2016

TEACHER TRAINING MANUAL

QESS Team and external consultant team
Hong Kong Institute of Technology
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HKIT 香港科技專上書院（非牟利）
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2016

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Preface

In 2013, Hong Kong Institute of Technology (HKIT) has admitted 6 students with special educational needs (SEN) in the Associate Degree and Bachelor Degree programmes. A greater number of SEN students have enrolled to the Diploma of Yi Jin, where some are anticipating to joining the Associate Degree programmes next year. The actual number of students requiring special educational supports may be larger because the official figures only take into account of those medically-diagnosed cases. As a consequence, academic staffs felt pressured due to lack of experience in working with students with diverse learning needs. It urged a teacher training program to equip the academic staffs with relevant knowledge and skills in working with students with diverse learning needs. This training manual is written for recording the development progress and training materials for teacher training program. It also offers direction and information for school personnel who wish to develop a teacher training program on SEN in their institutions.

Acknowledgment

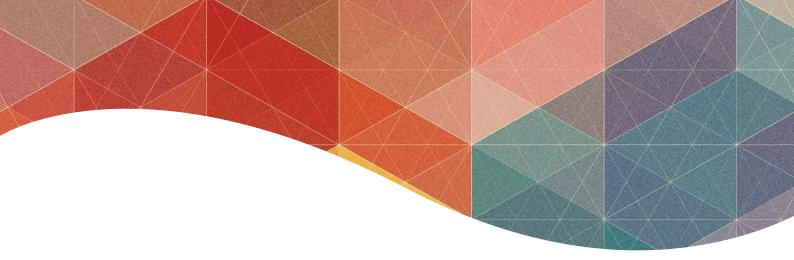# Development progress of teacher training program in HKIT

(1) Determining the framework of teacher training protocol

The framework of teacher training protocol was determined through literature review.

One of the goals is to foster positive attitude towards students with SEN. As Livingstone (2001, as cited in Dart, 2006, p.134) mentioned, people may misperceive the status of students with SEN as a result of ancestral displeasure, human machinations or punishment from gods. Within this context, students with SEN need to cope with the societal attitude that based on pity or fear, it is essential for teachers to reflect on their attitudes on students with SEN (Dart, 2006).

Another goal is to enhance teachers' knowledge on working with students with SEN. Kirby, Davies, and Bryant (2005) pointed out that teachers cannot recognize or accommodate the needs of students with SEN, if they are not equipped with relevant knowledge about SEN. Therefore, a pre-service and in-service teacher development program in United States included topics about knowledge of SEN, such as "Introducing behavioral, emotional and social needs", "An overview of cognition and learning", "Speech and language" and "Autism Spectrum condition"(Golder, Jones, & Quinn, 2009).

The last goal is to equip the teachers with teaching skills of accommodating students with SEN in mainstream classroom. The document published by the Department of Education and Skills in United States (2004, as cited in Golder et al., 2009, p. 183) noted the importance of teachers to have the skills to work with students with

SEN. Therefore, there were corresponding programs for dyslexic pupils" and "Creating an inclusive learning environment"(Golder et al., 2009).

Some components were mentioned by the literatures, but the effectiveness of these components was doubtful and was not applicable to the teacher training program in HKIT. The program mentioned by Golder et al. (2009) used various ways to enhance knowledge and skills for trainee teachers, for instance, placements in special education schools. However, it was found that teachers from the program developed by Golder et al. (2009) commented that the skills learnt from the placement cannot be transferred to mainstream settings, one of the trainee teachers pointed out that, the tactics used in special education schools were successful as a number of teaching assistant were allocated to the students and thus differentiation was possible; and it is unlikely to do it in mainstream classrooms (Golder et al., 2009). Additionally, teachers in HKIT are in-service teacher and are not able to have placements in special education schools.

In conclusion, three elements should be included in the teacher training program in HKIT: (1) attitude, (2) knowledge, and (3) skills.

(2) Understanding the expectations of different partiesandprior understanding on SEN of teachers

After determining the initial framework of teacher training protocol, QESS Project Team conducted semi-structured interview to academic staffs on their expectations on the teacher training program; and students with SEN and their parents on their views of student support in the classroom, in order to understand the expectations of stakeholders on the program and strengthen the parts in teacher training protocol if these are the major concerns of the stakeholders. Additionally, by understanding the learning difficulty of the students in HKIT, training materials can be designed in a way that matches with the needs of the students.

Two sets of interview protocol were prepared for academic staffs (see Appendix A), students with SEN (see Appendix B).

Interview on academic staffs

QESS Project Team invited 16 academic staffs that are currently teaching associate degree or bachelor degree program in HKIT. All of the interviews were in voluntary basis and conducted in Cantonese.Six teachers agreed to participate in the interview.

The interview results (see Appendix C to H) has shown that all of the participating teachers have some basic knowledge on SEN, as they can point out that SEN students were being affected by certain physical or psychological factors and they need special supports from teachers or school. However, none of them can provide detailed information (i.e. what the physical or psychological factors did they mean). More detailed information is needed in teacher training program on the basis of teachers' prior knowledge on SEN students.

One of the teachers (i.e. Teacher B) have diagnosed case of SEN student in his class and adopted special strategies of working with the student. As the student encountered hearing disability, the teacher checked his understanding on the key concepts, reminded him to put on his hearing aid and asked him to sit closer to the teacher. It is believed that the teacher have such awareness because of his personal expertise (i.e. occupational therapist). Another teacher (i.e. Teacher C) also reported that one of his students has emotional disturbance, however, he did not know what to do with her emotional disturbance. It reflected the helplessness of the teachers when working with SEN students. Teacher E also pointed out that teachers in tertiary institutions are relatively "passive" than their secondary and primary counterparts, as the students are already "grown-ups" and behavioral management (e.g. threats to visit their parents) is not applicable in tertiary level.

The other teachers, however, said that the school did not have official referral mechanism of SEN students. They only suspected that some students in the class have SEN. It implied that the school did not have well-established screening or report mechanism for SEN students. When being asked for their feelings of working with SEN students, most of the teachers showed empathy towards the students and tried to treat them as the same as the others. One of the teachers (i.e. Teacher F) admitted that he wants to escape from the student with emotional disturbance as he did not know how to handle it. It reflected that majority of the teachers have positive attitude towards SEN students while some of them fear of working with them. It is probably because of lack of skills of working with SEN students.

Interview on diagnosed or suspected cases of SEN

QESS Project Team has also invited the students according to the results of a questionnaire, which intended to reach students studying associate degree and degree in HKIT and ask if the student have any SEN condition.

Due to privacy concerns, the interview record of the students were not shown in the current manual. Summary of the interview results was presented instead.

1. **Difficulties encountered by SEN students**

   Three students were living with dyslexia. All of them showed difficulties in reading and writing. However, their difficulties were slightly different. Two students encountered difficulty on English vocabulary, English writing comprehension and writing Chinese characters while one student encountered other difficulties (i.e. oral expression, missing rows in copying task) with the addition to English vocabulary, English writing comprehension and writing Chinese characters.

   One student was living with emotional disturbance (i.e. depression and bipolar disorders), however, he does not suffer from the disturbance and the disturbance does not affect his study now. However, he occasionally suffer from anxiety that adversely affect his performance in presentation.

   One student was living with specific language impairment. She also found to have attention problems by her design teacher two years ago. However, her attention problem diminished in HKIT as the lectures required her to jot down the notes and made her attentive.

   One student suspected himself as having dyslexia after reading a medical journal. He found that symptoms of dyslexia happens on him: messy organization

and writing homophones, such as writing 風 instead of 豐, the problem is even more serious in Chinese.

None of them showed difficulty in interpersonal aspect, as they had a good or at least average relationship with teachers or other students.

2. **Prior assessment and intervention**

Most of them (i.e. Student A to D) have some form of assessment and intervention. But all of them found it difficult to find out the assessment report. For the intervention, most of them received SEN services during childhood, primary schools and secondary schools; and included counselling, sensory integration trainings, mind map drawing and pull-out class in school. Mind map drawing was particularly efficient to one of the students that she applied the skills in YJD presentations and composition. Although one of them claimed herself as having specific language impairment, she said she did not undergone any formal assessment; she did received speech therapy in childhood but cannot remember the details.

3. **Expectations to teachers**

Three of them reflected that they do not want teachers treat them differently in the class. One of the student recalled his memory of being treated different during secondary school: he was being called for several times and checked his understandings. Additionally, the teacher slowed down the speech rate and teaching for him. The student reflected that he did not want the teacher make change in the curriculum for him. The students also pointed out that they preferred asking the teacher or classmates during break, rather than the teacher coming to them.

Content
of
sessions

Session 1: SEN basics

Learning outcomes:

1. Participating teachers will have a brief concept on biological and cognitive differences of SEN conditions such as Dyslexia, Mathematical Disabilities, ADHD, Autism and Emotional and behavioral disturbance.

2. Participating teachers will have a brief concept on behavioral signs of different SEN conditions such as Dyslexia, Mathematical Disabilities, ADHD, Autism and Emotional and behavioral disturbance.

Suggested timing: 30 Minutes

Power point presentation:

1. Introduce the topic of this session.

(Slide 1)

SEN BASICS

2. Introduce what SEN conditions will cover in this session.

SEN

- Dyslexia
- Mathematical Disabilities
- Attention deficit hyperactivity disorder (ADHD)
- Autism Spectrum Disorder (ASD).
- Emotional and Behavioral Disorder

3. Introduce the definition of Dyslexia: Using the definition on DSM V, introduce to teachers that Dyslexia can be categorize into impairments in reading and impairments in writing.

DYSLEXIA

Definition

DSM V (Diagnostic and Statistical Manual of Mental Disorders, 5th Edition)

- Having impairments in reading and impairments in writing expression.
  - Impairments in reading
    - Difficulties on word reading accuracy,
    - Reading rate or fluency
    - Reading comprehension
  - Impairment in writing expression
    - Difficulties on spelling accuracy,
    - Grammar and punctuation accuracy
    - Clarity organization of written expression

4. Introduce the biological differences of Dyslexia: elaborate on biological causes of dyslexia, explain to teachers that dyslexic students may have abnormalities in the brain structure and brain activation while reading or writing.
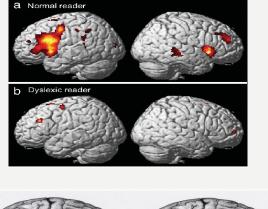
(Slide 4)

- Dyslexia was identified as a:
  - genetic
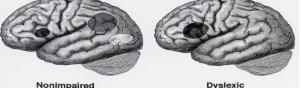 - biological
  - neurologic
  - bio-social problem

Compared fMRI and PET scans their brain has structural differences in dyslexic and non-dyslexic children

(Whitaker, 2010)

Research had found that dyslexic children had less brain activation on the left hemisphere of the brain while reading.

(Pammer ,2014)

a Normal reader

b Dyslexic reader

Nonimpaired   Dyslexic

Figure 25. A Neural Signature for Dyslexia:
Underactivation of Neural Systems in the Back of the Brain
At left, nonimpaired readers activate neural systems that are mostly in the back of the left side of the brain (shaded areas); at right, dyslexic readers underactivate these reading systems in the back of the brain and tend to overactivate frontal areas.

