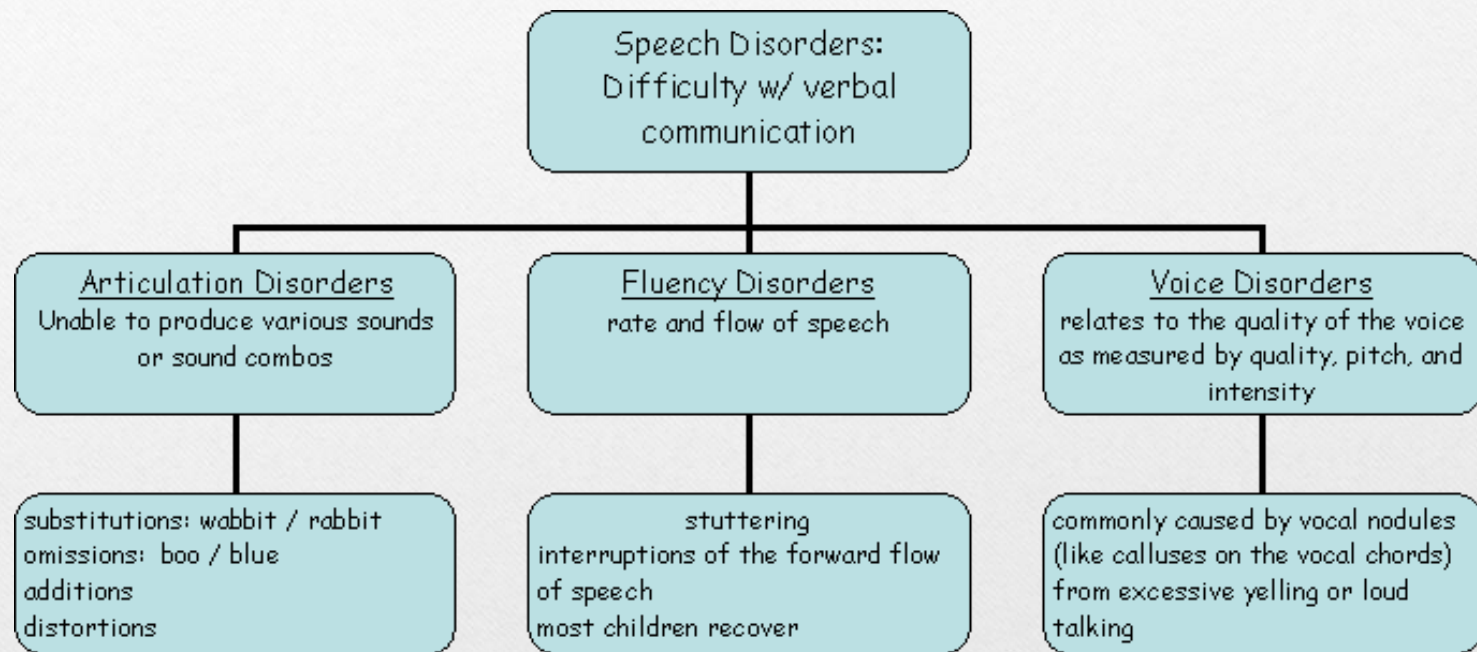
Difficulties in communication:

- Motivation to communicate with others
- Hearing problem
- Listening and attention
- Understanding of language
- Knowledge of vocabulary and concepts
- Clear speech
- The ability to use language meaningfully with attention to grammatical structure
- Social awareness of how to use language in an appropriate manner for the context

Speech

- Articulation of sound
- Co-ordination of the tongue, teeth, soft and hard palates, abdominal muscles and breath to produce sound.
- Speech involves language because you have to have a thought to articulate and then be able to construct this thought into words.

● 言語障礙 (Speech Disorder)



Causes

- Physiological disorders
- **Oral structure**(口腔的結構)with function (such as **coarse tongue**(粗舌), not the **whole dentition**(齒列不整), **Cleft lip**(唇裂)/ **Cleft palate**(腭裂)
- Breathing and phonation
- Mood disorders
- Short attention span
- Poor communication motives

Diagnosis:

- The child's hearing is almost always tested first, in order to make certain he or she is hearing speech.
- Depending on the child's age, reading ability is also tested if appropriate.
- The speech-language pathologist also examines the child's mouth, jaw and tongue and has the child perform simple movements to assess muscle tone and coordination.
- For some communication disorders, such as selective mutism: children who know how to speak, and speak well, but only at certain times, to certain people or to certain beloved toys like a doll or teddy bear; a psychiatrist may be necessary. The speech-language pathologist may institute a program of behavioral treatment to reduce social anxiety, for instance, but he or she may also call in a child counselor or therapist to help.

Articulation

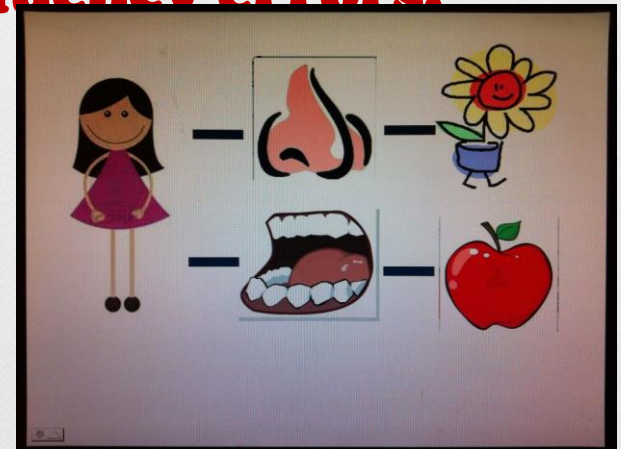
- In essence, an articulation disorder is a SPEECH disorder that affects the **PHONETIC** level.
- The phonological or phonemic level is in charge of the brainwork that goes into **organising the speech sounds into patterns of sound contrasts**. The sounds need to contrast with each other, or be distinct from one another, so that we can make sense when we talk.
- The child has difficulty saying particular consonants and vowels. The reason for this may be unknown (e.g., children with functional speech disorders who do NOT have serious problems with muscle function); or the reason may be known (e.g., children with serious problems with muscle function).

Fluency

- They might be characterized by an interruption(中斷)in the flow or rhythm of speech
- People with speech disorders have trouble using some speech sounds, which can also be a symptom of a delay

There are three basic kinds of fluency errors:

1. Distortions(扭曲) & Lisp(口齒不清)
2. Omissions(遺漏)
3. Additions(添置)



Fluency Disorder

Stuttering(口吃)

- ❑ The repetition of words or phrases
- ❑ Syllables extend
- ❑ Speak suddenly interrupted
- ❑ Genetic or psychological disorders
- ❑ Mouth muscle activity uncoord
- ❑ The omission of words or phrases