*courtesy of Sally Shaywitz

5. Introduce the cognitive deficits and behavioral signs of Dyslexia: explaining with biological differences may lead to cognitive differences. Introduce cognitive deficits that dyslexic students may have, while also explaining each cognitive deficit may lead to behavioral signs.

(Slide 5)

SIGNS AND SYMPTOMS

- Cognitive deficits
  - Rapid naming deficits
  - Orthographic awareness deficit
  - Phonological awareness deficit
  - Visual perceptional deficit
  - Working memory deficit

Students with dyslexic mainly
  - 20% have single cognitive deficit
  - 23% have double cognitive deficit
  - 50% have multiple cognitive deficit

(Ho, Chan, Tsang & Lee 2002)

These may lead may difficulties such as :
  - Writing
  - Copying
  - Bad memory (procedures or language related knowledge)

(Chung, Ho, Chan, Tsang, & Lee, 2011)

teapot   teapot
teapot   teapot
teapot   teapot

(D. W. Chan, Ho, Tsang, Lee, & Chung, 2004)

WAS   SAW
p   q
b   d

6. Introduce behavioral signs and difficulties which Dyslexic students may encounter.

(Slides 6 - 7)

Asam walk and to listheng the [listen] whistling with his ear phones to walk, his friend shoulder Asam. Asam did not hear his friend is tokeing with he. [talking] Sadenlih his friend thack his [Suddenly] [touched] shoudel Asam shocked and the noodle [shoulder] fould down the man shoudel. The man [fall] shoudel is paful. [painful] The customer is apologised the chchonren. Aman says, "Sorry" became [children] [because] he do his shirt weat. [wet]

WHAT DYSLEXIA SEES?

"Many of us who learned our elementary reading before the early 1950's must be very perplexed over the continuous reading problems of the past 45 years or so. The vast majority of us before the early '50's learned to read well without being subjected to ongoing reading theories that are peculiar to the past 45 years. How did we get along so well? That 'ancient' system, without question, worked. This begets the question: What was broken and what needed fixing?"

Homeschoolers using this ancient system, phonics, achieve nearly universal success in teaching their children to read. In our house, we take advantage of the fact that kids are exceedingly curious about the world around them. As they grow, they take an increasing interest in the written language which is on display in neon signs, billboards, books, magazines, Sunday comics, etc. They see parents and siblings reading and want to copy their behavior. When we read them material which they find fascinating, their desire to solve the reading puzzle intensifies. At this point it would be very difficult to prevent them from learning to read, unless we withheld from them the key to the secret code, which is phonics.

English is a phonetic language, and one learns to read it by learning the sounds that letters make and voicing them in the sequence in which they are printed. We give our toddlers alphabet blocks and alphabet books with charming illustrations. Sitting on the laps of Mom and Dad, they explore the pages of these books, unaware that the phonetic foundation for their reading future is being laid.

After they master letter sounds, we teach our kids to sound-out words. "Mmm...ah...mm, Mom." We use simple workbooks and hands-on phonics instruction during out-loud reading sessions. We post colorful, magnetic letters on the refrigerator. I sense a feeling of power and pride in youngsters when they first learn to manipulate these letters to form words. Refrigerator-phonics sessions have the advantage of occurring in the natural flow of life. Some mothers aren't above offering a cookie to a toddler to stimulate his interest. Spelling his name (and words such as "cat"

7. Introduce the definition of Mathematical Disabilities: Using the definition on DSM V, introduce to teachers that Mathematical Disabilities is a learning disorder with difficulties on learning and acquiring mathematical concepts and reasoning.

(Slide 8)

MATHEMATICAL DISABILITIES

Definition

DSM V (Diagnostic and Statistical Manual of Mental Disorders, 5th Edition)
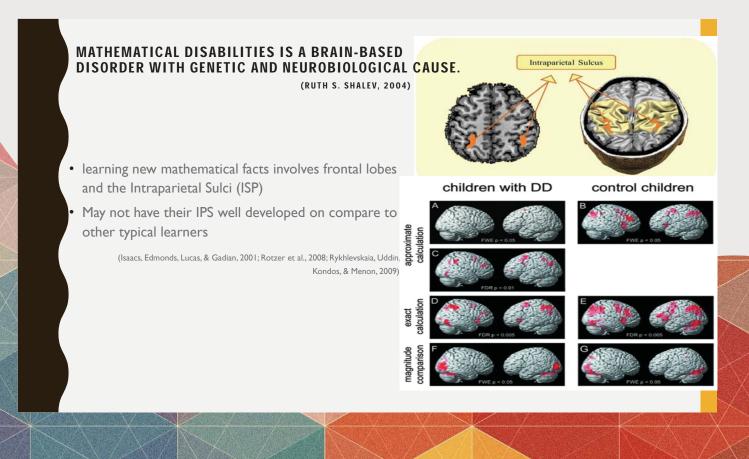
Learning disorder with impairment in mathematics

- Includes difficulties on number sense, memorization of arithmetic facts, accurate or fluent calculation and accurate math reasoning.
- Students with Mathematic Disabilities have their mathematical skills significantly lower than students on compare with their chorological age

8. Introduce the biological differences of Mathematical Disabilities: elaborate on biological causes of Mathematical Disabilities, explain to teachers that students with Mathematical Disabilities may have abnormalities in the brain structure and brain activation while calculating and retrieving mathematical facts.

(Slide 9)

MATHEMATICAL DISABILITIES IS A BRAIN-BASED DISORDER WITH GENETIC AND NEUROBIOLOGICAL CAUSE.
(RUTH S. SHALEV, 2004)

- learning new mathematical facts involves frontal lobes and the Intraparietal Sulci (ISP)
- May not have their IPS well developed on compare to other typical learners

(Isaacs, Edmonds, Lucas, & Gadian, 2001; Rotzer et al., 2008; Rykhlevskaia, Uddin, Kondos, & Menon, 2009)
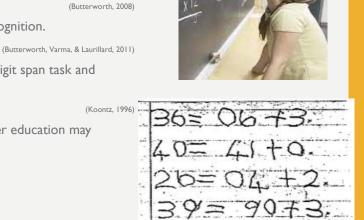
9. Introduce the behavioral signs and symptoms of Mathematical Disabilities: explaining with biological differences may lead to cognitive differences. Introduce cognitive deficits that students with Mathematical Disabilities may have, while also explaining each cognitive deficit may lead to behavioral signs.

(Slide 10)

SIGNS AND SYMPTOMS

- Perform poorly on simple tasks such as number comparison and counting numbers of dots.

  (Butterworth, 2008)

- Poor working memory, reasoning and spatial cognition.

  (Butterworth, Varma, & Laurillard, 2011)

- Have difficulties on performing both forward digit span task and backward digit span tasks.

  (Koontz, 1996)

- Students with mathematical disabilities in higher education may experience :
  - Difficulties with place values
  - Problems remembering formulae or theorems
  - Always forgetting names, dates, phone numbers
  - Etc.

  (Trott2014)

10. Introduce behavioral signs and difficulties which studentswith Mathematical Disabilities may encounter.

(Slides 11 - 13)

With Dyscalculia
2439+185+798= 3,422

Can look like this:
2493+851+789= 4,133

This makes math hard to get right.

WHICH NUMBER IS LARGER?

These tests are used to determine whether a person's problems with numbers are due to dyscalculia or to other cognitive deficits.

3 8 | 7 9

WHICH IS TALLER?

People with dyscalculia answer this question just as quickly and accurately as people without a learning disability.

WHICH IS GREATER?

Dyscalculics take longer and are less accurate at answering this question. They have even more trouble when the difference between the two numbers is small.

MATHEMATICAL DISABILITIES

- "For as long as I can remember, numbers have not been my friend. Words are easy as there can be only so many permutations of letters to make sense. Words do not suddenly divide, fractionalise, have remainders or turn into complete gibberish because if they do, they are gibberish. Even treating numbers like words doesn't work because they make even less sense. Of course numbers have sequences and patterns but I can't see them. Numbers are slippery."

(Blackburn, 2003)

11. Introduce the definition of Attention deficit hyperactivity disorder (ADHD) :Using the definition on DSM V, introduce to teachers that ADHD can be categorize as three subtype category which is Inattentive, hyperactive and impulsive. Also, explaining that with different combinations of subtypes may lead to different characteristics in ADHD.
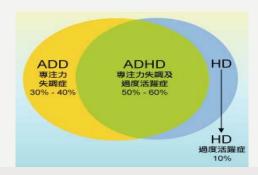
(Slide 14)

ATTENTION DEFICIT HYPERACTIVITY DISORDER (ADHD)

Definition
 DSM V (Diagnostic and Statistical Manual of Mental Disorders, 5th Edition)
- Persistent patterns of :
  - Inattention
  - Hyperactivity
  - impulsiveness
- Interferes individuals functioning and learning development.
- ADHD may be specify as :
  - Mild
  - Moderate
  - Severe
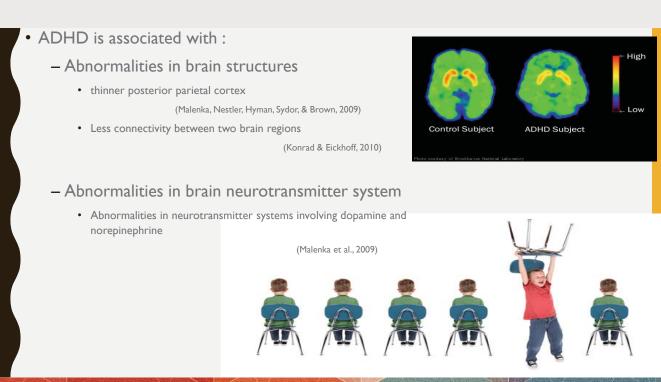
12. Introduce the biological differences of Attention deficit hyperactivity disorder (ADHD): elaborate on biological causes ADHD, explain to teachers that students with ADHD may have abnormalities in the brain structure and brain neurotransmitter systems.

(Slide 15)

- ADHD is associated with :
  - Abnormalities in brain structures
    - thinner posterior parietal cortex
      (Malenka, Nestler, Hyman, Sydor, & Brown, 2009)
    - Less connectivity between two brain regions
      (Konrad & Eickhoff, 2010)

  - Abnormalities in brain neurotransmitter system
    - Abnormalities in neurotransmitter systems involving dopamine and norepinephrine
      (Malenka et al., 2009)

13. Introduce the behavioral signs and symptoms of Attention deficit hyperactivity disorder (ADHD): explaining with biological differences may lead to cognitive differences. Introduce cognitive deficits that students with ADHD may have, while also explaining each cognitive deficit may lead to behavioral signs.