Voice disorder

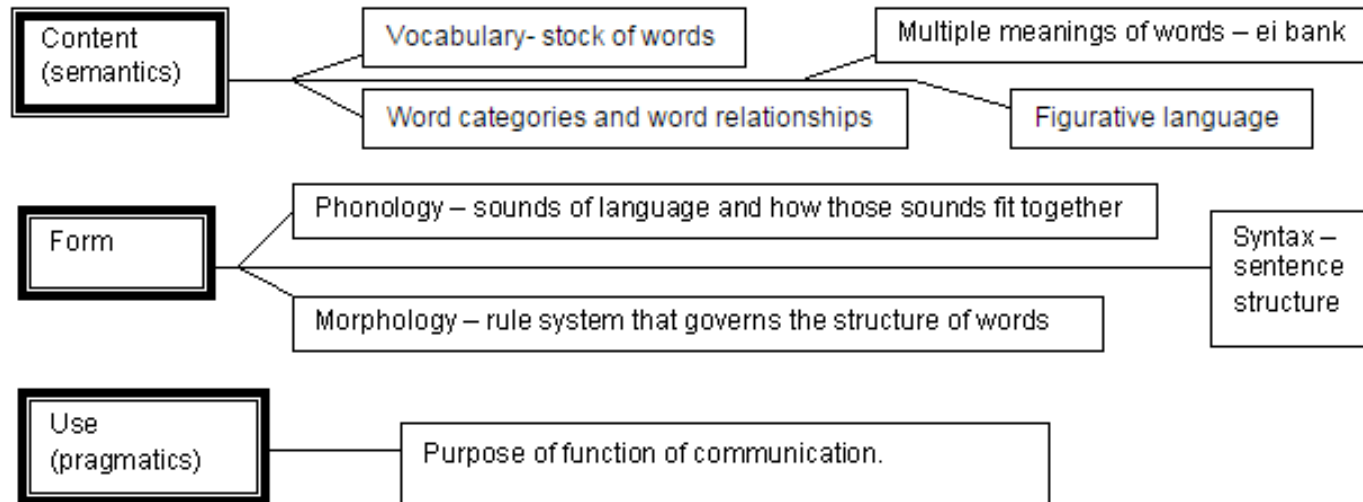
- ❑ Voice developmental delay, abnormal oral structures
- ❑ The mouth muscle activity weak ability to control uncoordinated
- ❑ Hearing impairments arising

Language

- Language is a **rule** governed process and incorporates the following aspects: grammar (syntax), meaning (semantics), use (pragmatics), vocabulary.
- Thinking
- Remembering: working memory, long term memory
- Reasoning
- Predicting
- Language without speech e.g. writing, sign language.

The Three Components of Language

Language is divided into three components



特殊語言障礙

Specific Language Impairment



Specific Language Impairment

- SLI refers to a form of developmental language impairment in which children demonstrate unexpected difficulties with the acquisition of **spoken language** 口語 which refers to the **comprehension** 理解 and **expression** 表達 of verbal language (Tomblin et al., 1997).
- There is no obvious accompanying condition such as **MR, neurological damage or hearing impairment** (Leonard, 1998).
- **Developmental Language Delay** 語言遲緩 is for preschoolers with discrepant language problems. If problem persists beyond **4 years** old, they are diagnosed as SLI.

Prevalence

- 《香港兒童口語(粵語)能力量表》 in 2006, estimated prevalence rate is 5%
- Western countries 7% (Leonard, 1998)

Gender

- boys are 3 times more likely than girls to be diagnosed with SLI

Prognosis:

- Persist beyond childhood
- Many children with SLI at the age of 5.5 years who continued to have persistent spoken language problems at teenagers had significant written language impairment.

Comorbid conditions: (Cantwell, Baker & Mattison, 1979; Talal, 1988)

- Dyslexia, ADD, developmental coordination disorder.

Diagnostic criteria for SLI (Leonard, 1998)

Factors	Criteria
Language ability	Language test score ≤ 1.25 SD
Non-verbal IQ	P-IQ ≥ 85
Hearing	Pass screening at conventional level
Otitis media中耳炎	No recent episode
Neurological dysfunction	No evidence of seizure disorders, cerebral palsy, brain lesion.
Oral structure	No structural anomalies
Oral motor function	Pass screening at conventional level
Physical and social interaction	No impaired reciprocal social interaction or restriction of activities

Behavior Characteristics of children with SLI

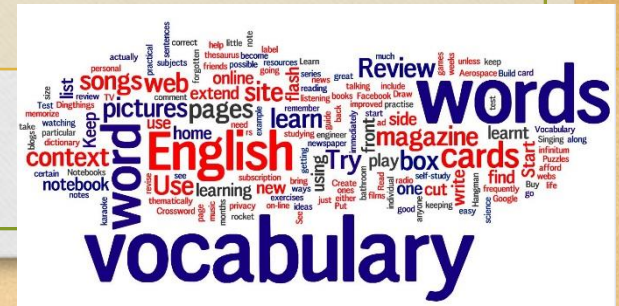
1. Delay in starting to talk (First words may not appear until 2 years old or later)
2. Difficulties in saying what they want to, even though they have ideas
3. Difficulties in understanding complex language, especially when speaker talks rapidly
4. Participate less in verbal social exchanges
5. Inattentive and has difficulty with concentration
6. Isolated themselves from social lives



Learning Characteristics of children with SLI

Languages subjects (e.g.:Chinese, English)

1. Have difficulties in reading and writing
2. Reading relies on Grammar and syntax semantics ,phonological skills
3. Restricted vocabulary in production and comprehension
4. Wrong grammar, words.(For example: 「這枝鉛筆有多高？」)
5. Problems in organizing sentences



Mathematics

1. Problems in symbolic understanding
2. Difficulties in understanding abstract principles

Overall

1. Weak verbal short-term memory
2. Hesitates or refuses to participate in activities where speaking is required
3. Overall academic achievement may be lower than expected



Language disorder



- Language disorder in children refers to problems with either :
- Getting their meaning or message across to others (**expressive language disorder** 表達性語言障礙), or
- Understanding the message coming from others (**receptive language disorder** 接受語言障礙)
- Children with an expressive language disorder have problems using language to express what they are thinking or need.

Receptive language difficulty

- Difficulties in **understanding** spoken language at the level expected for their age.
- Can be difficult to identify as children become adept at using visual and contextual cues to support their understanding of what is being said.
- Problems arise where the complexity of the language being used outstrips these types of support, as the demands of the curriculum increase.

Receptive language difficulty

- *Points to look out for include:*
- Difficulty following instructions
- Severe and persistent expressive language difficulties
- Attention problems, especially in large groups.
- Difficulty in answering questions.
- Behaviour problems (appears off task, inattentive).
- Misunderstanding of written language and of concepts.

Expressive Language Difficulty

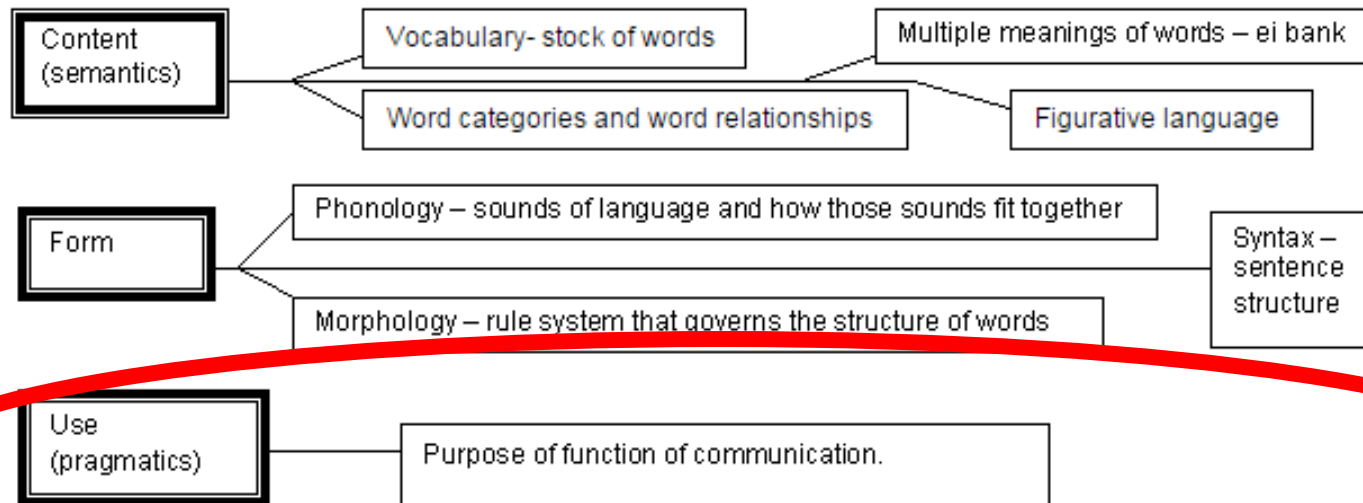
- The ability to **use** words and to combine words into sentences using appropriate vocabulary, concepts, grammatical structure and meaning.
- All of the above are dependent on the ability to retrieve words and syntax from the memory banks.