(Slides 16 - 17)

SIGNS AND SYMPTOMS

- May perform :
  - More inattentive
  - Higher chance to exhibit emotional instability

(Avisar & Shalev, 2011)

  - Verbally hyperactive / impulsive behaviors
  - Motoric hyperactive / impulsive behaviors

(Gibbins, Toplak, Flora, Weiss, & Tannock, 2011)

  - Slower processing speed

(Willcutt et al. 2010)

  - Having deficits in both verbal and spatial working memory

(Alderson, Kasper, Hudec, & Patros, 2013; Dowson et al., 2004)

成人 ADHD 常見症狀

資料來源：林中鍵醫生

專注能力問題
- 粗心大意易出錯
- 容易分心
- 組織能力弱
- 記憶力差
- 集中力差
- 未能遵守指示
- 躲避不喜歡或需思考的工作

活躍程度問題
- 坐唔定、多話、插嘴
- 經常做出騷擾他人的舉止

自制能力問題
- 容易與他人發生衝突
- 情緒易波動及興奮

14. Introduce the definition of Autism Spectrum Disorder (ASD): Using the definition on DSM V, introduce to teachers that ASD is a developmental disorder , students with ASD may have abnormalities on social interaction and verbal or non-verbal communication, also Autistic students may exhibit restrictive and repetitive behaviors.

(Slide 18)

AUTISM SPECTRUM DISORDER (ASD)

Definition

DSM V (Diagnostic and Statistical Manual of Mental Disorders, 5th Edition)

- Having abnormalities on social interaction, having impairments on verbal and non-verbal communication and also with restricted and repetitive behavior.
- Symptoms above ,must be presented in the early age of development.
- ASD may by specify as:
  - Level1 : requiring supports
  - Level2 : requiring substantial supports
  - Level3 : requiring very substantial supports
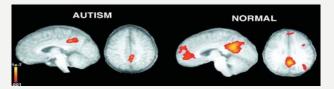
- According our observation mainly high functioning autism or Asperger syndrome are seen in tertiary education.

15. Introduce the biological differences of Autism Spectrum Disorder (ASD): elaborate on biological causes ASD, explain to teachers that students with ASD may have abnormalities in the different regions of brain structure.

(Slide 19)

- ASD is associated both by genetic and neurobiological causes
- ASD is associated with different parts of the brain structures such as :
  - Limbic system
  - Hippocampus
  - Amygdale
  - Cerebellum

     (Amaral, Schumann, & Nordahl, 2008; Damasio & Maurer, 1978; Haznedar et al., 2014; Pierce, Müller, Ambrose, Allen, & Courchesne, 2001)

16. Introduce the behavioral signs and symptoms of Autism Spectrum Disorder (ASD): explaining with biological differences may lead to cognitive differences. Introduce cognitive deficits that students with ASD may have, while also explaining each cognitive deficit may lead to behavioral signs.

(Slide 20)

SIGNS AND SYMPTOMS

- Individuals with ASD may have deficits in multiple aspects such as :
    – slower processing speed

    (Mayes & Calhoun, 2007)

    – planning deficit

    (Hill, 2004)

    – significantly poorer working memory
    – poor executive functioning
    – Inattentive

    (Bennetto, Pennington, & Rogers, 1996)

17. Introduce behavioral signs which students with ASD may exhibit, also highlights on behaviors that can to observe in the school environment.

(Slide 21)

18. Introduce the definition of Emotional and Behavioral Disorder: Using the definition on IDEA, introduce to teachers that EBD is an umbrella term of disorders that affects students' academic performance which cannot be explained by intellectual, sensory or health factors. Also, explaining that EBD can be categorize into two subtypes which is internalizers and externalizers.

(Slides 22 - 23)

EMOTIONAL AND BEHAVIORAL DISORDER

Definition

- Describing individuals with range of problems that affects their academic performance which is cannot explained by intellectual, sensory, or health factors.

("Indiviuals with Disabilities Education Act," 1997)

- Umbrella term under which several distinct diagnoses such as :
  – Anxiety Disorder
  – Manic-Depressive Disorder
  – Oppositional-Defiant Disorder
  – and more …….
- EBD are mainly categorized into "Internalizers" and "Externalizers".

- Internalizers include:
  – Depression
  – Anxiety disorders
  – And more …..

- Externalizers include:
  – ADHD
  – oppositional defiant disorders (ODD)
  – Conduct Disorders (CD)
  – Antisocial personality disorders (ASPD)
  – And more……

19. Introduce the behavioral signs and symptoms of Emotional and Behavioral Disorder: Introduce cognitive deficits that students with EBD may have, while also explaining each cognitive deficit may lead to behavioral signs.

(Slide 24)

SIGNS AND SYMPTOMS

- May demonstrate internal and external behavioral manifestation
- Internalizing behavior :
    - social withdrawal or depression
    - internalize their problems
    - Low self esteem
- Externalizing behaviors :
    - maladaptive social behavioral responses (performing aggression and non compliance)
    - Impulsive behaviors

(Goran & Gage, 2011)

Also individuals with EBD may have deficit in:
    - expressive language
    - receptive skill

(Benner et al., 2002)

20. Introduce the Genetic cause & heritability of presented SENs: elaborate on genetic causes and the heritability of each SEN conditions.

(Slide 25)

Genetic causes & Heritability

SEN	Genetic Markers	Heritable
Dyslexia	Related Genes such as: •KIAA0319 on Chromosome6 •DYX1C1 on Chromosome 15 (Marshall, 2012; Rosen,2013)	Around 40% to have a dyslexic child if you have dyslexia. (Pennington & Lefly 2001)
Mathematical Disorder	Genetic Markers are still unknown.	Parents or siblings diagnosed with Mathematical Disabilities may also likely to have their children to be diagnosed with mathematical disabilities 10 times more than general population. (Shalev et. al, 2001)
ADHD	Related Genes such as: •Dopamine transporter gene (DAT1) •Dopamine transporter gene (SLC6A3) (Gizer, Ficks, & Waldman, 2009)	Genetic influences was found in twin studies on ADHD. (Ronald, Simonoff, Kuntsi, Asherson, & Plomin, 2008)
ASD	Related Genes such as: • Cadherin 9 (CDH9) • Cadherin 10 (CDH10) (Wang et. al, 2009)	ASD is proven to be genetic heritable. (Hallmayer et al., 2011; Ronald et al., 2006)
Emotional and Behavioral disturbance	It was proven that both internalizing disorders and externalizing disorders are associated with abnormalities in brain structures and mostly they are genetic heritable. (Drevets, Price, & Furey, 2008; Hettema, Neale, & Kendler, 2001; Hallmayer et al., 2011; Martin, Ressler, Binder, & Nemeroff, 2009; Ronald et al., 2006; Sullivan, Neale, & Kendler, 2014; Thapar, Harrington, & McGiffin, 2001)	

21. Summing up by applying into Causal model: explaining which the causal model, emphasizing that it was not the students choice to be disabled while as the role of teachers should be the environmental factors that can help and make a difference on a student's development.

(Slide 26)

EMOTIONAL AND BEHAVIORAL DISORDER

Definition

- Describing individuals with range of problems that affects their academic performance which is cannot explained by intellectual, sensory, or health factors.

("Indiviuals with Disabilities Education Act," 1997)

- Umbrella term under which several distinct diagnoses such as :
  - Anxiety Disorder
  - Manic-Depressive Disorder
  - Oppositional-Defiant Disorder
  - and more …….
- EBD are mainly categorized into "Internalizers" and "Externalizers".

Session 2: Universal design for learning

Learning outcomes:

1. Participating teachers will understand the concepts and corresponding principles of universal design for learning

2. Participating teachers will know how to implement the principles of universal design for learning in mainstream classroom through learning the examples of universal design

Suggested timing: 30 minutes

Power-point presentation:

1. Introduce the topic of this session.

(Slide 1)

TEACHING METHOD

UNIVERSAL DESIGN FOR LEARNING

2. Introduce the original idea of universal design: it was derived from the concept of architecture. Elaborate the concept of universal design through asking the participating teachers: "What makes this staircase different from the others?", and explain that this staircase can maximize the number of users through special design.

(Slide 2)

Concept of universal design for learning

Universal design of architecture:

- Buildings are constructed in a way that suitable to greatest number of users, in low or no additional cost

(Jimenez, Graf & Rose, 2007)

3. Introduce the concept of universal design for learning: similar to the staircase, the curriculum and instructional design can meet the needs of maximum number of learners, regardless their learning style, language and culture.

(Slide 3)

Concept of universal design for learning

Universal design for learning:
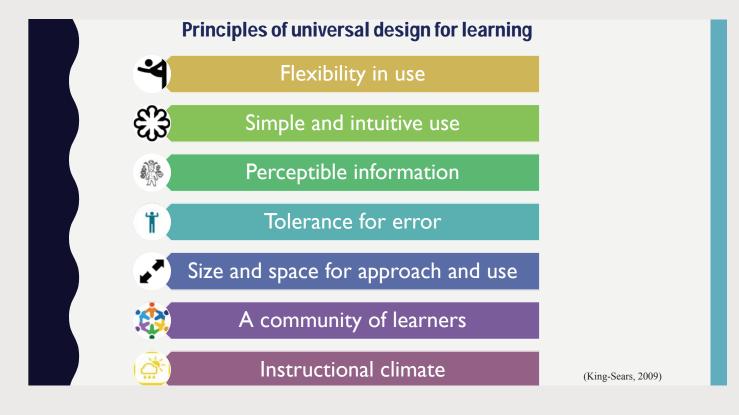
- Created opportunities for diverse learners, regardless their learning style, language and culture

(Rose & Meyer, 2002)
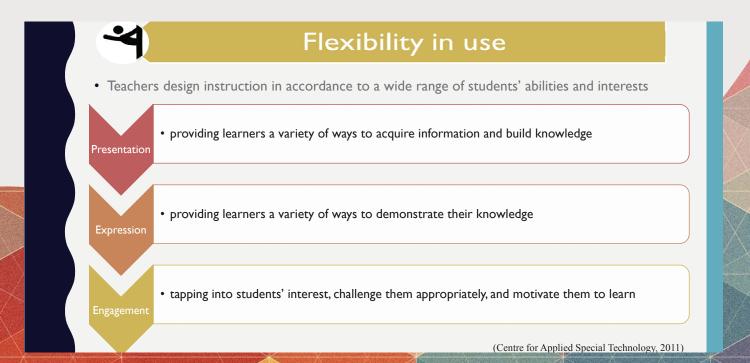
4. Introduce the principles of universal design for learning. Some of the principles suggested by the scholars, were not adopted, as they are (1) related to change in school policies that individual teachers may not be able to follow; and (2) related to special examination arrangement, which is arranged by examination officer, rather than teachers.Therefore, the principles that introduce to teachers are applicable within their scope of work.

(Slide 4)

Principles of universal design for learning

Flexibility in use

Simple and intuitive use

Perceptible information

Tolerance for error

Size and space for approach and use

A community of learners

Instructional climate

(King-Sears, 2009)
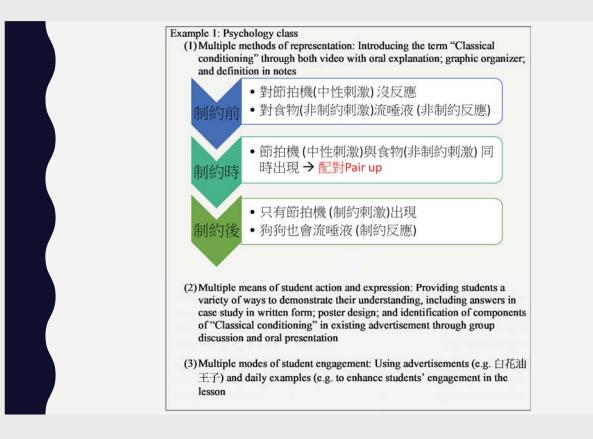
5. Introduce the principle "Flexibility in use", its definition and examples.

(Slide 5)

Flexibility in use

- Teachers design instruction in accordance to a wide range of students' abilities and interests

Presentation
- providing learners a variety of ways to acquire information and build knowledge

Expression
- providing learners a variety of ways to demonstrate their knowledge

Engagement
- tapping into students' interest, challenge them appropriately, and motivate them to learn

(Centre for Applied Special Technology, 2011)

6. Example of "Flexibility in use" in Psychology class.

Example 1: Psychology class
(1) Multiple methods of representation: Introducing the term "Classical conditioning" through both video with oral explanation; graphic organizer; and definition in notes

制約前
• 對節拍機(中性刺激) 沒反應
• 對食物(非制約刺激)流唾液 (非制約反應)

制約時
• 節拍機 (中性刺激)與食物(非制約刺激) 同時出現 → 配對Pair up

制約後
• 只有節拍機 (制約刺激)出現
• 狗狗也會流唾液 (制約反應)

(2) Multiple means of student action and expression: Providing students a variety of ways to demonstrate their understanding, including answers in case study in written form; poster design; and identification of components of "Classical conditioning" in existing advertisement through group discussion and oral presentation

(3) Multiple modes of student engagement: Using advertisements (e.g. 白花油王子) and daily examples (e.g. to enhance students' engagement in the lesson

7. Introduce the principle "Simple and intuitive use", its definition and examples.
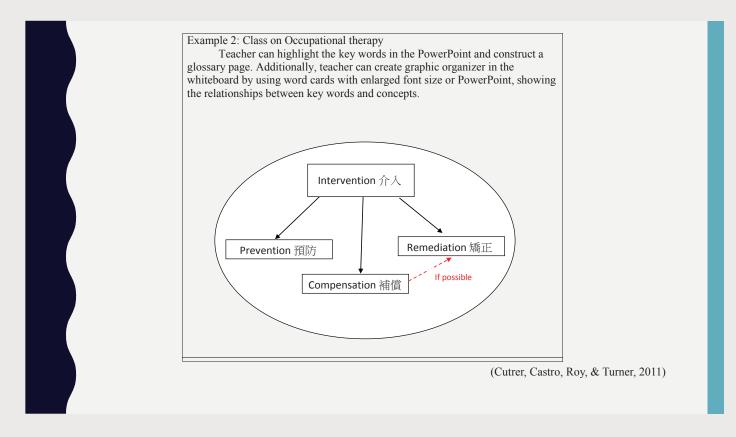
Simple and intuitive use

• Course content is presented in a way that are straightforward and consider students' background knowledge and language skills

• For example, science terms are organized into categories and presented by a graphic organizer; pairing new terms with familiar terms, such as pairing use and utilize
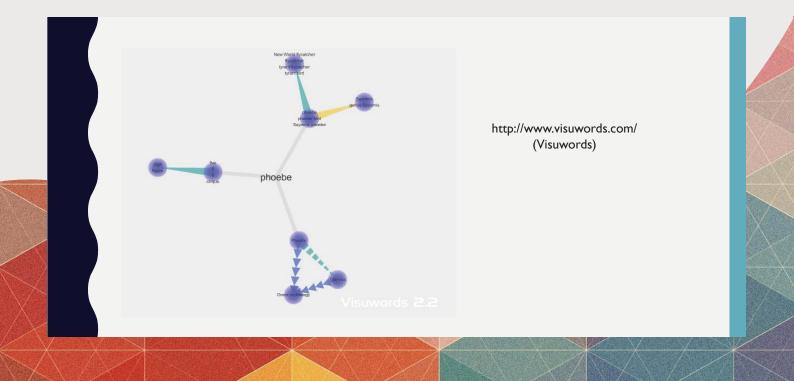
7. Example of "Simple and intuitive use" in health studies class: The use of graphic organizer in linking the relationship among concepts and key words.

(Slide 8)

Example 2: Class on Occupational therapy
  Teacher can highlight the key words in the PowerPoint and construct a glossary page. Additionally, teacher can create graphic organizer in the whiteboard by using word cards with enlarged font size or PowerPoint, showing the relationships between key words and concepts.

Intervention 介入

Prevention 預防

Remediation 矯正

Compensation 補償   If possible

(Cutrer, Castro, Roy, & Turner, 2011)

8. Introduce a website that can facilitate "Simple and intuitive use": Teachers can type the key words of the concept and the website can generate all of the related concepts of the word.

(Slide 9)
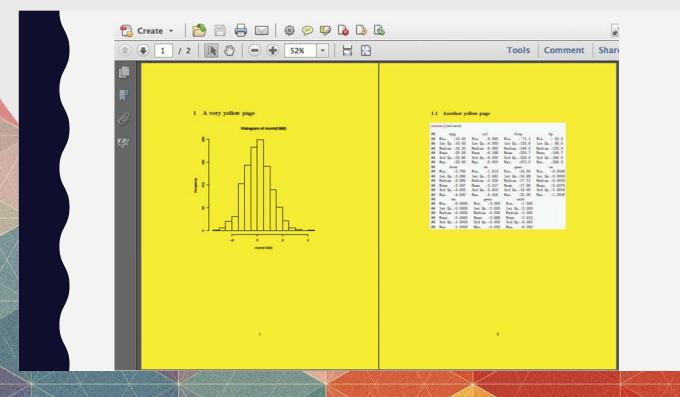
http://www.visuwords.com/
(Visuwords)

9. Introduce the principle "Perceptible information", its definition and examples.

(Slide 10)

Perceptible information

- Notes are presented in a way that communicate effectively to the students

- ☺ HKIT is currently achieved this principle to certain extent, by uploading notes in CMS

- It can be even better if the teachers can upload the notes in PDF format with yellow or blue background.

(King-Sears, 2009)

10. Illustrate the steps of achieving "Perceptible information" through changing background color of the PDF file.
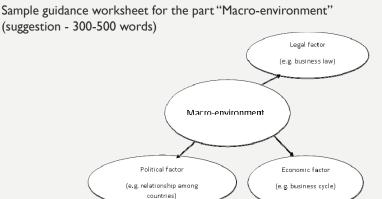
(Slide 11)

11. Introduce the principle "Tolerance for error", its definition and examples.

(Slide 12)

Tolerance for error

- Teachers design instruction anticipates variation in individual student learning pace and prerequisite skills

- Example: structuring a long-term course project so that students have the option of turning in individual project components separately for constructive feedback and for integration into the final product

- Rationale:
(1) Some of the SEN students are weak in planning and organization
(2) Students with dyslexia are weak in writing, teachers can identify problems in writing style or grammar earlier and provide advice

(King-Sears, 2009)

12. Example of "Tolerance for error" in digital marketing class: Essays can be divided into several components and students can choose to hand in the components of the essay for teachers' comments prior to final submission.

(Slide 13)

Example 4: Class on digital marketing
    In the course "Digital marketing", students were asked to hand in business proposal. The teacher can divide the project into various components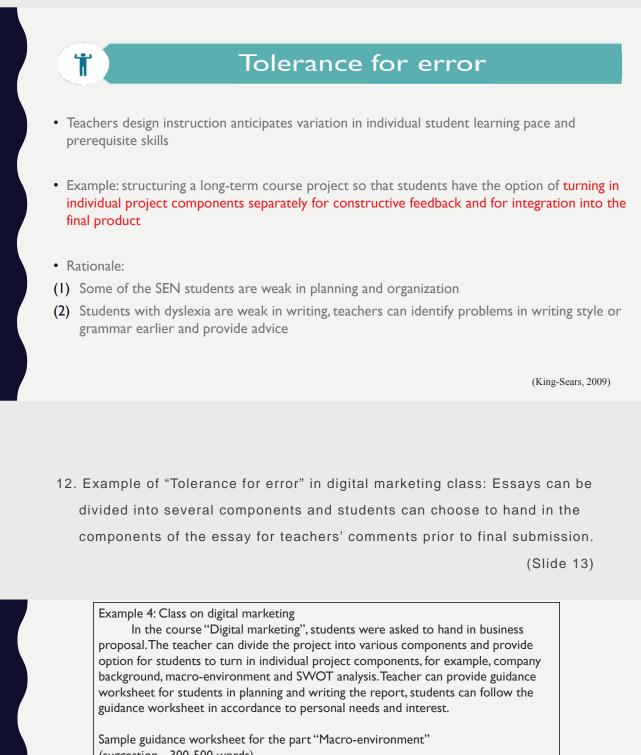 and provide option for students to turn in individual project components, for example, company background, macro-environment and SWOT analysis. Teacher can provide guidance worksheet for students in planning and writing the report, students can follow the guidance worksheet in accordance to personal needs and interest.

Sample guidance worksheet for the part "Macro-environment"
(suggestion - 300-500 words)

Legal factor
(e.g. business law)

Macro-environment

Political factor
(e.g. relationship among countries)

Economic factor
(e.g. business cycle)

13. Introduce the principle "Size and space for approach and use", its
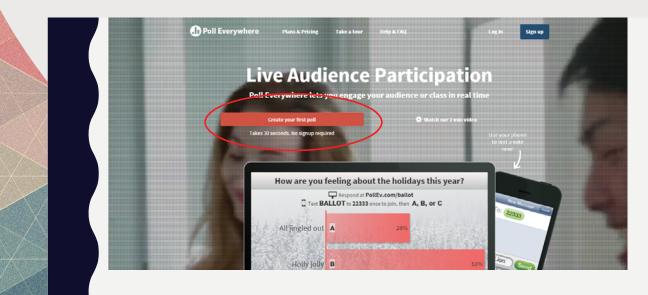   definition and examples.

(Slide 14)

Size and space for approach and use

- Instruction is designed with consideration for appropriate size and space for approach, reach, manipulations, and use regardless of a student's body size, posture, mobility, and communication needs

- ☺ As observed in classroom observation, there are electronic screen for showing the words written in PowerPoint slides and digital blackboard. It reflected that teachers in HKIT has achieved this principle in certain extent

- Another example is face-to-face discussion in a circle, which is particularly suitable for students with ADHD. However, it is difficult to achieve in the physical environment of HKIT

- It can be achieved through another form of discussion: Immediate response assistive technology/ E-platform

(King-Sears, 2009)

14. Introduce a software that can facilitate "Size and space for approach and
    use": It can attract students' attention on the class through e-discussion forum.