Expressive Language Difficulty

- *Points to look out for include*
- Withdrawn and isolated
- Difficulty establishing relationships
- Behaviour difficulties; may get easily frustrated.
- Use of gesture and empty words such as 'thingy' and 'this' or 'that' .
- Difficulties with literacy as written language reflects spoken language.
- Difficulties with sequencing, predicting and inferring.

The Three Components of Language

Language is divided into three components



Social Use of Language (pragmatics)

- Essential for successful relationships with others and managing all aspects of life:
- Using language for different purposes.
- Adapting language to the listener.
- Following the rules of conversation and narrative (topic maintenance, repairs, eye-contact).
- Understanding non-verbal rules.



DIY blower spinner



Preschool Activity- Snowstorm in a Bag.



Paint Blowing Art - Oral motor practice.



- M&M Transfer ~ Open up a bag of M&M's and put some in one bowl.
- Give the child a straw and have them try to transfer all of the M&M's into another bowl by sucking through the straw and securing the M&M to the end of the straw.
- You could just have it as an activity or you could make it a race between several kids. This is a great way to work on oral motor skills.

Classroom Support

- 觀察學習(Observational Learning)
 - 觀察 (Attention Period)
 - 大民留意老師的口型和發音
 - 保留 (Retention Period)
 - 大民記著老師的示範
 - 行為產生 (Reproduction Period)
 - 大民能夠正確發音
 - 動機與機會(Motivational phase)
 - 老師邀請全班同學一齊讀
 - 大民知道跟著老師做會得到老師的肯定

Additional Support

Guided Reading: Correction with positive feedbacks

- What is going on in these pictures?
- What happened to the boy?
- How does he take care of his wound?
- How do you feel about this story?

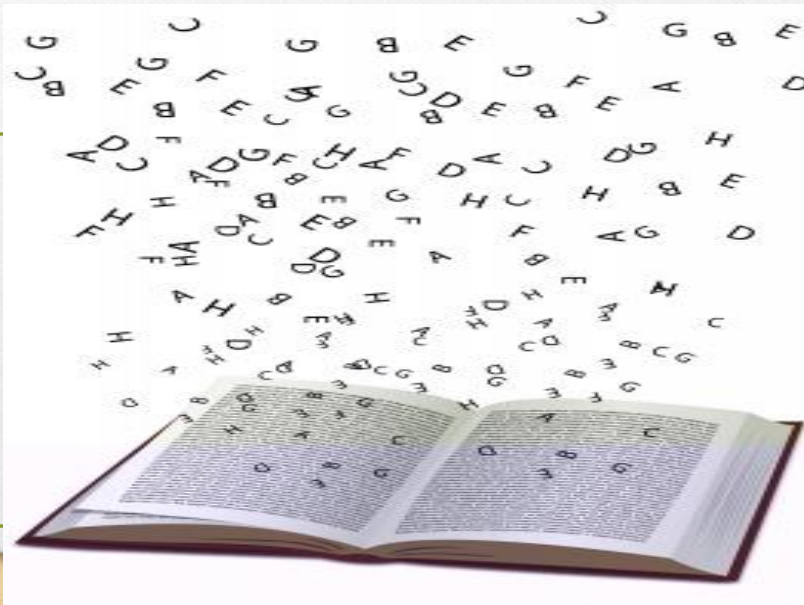


Conclusion

There are essentially three main goals for teaching communication disorder learners:

- 1) To help children to **develop and improve their communication abilities**.
- 2) To help children **develop coping strategies and alternative communication options** enabling them to compensate for times when their communications abilities are insufficient.
- 3) To help children **get used to using and practicing their communication skills** and coping strategies in real-world environments such as home, at school, and with friends.

Specific Learning Difficulties in Reading and Writing



Specific Learning Difficulties (SpLD)

- The umbrella term specific learning difficulties is used to cover a wide variety of difficulties.
- **Dysgraphia**: writing difficulty
- **Dyspraxia**: motor difficulties
- **Dyscalculia**: a difficulty performing mathematical calculations
- **Dyslexia**: reading and writing difficulty
- These learning difficulties typically affect a student's motor skills, information processing and memory.

Dysgraphia:

results in irregular letter sizes and shapes, a mixture of upper and lower case letters, or print and cursive letters

causes writing fatigue

Dysgraphia

interferes with communication of ideas in writing

contributes to difficulties in using writing as a communication tool

results in unfinished letters and letter inconsistencies

Dyspraxia

- Dyspraxia is a developmental disorder that affects coordination. This can impact on
- perception and thought
- speech
- fine motor movement
- whole body movement
- hand-eye coordination
- sequencing and organization
- Dyspraxia can overlap with dyslexia, Asperger's Syndrome and ADHD.



Dyscalculia:

Dyscalculia difficulties

remembering specific facts
and formulas for
mathematical calculations

mastering
arithmetic facts
by traditional methods

telling and keeping track of
time, and the sequence of
past and future events

following
sequential
directions

acquiring
spatial
orientation

learning musical
concepts

easily disoriented
including left and right

learning abstract concepts
of time and direction

dealing with the
exchange of money
(e.g. handling a bank account,
dealing with change)