(Slide 15)

https://www.polleverywhere.com/
(Polleverywhere)

15. Introduce the principle "A community of learners", its definition and examples.

(Slide 16)

A community of learners

- The instructional environment promotes interaction and communication among students and between students and faculty

- Examples:

(1) Fostering communication among students through discussion groups

→☺ Currently, HKIT achieved it (i.e. providing platform in CMS for students to discuss; some of the teachers provided classroom discussion time and foster discussion environment through guided questions)

(2) Making a personal connection with students and incorporating motivational strategies to encourage student performance through individually acknowledging excellent performance

→Suggestion: Providing encouraging feedback to students in the homework

(King-Sears, 2009)

16. Introduce the principle "Instructional climates", its definition and examples.

(Slide 17)

Instructional climate

- Instruction is designed to be welcoming and inclusive

- Example: highlight diverse thinkers who have made significant contributions to the field or share innovative approaches developed by students in the class

→Showing that being different does not mean abnormal

(King-Sears, 2009)

Session 3: Review of screening tool

Learning outcomes:

1. Participating teachers will understand the importance of screening

2. Participating teachers will have better understanding on the idea behind the developing screening tool in HKIT

Suggested timing: 15 minutes

1. Introduce the topic of this session.

(Slide 1)

REVIEW OF SCREENING TOOL

2. Explain the purpose of developing a screening tool for HKIT: Identifying students with SEN proactively, rather than relying on self-disclosure of the students.

PURPOSE

- Identifying students with SEN in a proactive way, as HKIT currently rely heavily on self-reported questionnaire in identifying students with SEN

3. Provide a sample of existing tool for screening adults with SEN. Point out that although the screening tool is for 21 to 60 year-old adults, which matches with the age of HKIT students in associate degree and degree level. However, this screening tool does not include items related to learning tasks. The results of screening have little implications and usage for teachers.

EXISTING TOOL

4. Explain the idea behind the design of screening tool developing by HKIT QESS team and external consultant team, which does not simply assess the weaknesses of the students, it also consider students' grit and thinking style. The design of thescreening tool can help assessing students in a holistic view.

IDEA BEHIND THE DESIGN OF SCREENING TOOL

- Not only focus on the problem of suspected SEN students, but also potential strengths

Grit	Thinking Style	Weakness

Session 4: Case sharing

Learning outcomes:

1. Participating teachers will have better understanding on the current situation Of students with SEN in HKIT

2. Participating teachers will learn the difference in learning needs among SEN students

Suggested timing: 20 minutes

1. Introduce the topic of this session.

(Slide 1)

CASE SHARING: REAL CASES IN HKIT

2. Introduce background information of the two SEN students that QESS project team is currently working with.

BACKGROUND INFORMATION

Student A	Student B
• 19 year-old girl, a Year 1 student studying AHS	• 22 years old boy, a Year 3 student studying TUBM
• Reported that she was diagnosed to have dyslexia by professionals (i.e. registered doctors, clinical or educational psychologists) in the self-reported questionnaire distributed by QESS project team	• Reported that he was diagnosed to have dyslexia by professionals (i.e. registered doctors, clinical or educational psychologists) in the self-reported questionnaire distributed by QESS project team
• Former YJD student	

3. Report the highlights of first intake interview results: students have different views on the same special examination arrangement. Remind the participating teachers that special examination arrangement is not "One size fits all". Additionally, point out that student B reflected that additional examination time does not really help him when he did not know how to write the word. It reflects that special examination arrangement or other accommodational measures are not the only means to support students with SEN. Other measures, such as language enhancement class, are needed for improving students' foundational competency.

INTERVIEW RESULT
(THEIR VIEW ON THE EFFECTIVENESS OF SPECIAL ARRANGEMENT)

Student A	Student B
• Received special examination arrangement during examinations (i.e. providing additional time, special design of the paper and increase font size of the paper)	• Received special examination arrangement HKCEE, including increasing the font size and providing additional examination time
• Changing the color of the examination paper to yellow is ☺ for her, when compared with white paper. The use of white paper is okay during lectures and self-study, however, it is described as "too shining" for her during examinations. Blue paper is ☹ for her, as she always use blue pens	• The student reflected that additional examination time was helpful for him, as he sometimes need more time to recall the correct word. However, he said additional examination time does not help when he did not know how to write the word
• She thinks increase the font size is useful and easier for her to read if the subject is English. For the other subjects, increase the font size did not have additional effect on her	• Additionally, he reflected that increase the font size was not very helpful for him

4. Explain the assessment procedure by using curriculum-based assessment, which involved assessing students' reading fluency, accuracy, reading comprehension, vocabularies and writing quality by using teaching materials of the courses that they are currently studying.
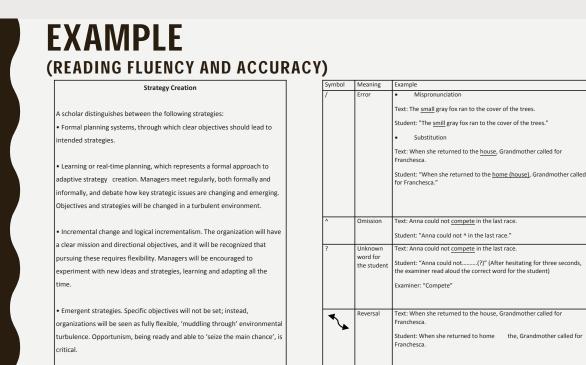
CURRICULUM-BASED ASSESSMENT

- Although no standardized and norm-referencing assessment among tertiary institution, we tailor-made assessment materials for each student

- Select assessment materials from their curriculum to assess:
(1) Reading fluency and accuracy
(2) Reading comprehension
(3) Vocabularies
(4) Writing task

8. Show the one of the samples of curriculum-based assessment.

EXAMPLE
(READING FLUENCY AND ACCURACY)

Strategy Creation

A scholar distinguishes between the following strategies:
• Formal planning systems, through which clear objectives should lead to intended strategies.

• Learning or real-time planning, which represents a formal approach to adaptive strategy creation. Managers meet regularly, both formally and informally, and debate how key strategic issues are changing and emerging. Objectives and strategies will be changed in a turbulent environment.

• Incremental change and logical incrementalism. The organization will have a clear mission and directional objectives, and it will be recognized that pursuing these requires flexibility. Managers will be encouraged to experiment with new ideas and strategies, learning and adapting all the time.

• Emergent strategies. Specific objectives will not be set; instead, organizations will be seen as fully flexible, 'muddling through' environmental turbulence. Opportunism, being ready and able to 'seize the main chance', is critical.

(Total: 135 words)

Symbol	Meaning	Example
/	Error	• Mispronunciation Text: The small gray fox ran to the cover of the trees. Student: "The smill gray fox ran to the cover of the trees." • Substitution Text: When she returned to the house, Grandmother called for Franchesca. Student: "When she returned to the home (house), Grandmother called for Franchesca."
^	Omission	Text: Anna could not compete in the last race. Student: "Anna could not ^ in the last race."
?	Unknown word for the student	Text: Anna could not compete in the last race. Student: "Anna could not………..(?)" (After hesitating for three seconds, the examiner read aloud the correct word for the student) Examiner: "Compete"
↘↖	Reversal	Text: When she returned to the house, Grandmother called for Franchesca. Student: When she returned to home the, Grandmother called for Franchesca.

9. Illustrate the results of curriculum-based assessment.

CURRICULUM-BASED ASSESSMENT RESULTS

Student A	Student B
• Unable to finish the full set assessment, as she was too anxious towards English assessment • Weak in vocabularies	• Weak in vocabularies, able to finish the writing and reading comprehension tasks after understanding the meaning of the vocabularies

10. Show the results from other forms of assessment (i.e. grit scale and thinking questionnaire). Explain the characteristics in grit and thinking style of the two SEN students.

GRIT AND THINKING STYLE QUESTIONNAIRE

• In order to understand their grit (i.e. persistence) and thinking style prior to designing individualized program for them, grit and thinking style questionnaires were used
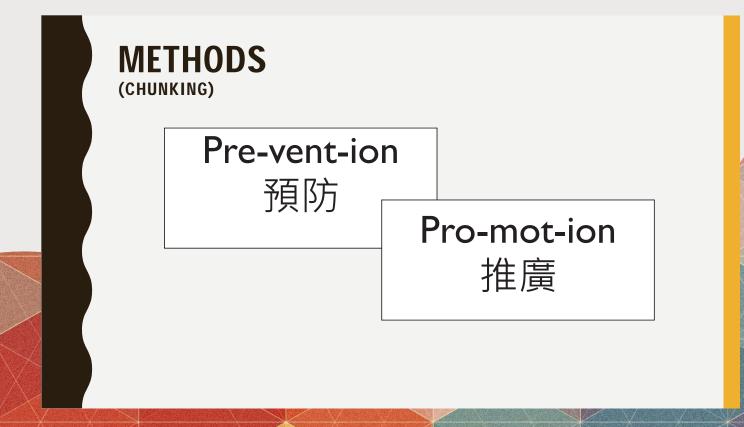
Student A	Student B
• Higher grit, when compared to HKIT norm → More persistent	• Lower grit, when compared to HKIT norm → Less persistent, measures to attract his attention and increase his willingness to sessions are needed • Thinking style→ Weaker in time management → Session on time management are needed

11. Review the training goals of 6-session program for the SEN students.

TRAINING GOALS
(TRAINING GOALS FOR 6-SESSION PROGRAM)

Student A	Student B
• The student will be able to comprehend and spell correctly the common words in the program that she is currently studying, without assistance • The student will be confident while reading and writing English (less anxious towards English)	• After six sessions, the student will be able to comprehend and spell correctly the selected words in the program that he is currently studying, without assistance • After six sessions, the student will be able to demonstrate time management skills during the session
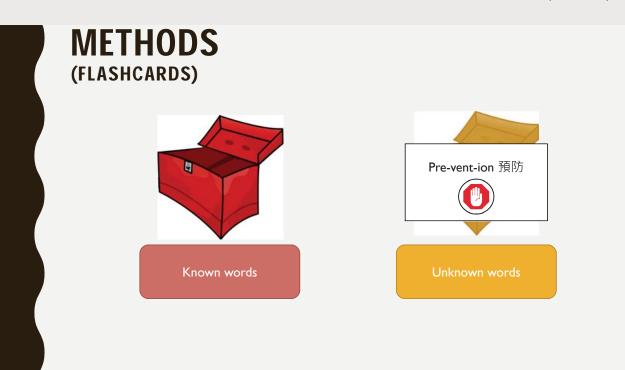
12. Introduce one of the method assisting SEN students to remember vocabularies, which included dividing the words in accordance to their syllables.