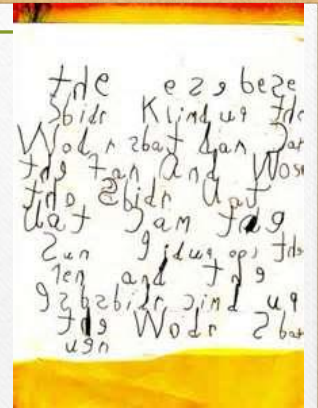
Dyslexia

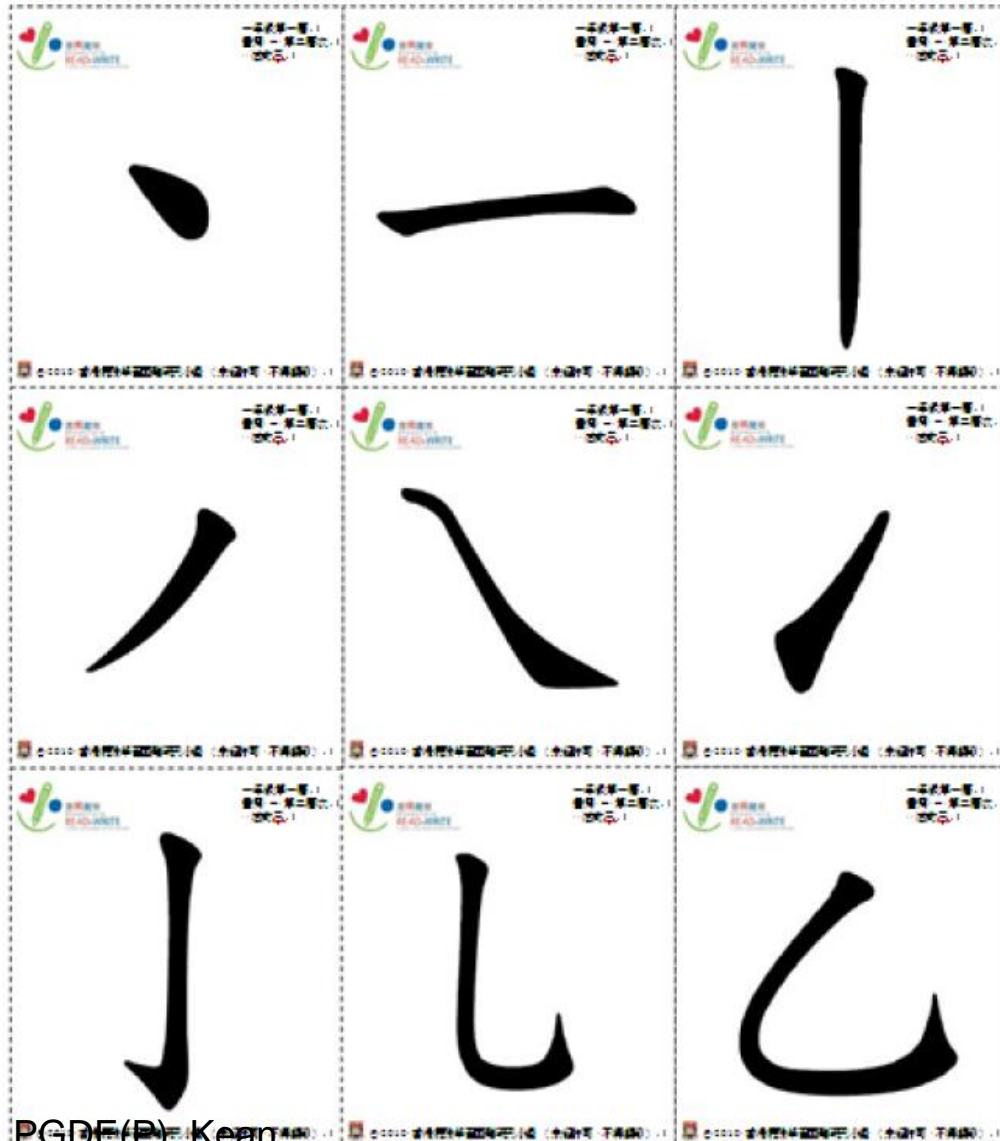
- Students who have dyslexia may have a difficulty with the use of both written and oral language.
- This is due in part to processing difficulties, including visual and auditory perceptual skills, and is not necessarily related to prior education.
- They may also find some learning tasks cause concern due to difficulties with short-term memory, concentration and organization.

Early signs of dyslexia:

- A family history of learning difficulties
- Difficulty determining the meaning of a simple sentence
- Difficulties with spelling
- Confusion over left and right
- Writing letters or numbers backwards
- Difficulties organizing themselves

e.g.: unable to follow multi-step directions or routines





學習中文的困難

- 中華文族同文不同語
- 六書：象形、指示、會意、形聲、轉注、假借
- 85% 常用字是形聲字，只有38% 形聲部份有助發音 (Tan & Perfetti, 1998)
- 同音異字太多(分、粉、訓、焚、奮、份)
- 同字異音 (衣服、衣錦還鄉)
- 印刷文體與書寫文體也不同 (爲、為)

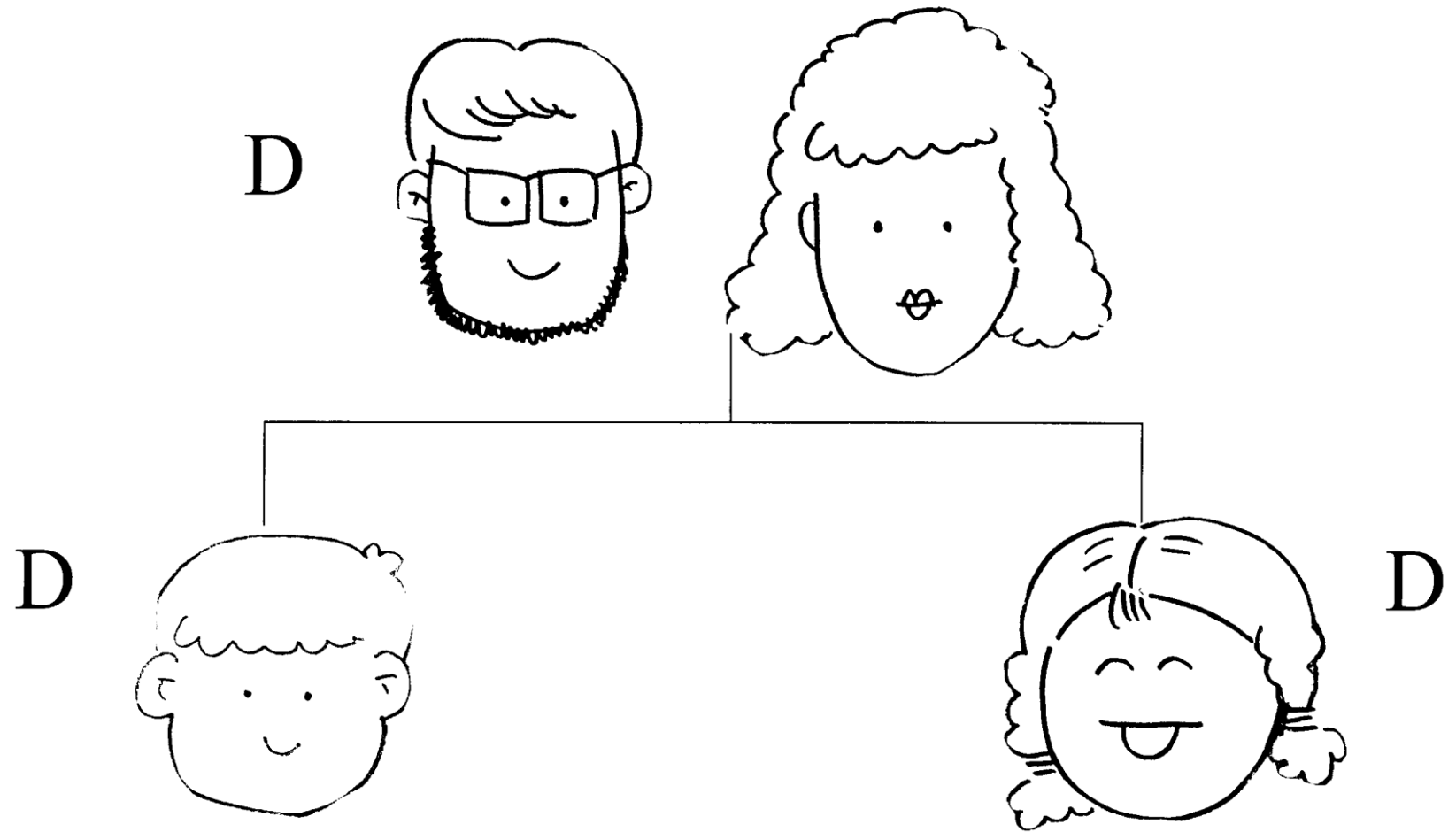
Prevalence in HK

- According to local studies (Chan, Ho, Tsang, Lee & Chung, 2007)
- Prevalence in HK at around 9.7% 至 12.6% ,
- ~6.2% 至 8.7% 的學童屬於輕度 (Mild)
- ~2.2% 至 2.3% 屬於中度 (Moderate) 及
- ~1.3% 至 1.6% 的學童屬於嚴重 (Severe)程度。

Causes

- 與遺傳有關 (Genetic)
- 與腦部運作有關 (Neurological)
- 與認知能力的缺損 (Cognitive)

如父親有讀寫困難



如母親有讀寫困難



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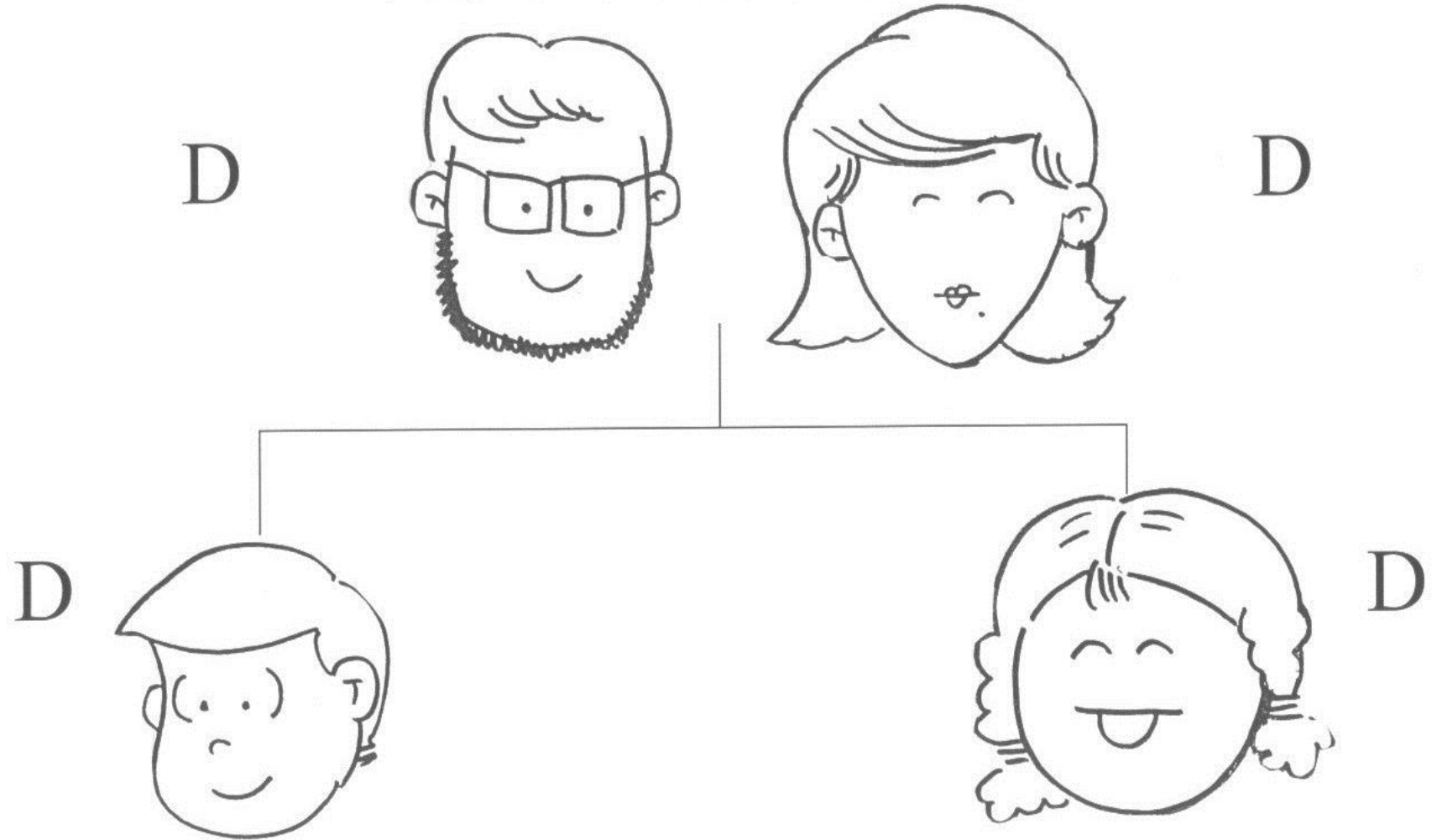


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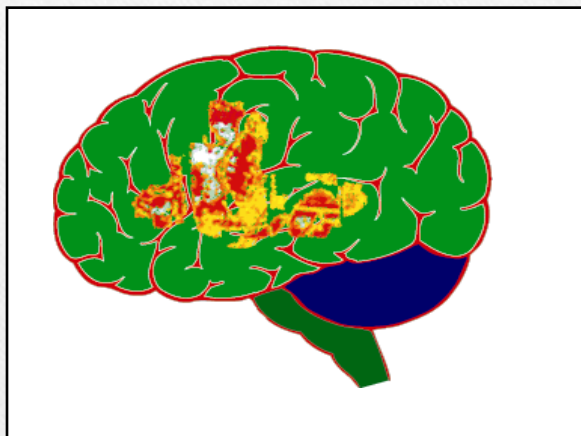
如父母有讀寫困難