METHODS
(CHUNKING)

Pre-vent-ion
預防

Pro-mot-ion
推廣
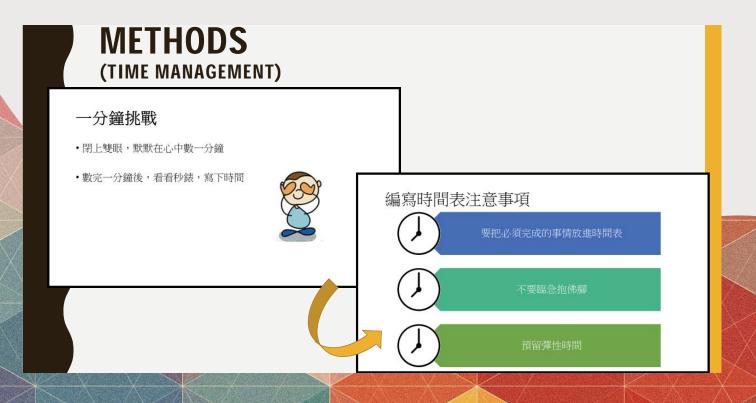
13. Introduce another method assisting SEN students to remember vocabularies, which included word banks for storing unknown and known words; and asked the students to revise the words 10 to 15 minutes per day.

METHODS
(FLASHCARDS)

Pre-vent-ion 預防
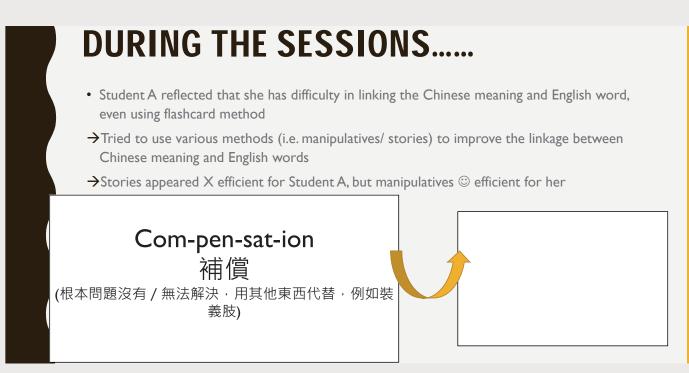
Known words

Unknown words

14. Introduce a method assisting SEN student to build up time management skills, which included introducing principles of time management through interactive games.

METHODS
(TIME MANAGEMENT)

一分鐘挑戰

• 閉上雙眼，默默在心中數一分鐘

• 數完一分鐘後，看看秒錶，寫下時間

編寫時間表注意事項

要把必須完成的事情放進時間表

不要臨急抱佛腳

預留彈性時間

15. Illustrate the issues arising during the sessions and corresponding solution.

DURING THE SESSIONS……

- Student A reflected that she has difficulty in linking the Chinese meaning and English word, even using flashcard method

→Tried to use various methods (i.e. manipulatives/ stories) to improve the linkage between Chinese meaning and English words

→Stories appeared X efficient for Student A, but manipulatives ☺ efficient for her

Com-pen-sat-ion
補償
(根本問題沒有 / 無法解決，用其他東西代替，例如裝義肢)

16. Explain one of the implications of the cases on working with students with SEN for teachers: even under the same label of "dyslexia", their learning needs can be very diverse. Point out that understanding the individual needs of the students is important in daily teaching.

IMPLICATIONS

1. Although under the same label of "dyslexia", their learning needs can be very diverse

E.g. The same special examination arrangement X efficient for all

→Increasing the font size is not efficient for Student B but is efficient for Student A in English

E.g.(2) They have different grit and thinking style

Understanding the individual needs of the students is important ☺

17. Explain another implication of the cases on working with students with SEN for teachers: teachers have to change teaching methods in accordance to students' special needs. Flexibility is important in working with SEN students.

IMPLICATIONS

2. Sometimes, we have to change our teaching methods

E.g. Student A reflected that she X linked up English words and their Chinese meaning

→ Use manipulatives in addition to flashcards

Get ready for the changes ☺

18. Explain another implication of the cases on working with students with SEN for teachers: Students with SEN may have relatively slower rate of improvement than the other students. However, every change is an important step for them.Remind the teachers to appreciate every improvement of the students.

IMPLICATIONS

3. Improvement on SEN students can be subtle but important

→After 2 sessions, the relationships among the students and us had been improved, students were more willing to share their learning difficulties with us

→Student A became less anxious in English and the sessions

Appreciate every subtle but important improvement ☺

Session 5: Coping Strategies

Learning outcomes:

1. Teachers are brought to the concern how proactive measures can promote classroom order

2. Teachers will get hold of some practical strategies when facing behavioral issue in classroom

3. Teachers will understand the intensifying process of behavior and corresponding procedures

Suggested timing: 30 minutes

1. Introduce the topic of this session.

(Slide 1)

HKIT TEACHER TRAINING PROGRAM

COPING STRATEGIES

VERGO CHENG
THE HONG KONG POLYTECHNIC UNIVERSITY
JAN 20TH 2016

2. Strategies that are useful to the general student population are introduced. These strategies should be done prior to your teaching. Rapport and mutual respect are important elements.

(Slide 2)

PROACTIVE PLAN

General:

- Rapport building

- Students' engagement / motives

- Mutually agreed terms

- Positive Feedback / Encouragement

3. Positive relationship (rapport) is one of the most neglected yet powerful proactive measures that can prevent occurrence of behavior issue. It begins with an inviting climate.

(Slide 3)

BUILDING POSITIVE RELATIONSHIPS

Relationship building begins with the teacher standing in the door and greeting students as they enter the classroom. Positive interactions that are quick, yet very effective in relationship building include the following:

– Showing a genuine interest in students

– Providing age-appropriate feedback in a non-embarrassing way

– Treating students with respect by using simple courtesy such as saying "thank you" and "please"

4. Mutual agreement does not mean a contract signed between student and teacher. It is more about the contingency of reward or consequence and mutual understanding of each other's expectation.

MUTUAL AGREEMENT

- Mutually set up with students
- Clear ground rules
- Reasonable consequences
- Contingent
- When problem comes, teacher can implement the consequence accordingly

5. Strategies that might be more specific to the SEN population are discussed. These are also some preparation work to be done prior to teaching or before semester start. It includes basic knowledge of different SEN types and geographic arrangement.

PROACTIVE PLAN

Supporting SEN

Specific to a population:
- Understand characteristics of the SEN
- Know the background of the student
- Understand the antecedent, anticipate problems
- Accommodation/special exam arrangement
- Seating arrangement / Proximity
- Priming / Routine
- Collaboration with other u

6. Reactive procedures are discussed. Some are more commonly mentioned yet important; some are more technical that will be used to manage behavior issue for instance, positive reinforcement and differential reinforcement of behavior. When we deal with young adults, giving room and choices to them are more effective than authority.

(Slide 6)

REACTIVE PLAN

1. Calm
2. Positive feedback and encouragement
3. Differential Reinforcement of Absence of Behavior (DRA)
4. Differential Reinforcement of Other Behavior (DRO)
5. Understand the need of the student
6. Provide room for student to step down
7. Appropriate contingency plan

KEEP CALM AND CALL BATMAN

7. Providing choices is an effective strategy. It can be open choice or forced choice. It empower student to make certain choice while the choice is in favorable to you or the situation. It also allows them to stop and think before further action cans it will interrupt the escalation of the emotion.

(Slide 7)

BEHAVIOR MANAGEMENT

- **Providing Choices**
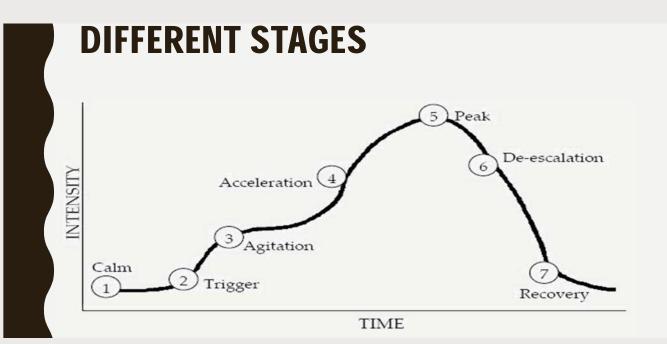
  Providing students choices is another simple but effective strategy that allows students to participate in the decision-making process. Providing students with choices increases the likelihood they will make better behavioral decisions.
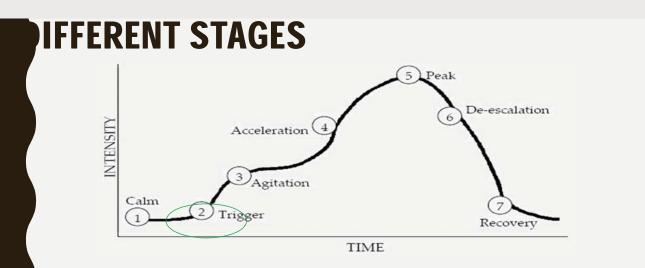
8. Introducing different stages of behavior eruption.

(Slide 8)

9. Discussion of the stage "Trigger". Its characteristics and possible strategies can be used during this stage.
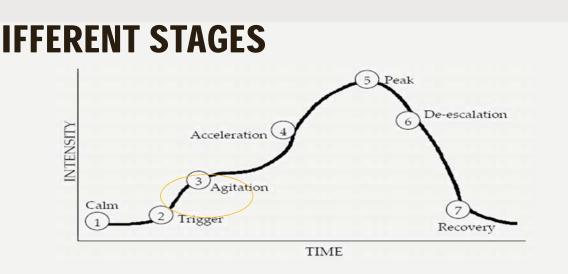
(Slide 9)

Trigger:

At the **trigger** stage, something occurs that upsets the student. The trigger stage often includes several unresolved conflicts, such as repeated failures, frequent corrections, interpersonal conflicts

Anticipate antecedent; understand need, giving attention and acknowledgement

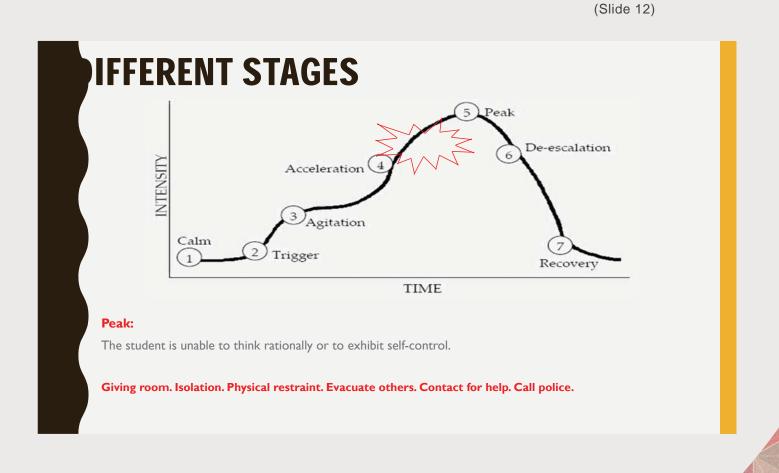10. Discussion of the stage "Agitation". Its characteristics and possible strategies can be used during this stage.

(Slide 10)

DIFFERENT STAGES
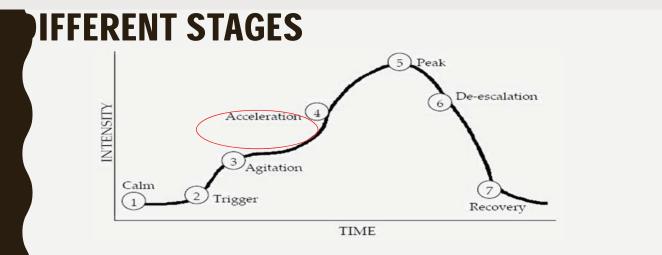
Agitation:

During the **agitation** stage, the student's behavior becomes unfocused. The student is off-task, perhaps withdrawing socially, talking with others, and/or out of his or her seat.

Provide options and alternatives, reduce proximity

11. Discussion of the stage "Acceleration". Its characteristics and possible strategies can be used during this stage.
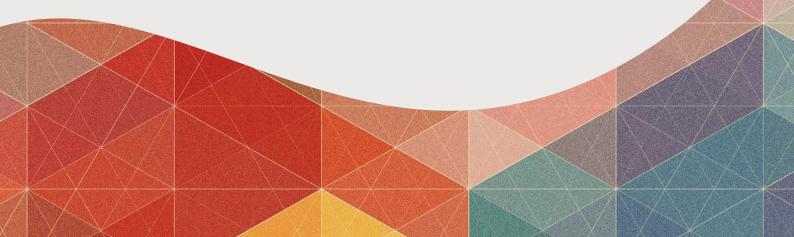
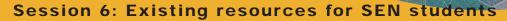(Slide 11)

DIFFERENT STAGES

Acceleration:

During the **acceleration** stage, the student's behavior becomes more focused, provocative, and may be threatening.

Stay calm & don't challenge. Don't put shame on him. Don't enforce body contact. Don't use "why" question. Acknowledge the feelings. Forced favored choice.

12. Discussion of the stage "Peak". Its characteristics and possible strategies can be
    used during this stage.

DIFFERENT STAGES

Peak:

The student is unable to think rationally or to exhibit self-control.

Giving room. Isolation. Physical restraint. Evacuate others. Contact for help. Call police.

Session 6: Existing resources for SEN students

Learning outcomes:

3. Some assistive technologies for supporting student with SENs will be introduced

4. Participating teachers will be invited to think about a broader concept of "resources" for supporting students with SENs

Suggested timing: 15 minutes
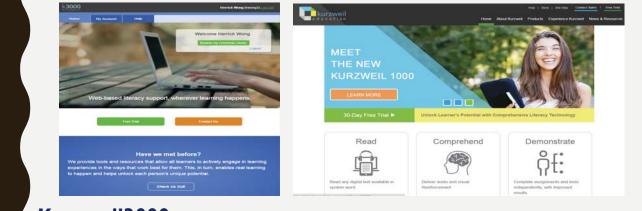
1. Introduce the topic of this session.

(Slide 1)

EXISTING RESOURCES FOR SEN STUDENTS?

MR. HERRICK WONG

BSC IN PSYCHOLOGY (ALBERTA), MPHIL (POLYU), EDD CANDIDATE (CUHK)

MANULIFE CENTRE FOR CHILDREN WITH SPLD, THE HK POLYTECHNIC UNIVERSITY

2. Some students with reading and writing difficulty experience a great deal of difficulty in reading text. Providing audio books along with printed books may help. Some adaptive reading software programs can facilitate readers by converting visually presented words into human-like speech sounds. Such tools do not only address the phonological deficits of the students in word learning and reading, but also enable them to allocate more cognitive resources to process the materials in sentence and discourse level of reading materials. Such technological resources can be incorporated into e-learning systems and test-taking systems of post-secondary institutes.

(Slide 2)

Kurzweil3000

(https://www.fireflybykurzweil.com/KLogin.php)

(VIDEO TUTORIAL : https://www.kurzweiledu.com/experience-kurzweil/video-library/video-library.html)

It supports *Universal Design for Learning,* and allows struggling readers to learn the same content as their peers in different ways with this reading, writing and learning software solution.
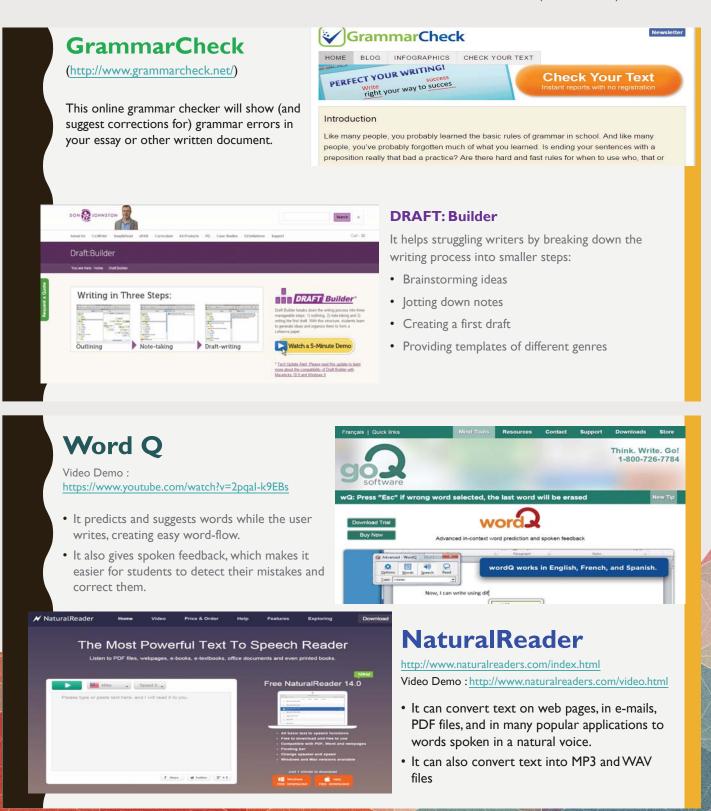
It facilitate students to develop on the following areas:
- Reading Fluency
- Vocabulary
- Comprehension
- Writing
- Study skills
- Test-taking support

3. Five adaptive computer-based programs were introduced in the session.

They support Universal Design for Learning, and facilitate struggling

learner to engage the same learning content as their peers but in different

ways. They facilitate students to develop skills such as reading fluency,

identifying main ideas, summarization, mind-mapping, note-taking, testtaking.

These skills contribute to reading comprehension and passage

writing, which are two important learning outcomes of academic learning.

GrammarCheck

(http://www.grammarcheck.net/)

This online grammar checker will show (and suggest corrections for) grammar errors in your essay or other written document.

DRAFT: Builder

It helps struggling writers by breaking down the writing process into smaller steps:

- Brainstorming ideas
- Jotting down notes
- Creating a first draft
- Providing templates of different genres

Word Q

Video Demo :
https://www.youtube.com/watch?v=2pqaI-k9EBs

- It predicts and suggests words while the user writes, creating easy word-flow.
- It also gives spoken feedback, which makes it easier for students to detect their mistakes and correct them.

NaturalReader

http://www.naturalreaders.com/index.html

Video Demo : http://www.naturalreaders.com/video.html

- It can convert text on web pages, in e-mails, PDF files, and in many popular applications to words spoken in a natural voice.
- It can also convert text into MP3 and WAV files

4. Why do we need to support students with special education needs? Answers to this question lead us to think about a wider range of much-needed resources that could range from extra-personal to intra-personal, from individual to interpersonal, or from personal to societal, etc.

After quickly introducing some concrete adaptive technologies for facilitating academic learning (which are highly extra-personal) the speaker highlighted in the second-half of the session the importance of seeing and conceptualizing the supports to students with SENs with a strength-based orientation– fostering intrinsic qualities among young postsecondary students with SENs. This perspective and its matters complement with the matters discussed in other sessions of the workshop.

Six qualities that predict successful outcomes for adults with SENs were introduced.

i. Self-awareness

ii. Proactivity

iii. Perseverance

iv. Goal setting

v. Presence and use of effective social support systems

vi. Emotional coping strategies

(Slide 5)

RETHINKING THE NATURE OF "RESOURCES"

. Why kind of resources are we really looking for?

. What kind of resources can be found among students?

   What kind of resources can be found among students <u>with SENs</u>?

. Are "empowering self determination", "developing the full potential" and "career development" the ends or the means?

– Resilience approach vs Deficit approach

– the resilience framework attempts to identify protective factors – resources in the family, school and community that can be mobilized to build students' academic skills and positive dispositions toward learning.

What are the variables that predict successful outcomes for adults with learning disabilities?

– **Success Attributes –** *Self-Awareness, Proactivity, Perseverance, Goal Setting, Presence and Use of Effective Social Support Systems*

5. Special educational needs are just some representations of extraordinary human differences. The project work taking place in the institute helps not just to identify these "differences" with reference to some established definition or understanding about the "differences", but also to make a difference in the learning life of the struggling learners.

Furthermore, differences can be dealt with two different ways. For differences that are about deficits, we should reduce the "differences"– to help learners catch up with their peers. However, for differences that are about talents, we should further enhance the "differences"– so as to make them more different from their peers on those aspects.

(Slide 6)

➢ Defining the differences

➢ Identifying the differences

➢ Making differences

"Why am I different from others?...

... Why do you have to be like other? "

What changes do you want to see to the learning life of our students?

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Appendix A

Interview protocol for academic staffs in HKIT

1. Do you know what "special educational needs (SEN)" means?

    For academic staffs that can demonstrate their knowledge on the term, turn to question 2

    For academic staffs that do not demonstrate their knowledge on the term, interviewers from QESS Project Team will explain the term to them with the following script, before turning to question 2.

    Definition of SEN in Hong Kong
    In Hong Kong, students with SEN was defined as having one or more following characteristics:
    - Attention Deficit/ Hyperactivity Disorders (ADHD)
    - Autism Spectrum Disorders (ASD)
    - Communication Difficulties (CD)
    - Emotional and Behavioral Difficulties (EBD)
    - Hearing Impairment (HI)
    - Visual Impairment (VI)
    - Intellectual Disability (ID)
    - Physical Disability (PD)
    - Specific Learning Difficulties (SLD)

    (Equal Opportunities Commission, 2012)

2. Have you ever had students with SEN in your class?

    Follow-up questions for "yes" in question 2:

(1) What were the specific types of SEN that they are living with?

(2) How did their special needs affect their learning in class?

(3) What did you do when you find that their special needs affect their learning?

(4) What did you feel when working with students with SEN?

3.   Have you ever suspected that some students in your class are students with SEN? (i.e. although they did not shown to be students with SEN in official school record, they showed some "symptoms" that consist with students with SEN)

4. What do you expect from the teacher training program in HKIT? (i.e. knowing about etiology of SEN; or specific skills of working with students with SEN)

Appendix B
Interview protocol for students with SEN in HKIT

1. Do you think you have a good relationship with teachers in HKIT? Do you think that teachers in HKIT help you in encountering challenges in academic issues and life challenges?
Follow-up questions for "yes" in question 1:
How did they help you?

2. Do you think you have a good relationship with other students in HKIT?

3. How is your study life in HKIT? What are you good at doing at school? What do you think you can improve?

4. Apart from strengths and weaknesses in studying, what are your strengths and weaknesses in other aspects?

5. What do you think HKIT can do for you (e.g. teacher accommodation in classroom)?

Appendix C
Interview protocol for academic staffs in HKIT

Q: Do you know what "special educational needs (SEN)" means?
A: Approximately. Some students are affected by certain factor, it can be physiological or psychological factor, it makes them need more support from schools/ additional support, when compared with other students.