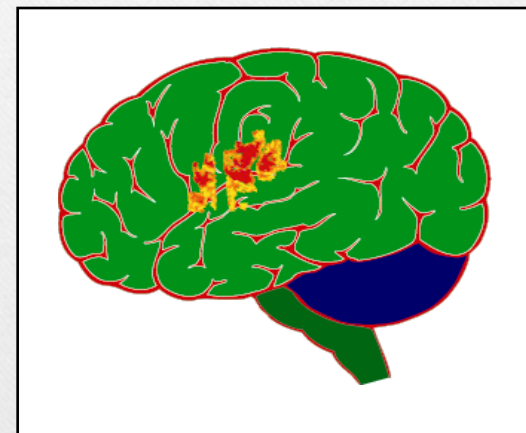
Neurological Impairment

-

Phonological Processing



Non Dyslexic



Dyslexic

Cognitive Deficit 認知能力缺損



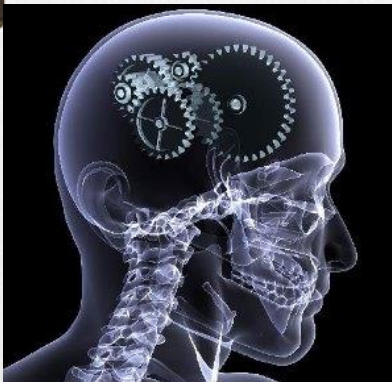
Visual Perception
視覺認知



Orthographical / Word Structure
字型結構



Phonological Awareness
語音意識



Visual Memory
視覺記憶



Phonological Memory
語音記憶

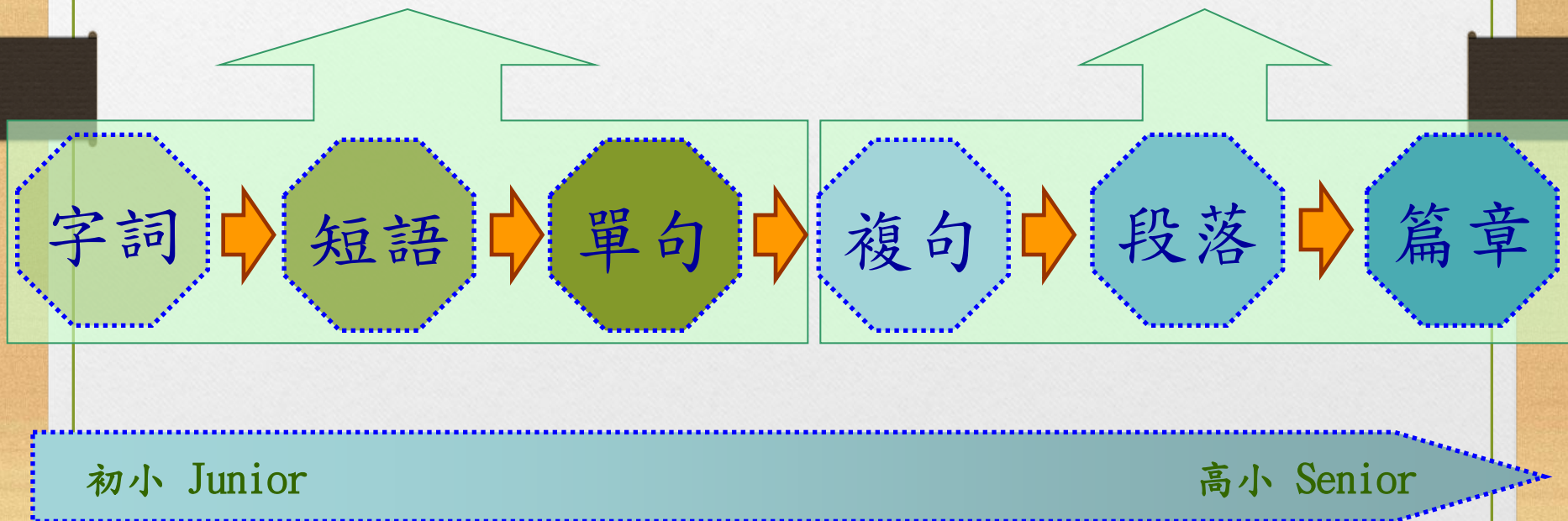


Rapid Naming
名命速度

Difficulties throughout primary education

語文知識 (knowledge)

閱讀策略 (Strategy)



Experience Dyslexia:

"On by
how we
at the
of stock.
hair company
The big
side
happy
change.

Do you remember the story of the little girl who dug a hole in the back yard and saw a big black and white dog come out? The dog was so big that it was like a monster. The little girl was so scared that she ran home and told her mother. Her mother said, "Don't be afraid. It's just a dog." But the little girl was still scared. She was so scared that she didn't go back to the yard again. The dog was so big that it was like a monster. The little girl was so scared that she ran home and told her mother. Her mother said, "Don't be afraid. It's just a dog." But the little girl was still scared. She was so scared that she didn't go back to the yard again.

The gift of dyslexia is the ability to think multi-dimensionally. While the ability to see in pictures and to change one's point of focus or reference point is a handicap in reading, it can also be a source of

Onegay, Jo^hn anp Bop^w n froa^w a k. "W^hatwo^l ou^k i e
 t^o op^a y?, Boq^a ske^p John. "I do^{n'tk} ow, J^r onh^{ed} li^{ed},
 hatwo^lpyo^k li e ot go?" It^h in^k I mi^ten^o yw at^c hin^g a
 o i nTV, e^{sd} c^l y^y fiw e^c av es me do ron. "Wow,"
 m v eo^{anh} o^{dc}
 saip Jonh, "Po^q c^{n!} or W^hat^g eati^e Let's^{ek} c^t h^e
 uq^r t^e o s e fim y m the^{gh} s^o he stalt im e wetn
 c^d goa^d o s e fim y m the^o rpou^t met^{esh}
 sⁱⁿ hodb^{g.} "Look," hey e^{ll} ep, "af^u lⁿ lpoxa^{pit's} r^{il} e^o v^l
 e^R pgenqocker! M^{yf} a^r o^v i^{te!} "Gr^{eat!} Bopsho^u eq, "Le^{t'sc} o^k t^o
 udiⁱ r wa^c o^{vea} nqs e woh ti truns^{tou.}"

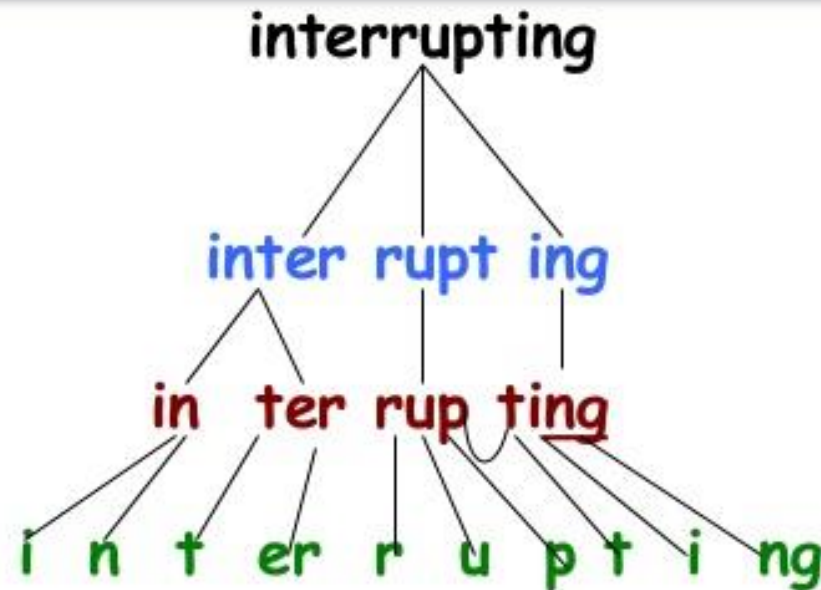
Trying to read this passage, you will experience the kind of difficulty a dyslexic reader faces when deciphering normal typeface (Almeida).

Phonograph Dyslexia (English)

- How does it look like?
- Show signs of difficulty **segmenting** words into individual sounds or **blending** sounds to make words. Difficulty with word **retrieval** or with **naming** things also feature.
- This includes difficulty with **phonological** awareness, decoding, processing speed, **orthographic** coding, language skills/verbal comprehension, and/or rapid naming.
- The **complexity** of a language's **orthography** has a direct impact upon how difficult it is to learn to read that language. English has a comparatively deep orthography within the **Latin alphabet writing system**, with a complex structure that employs spelling patterns of several levels: principally, **letter-sound correspondences, syllables, and morphemes**.

Word Reading: Multiple Levels of Analysis

Dehaene, 2009



Stripped of irrelevant features (e.g., font, case, and size), the letter string is broken down in elementary components (e.g., single letters with digraphs-bigrams→graphemes; syllables; and morphemes) that will be used by the rest of the brain to compute sound and meaning.