Q: Have you ever had students with SEN in your class?
A: There is no special class in the institution. There is also no official record to identify the students with SEN. However, I did suspect some students in my class have SEN by observation. Some students did not understand the course content even I have repeated three to four times. Also, some students did not respond actively in the class and have never asked question/ sending me the draft of their homework. Some students played in the class and do not listen to me after taking attendance......I wonder if they have SEN.

Q: What do you expect from the teacher training program in HKIT?
A: I would like to know how to identify students with SEN and corresponding accommodation. Without identification, students work very hard to meet the social expectations and frustrated by repeated failure. With early identification, we can have corresponding accommodations, as some students are unresponsive to teaching strategy like briefing and re-cap of key concepts. Also, we can refer the students to have therapy and continue their study. We may tell them their situation, so that the repeated failure can be attributed to learning disability, and they can know that it is not related to personal effort. If it is found that the students do not have the ability to study, we may ask them to terminate their study as it does not suit them.

Appendix D
Interview record of Teacher B

1. Q: Do you know what "special educational needs (SEN)" means?
   A: Different factors affecting students, that their learning needs are different from mainstream students and need additional support.

2. Q: Have you ever had students with SEN in your class?
   A: Yes.

3. Q: What were the specific types of SEN that they are living with?
   A: It was a confirmed case of hearing impairment in degree level.

4. Q: How did his/ her special needs affect his/her learning in class?
   A: He needed to bring the hearing aid with him. Sometimes, he did not bring it along with him. When he attended the class without the hearing aid, he cannot receive the message from the teacher properly.

5. Q: What did you do when you find that his special needs affect his learning?
   A: I kept reminding him to wear the hearing aid; reminding him the concepts; arrange his seat so that he can sit closer to me; and check his understanding on the concepts

6. Q: What did you feel when working with students with SEN?
   A: I think they have the rights to study in the same classroom as other students; therefore, teachers need to understand their needs. My concern is that other students may not be willing to help them, or they may not have the ability to help them. I afraid that assigning other students to help them may actually disturb other students' learning progress in class.

7. Q: Have you ever suspected that some students in your class are students with SEN?
   A: I suspected that one of my students in my higher diploma class have dyslexia.

8. Q: What did you observe to make this conclusion?
   A: I found that he performed poorly in the writing task in the examination while performed normally in non-writing task, such as multiple-choice questions and true/false questions. I think having spelling mistake was normal, however, that student wrote "mojibake" in the answer paper, which did not look like ordinarycharacters. Additionally, he wrote his thought on the paper immediately after he thought of the idea and therefore has poor organization in his work.

9. Q: What did you do when you suspected that he has dyslexia?
    A: Since I was a part-time teacher, I did not have the time to follow up the case. I did tell the program leader and the corresponding colleagues that time, but they did not have the ability or knowledge to offer help.

10. Q: If you have the time and ability, what would you do for that student?
    A: I would review his diagnosis and intervention record, as a part of clinical progress. I suspected that he may not have enough ability to catch up with the demand in higher diploma, as he entered the program as a mature student. Since the golden period of intervention have been passed, it is too late to have intervention at his age, I would focus on career planning, by guiding him to think of if higher diploma or studying is the most appropriate way for him.

11. Q: What do you expect from the teacher training program in HKIT?
    A: As a teacher, I think the most important thing is to know how we can help the students in a practical way. Some teachers may think that they need to do it on their own. However, I think that knowing their role is already good enough. Teachers may help to refer the case or act as a source of information. For example, they may report students' performance in examinations and in the class.

12. Q: As I know, you are also a specialist in SEN. Do you have any comments for the Screening mechanism of SEN in HKIT?
    A: I believe SEN students did exist in HKIT, but I think there is no mechanism to screen out the students. It depends on the sensitivity of the teachers. If the teachers are not familiar with SEN, they do not aware of students' situation. I do appreciate that City University of Hong Kong take the initiative to hire SEN specialist. In long term, it is beneficial to the school, as the school can claim themselves as "SEN-caring school".

Appendix E
Interview record of Teacher C

1. Q: Do you know what "special educational needs (SEN)" means?
   A: Students with learning disability or some in-born disabilities that they need special care.

2. Q: Have you ever had students with SEN in your class?
   A: Students won't tell me that they have SEN by themselves. I heard about it from other teachers. For example, Ada (Note: vice-president in HKIT) told me that one of my students have mental problem.

3. Q: Did her mental problem affect learning progress in class?
   A: Yes. She became depressed and cried easily. She failed one subject in Britain (Note: HKIT subsidies its degree students to pursuit their study in Britain for half or one year). She also forgets things easily. She did remember that she had a presentation at the night, but she forgot it in the following day, so she failed in the examination. The program leader from TU (Note: the cooperating university with HKIT) sent me a letter and discussed her situation with me.

4. Q: What did you do for her after knowing her mental problem?
   A: I think I have nothing to do. I will answer students' questions if they ask me, I try to treat SEN students as normal students, rather than labeling them, so that both parties can feel better.

5. Q: What did you feel when working with students with SEN?
   A: I don't have special feelings, if they do not disturb my class, such as screaming in the class.

6. Q: What would you do if the students scream at your class?
   A: I will seek help from Mike (Note: the social worker in HKIT).

7. Q: Have you ever suspected that some students in your class are students with SEN?
   A: No. I won't do it. Some students appeared confused, but I won't make the conclusion that they have SEN.

8. Q: What do you expect from the teacher training program in HKIT?
   A: I want to learn counseling skills, accommodation and behavioral management skills, for example, what should I do if there is ADHD student in my class? I want to see the corresponding measure for different scenarios.

Appendix F
Interview record of Teacher D

1. Q: Do you know what "special educational needs (SEN)" means?
   A: Students who are different from normal students. They may not receive information from the lesson properly. They may not be able to learn the course content even the teachers repeat for several times. They can be categorized according to the severity of their problems.

2. Q: Have you ever had students with SEN in your class?
   A: No.

3. Q: Have you ever suspected that some students in your class are students with SEN?
   A: I am not sure……some of them appeared to be confused and they need to be taught for several times.

4. Q: How did their conditions affect their learning in class?
   A: Yes, it affects other students' learning progress in class.

5. Q: What did you do when you found such a condition?
   A: I taught them for several times and check their understanding.

6. Q: What did you feel when working with these students?
   A: I feel sorry for them; I think I need to show my empathy to them…..I worry that they may fail in the examinations. I think the school should separate SEN and non-SEN students, to accommodate their special learning needs and thus teachers can be more concentrated in teaching.

7. Q: What do you expect from the teacher training program in HKIT?
   A: I hope I can learn practical skills and techniques, for example, how to enhance their interest in learning.

Appendix G
Interview record of Teacher E

1. Q: Do you know what "special educational needs (SEN)" means?
   A: Physical, mental and emotional issues.

2. Q: Have you ever had students with SEN in your class?
   A: They did not tell me actively. But I noticed that some students appeared to have SEN. There are some students appeared to have ADHD. Also, there is a student, called Wong, with memory problem that he did not remember the things that I had just mentioned. I had discussed his situation with other teachers and found that he also had problems in speaking and listening. He also had poor performance in examinations.

3. Q: Do you think that his situation affects his learning progress?
   A: Yes. Even though I spoke slowly, repeated the content for several times, highlighted the key points in the PowerPoint, it seems did not help much, Wong still looked confused. Although he said "I understand", I think it was because he wanted to avoid bothering the others.

4. Q: You mentioned that you had suspected some students in your class have ADHD. Would you mind describing their situation?
   A: When I was a lecturer in Lingnan University, some students kept walking around the classroom and eating in the class. I wonder if they have problem in attention or just feel bored…...As I remember, one of my students played with the electronic device all the time, even during the presentation. The presentation last for only 15 minutes, he could not inhibit his drive of playing with the electronic device. He ignored the others when playing with the electronic device.

5. Q: Do you have any special strategies in drawing students' attention?
   A: I think teachers in tertiary institutions are more passive when compared with their secondary and primary counterparts. For example, in secondary and primary schools, teachers can confiscate the object that distract the students or report it to the parents. However, it is impossible for us to do it in the tertiary sector.

6. Q: Had you suspected any other students in your class to be SEN students?
   A: Yes. She is called Yip. I wonder if she was impolite or just encountered some difficulties…..When I first met her, she entered the classroom in the

mid of the lesson. When I asked why did she come in the mid of the lesson, she stammered out her reasons. I wondered if it was because of problems in mindset or language, as I thought that she was a new comer to Hong Kong from mainland.....and I discovered that she had been Hong Kong for two years afterward and she seems confused even though I spoke in Mandarin, I think it may not be the problem with language. She failed in most of the subjects and had problems in interacting with the others. She always sits in the corners during the class, without interacting with the others.

7. Q: Do you think that her situation affects her learning progress?
    A: Sure, Yip failed in most of the subjects. She does not like the other mainland students who intend to work in Hong Kong with student visa; she did attend classes, but failed in most of the subjects. She also refused to tell me her problem, for example, I asked her if she printed her notes, she said yes, but I found that she did not pint the notes, she wrote on a notebook instead.

8. Q: What did you do for accommodating for Yip's learning needs?
    A: I thought of finding Mike (Note: the school social worker in HKIT), as Yip is the potential case of emotional disturbance. I afraid of she will commit suicide after failing in most of the subjects and being blamed by the family. As you know, students nowadays are delicate.

9. Q: How do you feel when working with students who are suspected to have SEN?
    A: I think we should not have any special perception or label towards SEN students. I will answer questions if they come to me. I think they are already "grown-up", and they should be able to handle their own problem. The peers also offer help for the students who experience learning difficulties, for example, the one that I mentioned before (Note: the boy who has problem in memory, speaking and listening), the other students also helped him.

10. Q: What do you expect from the teacher training program in HKIT?
    A: I don't know......as it is just the beginning of the semester, I think I need some more time to understand the situation.

Appendix H
Interview record of Teacher F

1. Q: Do you know what "special educational needs" means?
   A: The learning needs of SEN students are differ from normal students, some of them are less attentive than the others, some of them have poorer in expressive languages; some of them are gifted.

2. Q: Have you ever had students with SEN in your class?
   A: No, no one in my class claimed that they have SEN.

3. Q: Have you ever suspected that some students in your class are students with SEN?
   A: One of my students had difficulty in controlling his emotions and he talked loudly, he gave the others an impression that he was agitated.

4. Q: How does his special needs affect his learning in class?
   A: He failed in most of the subjects and studied for six years in our institution. But he can form group with other students and the group-mates did not complain him.

5. Q: What did you do when you find that his special needs affect his learning?
   A: I think I cannot do anything.

6. Q: What did you feel when working with the student?
   A: Honestly, I want to escape from him. He is just like a bomb; I feel that I do not have the power to control him.

7. Q: What do you expect from the teacher training program in HKIT?
   A: I don't think identification or basic knowledge is important. I think crisis management and practical skills are more important.