Teaching Strategies

- Peer Support
- Multisensory Teaching
- 3 Tier Model
- Accommodation
- School-home collaboration



小練習（一）：

箱

部首

聲旁

意思：與竹做的東西有關

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獨體字

中



一年級第一學
字形結構——第三學次
活動三
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樹 林 朵 枝

四個字裏面都有「木」，
而「木」是它們的部首。

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一年級第一學
字形結構——第二學次
活動一



高頻詞語表（家庭篇）

1 爺爺	2 表哥	3 堂妹	4 親友	5 客人
6 窗戶	7 被子	8 桌子	9 椅子	10 冰箱
11 玩具	12 娃娃	13 報紙	14 雨傘	15 衣服
16 鞋子	17 電視	18 電話	19 蛋糕	20 筷子
21 洗臉	22 家務	23 刷牙	24 梳頭	25 幫忙
26 收拾	27 茶點	28 午餐	29 黃昏	30 回家

「程度副詞」參考表



例句：



這裡的空氣**最**清新。



這裡的空氣**非常**清新。

這裡的空氣**十分**清新。

這裡的空氣**很**清新。



這裡的空氣**挺**清新。



這裡的空氣**不太**清新。



「關聯詞語」參考表

一面…… 一面……

例：弟弟一面散步，一面看風景。

一會兒…… 一會兒……

例：小志一會兒畫畫，一會兒彈鋼琴。

又…… 又……

例：水果又美味又有益。

不但……而且……

例：妹妹不但聰明，而且勤力。

因為……所以……

例：因為小芬很用功，所以她在考試中得到好成績。

雖然……但是……

例：雖然小勇年紀很小，但是他十分懂事。

如果……就……

例：如果今天天氣好，我們就出外郊遊。

第三部分

寫作小百科

文章結構圖



原因/開始



經過



結果



Multisensory Teaching

- 「神奇手指筆」：用手指在空中寫出筆畫

例：

先橫後直（十、干）	從上到下（三、魚）
先進入，後關門（日、回）	先外後內（刀、同）
先撇後捺（人、父）	從左到右（倒、樹）
先中間，後兩邊（小、樂）	底橫畫最後（王、士）

Conclusion

- When a person's reading difficulties can not explained by mental intelligence, improper education, visually impaired or cognitive problems, most likely he/she will be diagnosed with dyslexia disease. Since reading is a very complex thought process, the formation of dyslexia are caused by many possible reasons.
- Learning disorders tend to run in families. It is important to notice and recognize the warning signs. The earlier the disorder is discovered, the better the outcome.

What is Hearing Impairment?

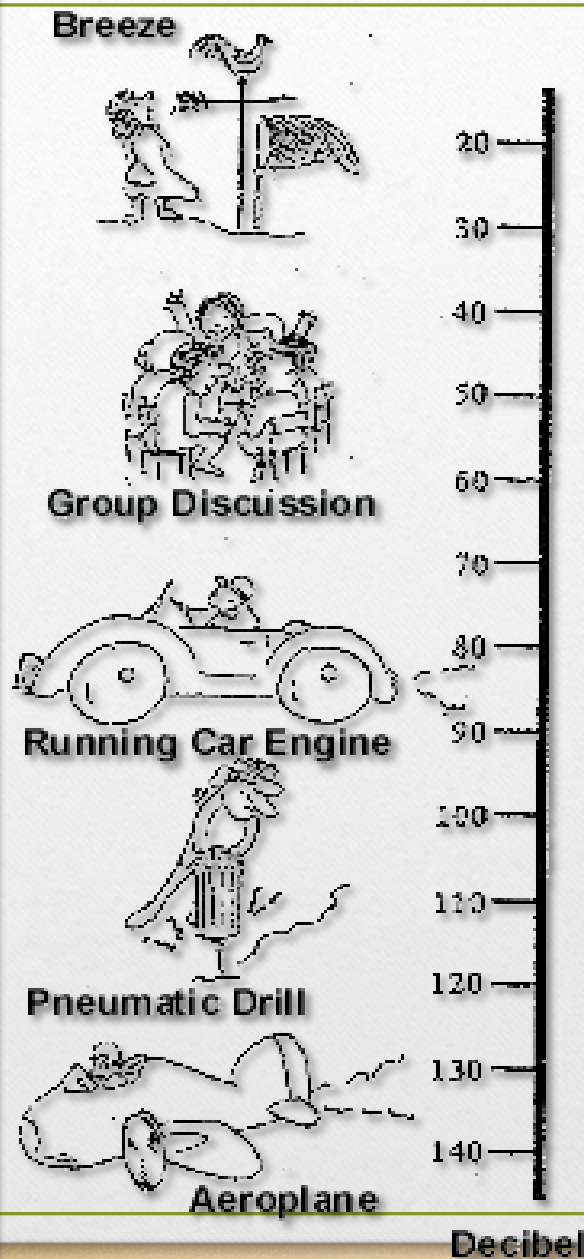
- A person suffering from hearing impairment has difficulty in perceiving or identifying sound clearly due to auditory problems.

The degree of hearing loss can be classified into **five** levels as listed below:

1. Mild Difficult to identify soft sound such as whispering
2. Moderate Unable to hear clearly what others are saying during conversation.
3. Hearing aids are necessary Moderately-severe Unable to clearly hear loud noises such as telephone ring
4. Severe Can only hear very loud noises and sounds such as shouting or vacuum cleaner noise
5. Profound Difficult to perceive any sound

Sound Range of the Ear and Range of Hearing loss

Category and Range of
Hearing Loss and
Communication Ability



Category of Hearing Loss

Mild Hearing Loss
(26dB to 40dB)

Moderate Hearing Loss
(41dB to 55dB)

Moderately Severe Hearing Loss
(56dB to 70dB)

Severe Hearing Loss
(71dB to 90dB)

Profound Hearing Loss
(Over 90dB)

Definitions of Hearing Impairment

With reference to Hong Kong Review of Rehabilitation Programme Plan (1994/95-1998/99) Section 7.2, the following definitions are currently adopted for educational purposes:

1. *Deaf pupils* are pupils with impaired hearing and who require education by methods suitable for pupils with little or no naturally acquired speech or language.
2. *Partially hearing pupils* are pupils with impaired hearing whose development of speech and language, even if impaired, is following a normal pattern, and who require for their education special arrangements or facilities, though not necessarily all the educational methods used for deaf pupils.

Cause of hearing impairment

About 1 in 500 infants is born with or develops hearing loss during early childhood. Hearing loss has many causes: some are genetic (that is, caused by a baby's genes) or non-genetic (such as certain infections the mother has during pregnancy, or infections the newborn baby has). A combination of genetic and non-genetic factors also can cause hearing loss. For many babies, the cause of hearing loss is unknown

Reading:

About The Causes of Hearing Loss

What are the symptoms of children with Hearing Impairment?

During infancy:

1-3 months old No response to sudden sound such as banging of door or ringing of door bell.

4-6 months old Unable to locate the sound source.

7-9 months old Do not look at the person being mentioned, e.g. “Where is UncleTom?”.

10-12 months old No response to their names being called or frequently used words or phrases, e.g. “No”.

What are the symptoms of children with Hearing Impairment?

During childhood:

- Delayed response to sound
- Cannot hear clearly what others are saying
- Show difficulty in locating the sound source
- Pay more than usual attention to speakers' facial expression and lip movement while listening
- Give irrelevant answers or misinterpret instructions
- Request for repetition during conversation

Symptoms

- Show poorer ability to understand speech in a noisy environment
- Tend to turn up the sound volume of television
- Incorrect pronunciation
- Delayed language development
- Poor attention in class
- Frequent use of gestures to express themselves, e.g. pointing to what they want
- Easily irritated as a result of communication difficulty

Difficulties in Speech and Language

- poor articulation of speech
- omission of high frequency sounds.
- weak in breath and pitch control
- voices tend to be monotonous (單調的)
- understanding abstract vocabulary
- complicated sentence structures and unfamiliar concepts
- learning to read and write

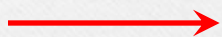


Learning characteristics

1. Deficit in the acquisition of language

- have problems with sounds, grammar and social use of a language

-Difficulty in locating sounds  **X** draw attention to distinctive sounds

 **errors in pronunciation and limited vocabulary**

- **Make mistakes in grammar** in written language, e.g. sentence structure, tenses and word omission.

-students may be unable to rehearse what is put down on a page

2. Research shows that HI children are **less likely to grasp daily life concepts** as hearing children (Dawais, 1974).

- They have difficulty in social contact with people
- In the process of social contact, they are not able to understand what adults teach and talk to them.
- Socially excluded by peers due to poor comprehension and expression, or actively avoid social contact and communication

3. Lack of concentration, less attentive

- Like to ask for repeats
- Heavily rely on lip-reading in conversations



■ **The educational performance of students with HI is often delayed** when comparing with hearing children, with reading and language the primary areas, the present most difficulties (Hardman, 1990, p. 275)

Behavioral characteristics

1. Difficulty in social integration

Unable to hear and understand what other people say

→ difficult to communicate and socialize with peers

isolation from the community and have poor

→ self-image and esteem. Lack of self-confidence with poor self-image for being always mistaken to be slow in response

→ Easy to have emotional and behavioural problems as a result of difficulties in verbally expressing himself/ herself

2. Inability to identify volume of sound levels

- turn up TVs or radios to an inappropriate volume in order to compensate for their sensory challenges.
3. may also closely watch their peers to emulate behavior and body language. It is called echopraxia.
4. may be dizzy or disoriented because the nerves in the ears also control balance.

5. Selective Hearing

- The American Academy of Pediatrics reports that children with HI might be only able to hear certain sounds and pitches.
- unable to hear their names when they are called.

Difficulties in Intellectual Development

Language plays an important part in the higher intellectual development, especially in **problem solving**.



Deafness may cause a language deficit, which in turn affects **progress in learning**.



Many hearing impaired children tend to be rather **weak in abstract thinking and analytical power**.



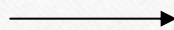
This can be an **obstacle to their acquisition of knowledge**.

Educational needs

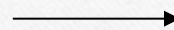
- ◆ 接受聽力補償與訓練 Residual Hearing
- ◆ 改善語音及語調有關的文字記憶 Verbal Memory
- ◆ 發展語言有利思考及社交 Social Thinking & Skills
- ◆ 發展抽象思維 Abstract Thinking
- ◆ 發展溝通技巧 Communication Skills
- ◆ 發展社會適應能力 Adaptive Skills
- ◆ 各種素質的協調發展 Holistic Approach

Concept Map

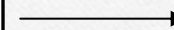
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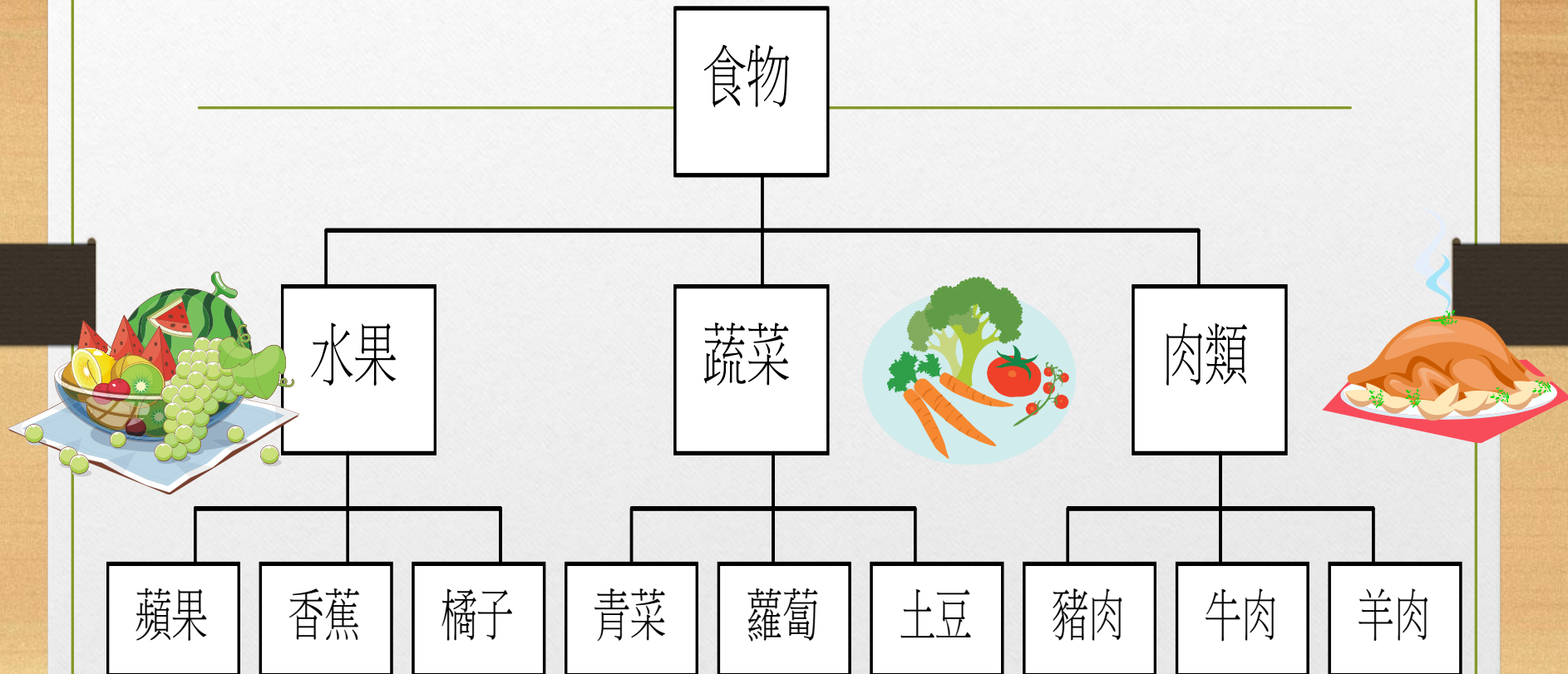
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Concept Map



資料來源：Yahoo (2014), 163.15.186.10/xms/read_attach.php?id=12230



Conclusion

- Hearing impaired children may have difficulties in some subjects and the root cause of these difficulties lies mainly in their difficulties in speech and language. Therefore, Speech and Language teaching should be **emphasized on the use of residual hearing**.
- Parents who have doubt about their children's hearing are advised to **seek medical consultation** as soon as possible.
- When necessary, students with persistent hearing impairment will be referred by the schools or medical practitioners to the Speech and Hearing Services Section for **further assessment and follow-up services**.