

**Inclusive Education Guidelines and Adaptations to Support the
Implementation of the National Curriculum**

On

**Curriculum Adaptations for children with Learning Disabilities (LD)
and Giftedness**

(Working Document)

What is Learning Disability (LD)?

A learning disability is a neurological disorder. In simple terms, a learning disability results from a difference in the way a person's brain is "wired." Children with learning disabilities are as smart or smarter than their peers. But sometimes they may have difficulty reading, writing, spelling, reasoning, recalling and organizing information if left to figure things out by themselves.

A learning disability can't be cured or fixed. However, with the right support and intervention, they can succeed in school and go on to successful, often distinguished careers.

Types of LD

Common Types of LD

Dyslexia Difficulty with reading
Dysgraphia Difficulty with writing
Dyscalculia Difficulty with math

Dyslexia – A child has trouble understanding written words. It may also be referred to as reading disability or reading disorder.

Dysgraphia – A child finds it hard to form letters or writes within a defined space.

Dyscalculia – a mathematical disability in which a person has a difficulty in solving arithmetic problems and grasping math concepts.

Common signs of LD

Below characterizes common characteristics of child with LD in various levels.

Preschool	Grades K-4
Speaks later than most children Pronunciation problems Slow vocabulary growth, often unable to find the right word Difficulty rhyming words Trouble learning numbers, alphabet, days of the week, colors, shapes Extremely restless and easily distracted Trouble interacting with peers Difficulty following directions or routines Fine motor skills slow to develop	Slow to learn the connection between letters and sounds Confuses basic words (run, eat, want) Makes consistent reading and spelling errors including letter reversals (b/d), inversions (m/w), transpositions (felt/left), and substitutions (house/home) Transposes number sequences and confuses arithmetic signs (+, -, x, /, =) Slow to remember facts Slow to learn new skills, relies heavily on

	memorization Impulsive, difficulty planning Unstable pencil grip Trouble learning about time Poor coordination, unaware of physical surroundings, prone to accidents
Grades 5-8 Reverses letter sequences (soiled/solid, left/felt) Slow to learn prefixes, suffixes, root words, and other spelling strategies Avoids reading aloud Trouble with word problems Difficulty with handwriting Awkward, fist-like, or tight pencil grip Avoids writing assignments Slow or poor recall of facts Difficulty making friends Trouble understanding body language and facial expressions	High School Students and Adults Continues to spell incorrectly, frequently spells the same word differently in a single piece of writing Avoids reading and writing tasks Trouble summarizing Trouble with open-ended questions on tests Weak memory skills Difficulty adjusting to new settings Works slowly Poor grasp of abstract concepts Either pays too little attention to details or focuses on them too much Misreads information

Teaching Strategies

Multi-Sensory Approach

If your child has learning disabilities, multisensory learning is likely to help your child learn better than paper, pencil, and lecture-based learning. Multisensory teaching methods are PROVEN to create better learning outcomes for Learning Abled Kids. In fact, it helps all kids learn better.

Multisensory learning involves teaching your child through each of the senses at the same time.

Auditory (hearing and speaking).

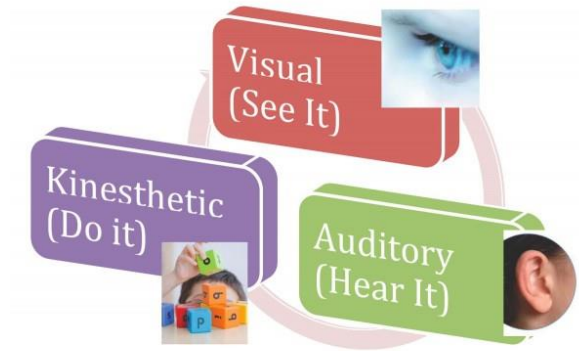
Visual (seeing and perceiving).

Kinesthetic / Tactile (touch, movement, and doing).

Multisensory approach....

- Involves the use of our senses (Mostly - auditory, visual and kinesthetic).
- Focuses primarily, on using visual, auditory, and kinesthetic-tactile elements.

- Is taught incorporating all senses into the learning process to activate different parts of the brain simultaneously, enhancing memory and the learning of written language.
- Helps learners discover what learning style fits them best.
- Provides more ways for understanding new information, more ways to remember it and more ways to recall it later.



Accommodations/Modifications

Listed below are accommodations and or modifications for the students with learning disabilities.

Textbooks and Curriculum

Texts /Reading

- Provide audio of the text and have student follow the text while listening
- Provide summaries of the reading/text
- Use marker or highlighting tape to highlight important text/sections
- Assign peer reading buddies
- Use colored transparency or overlay
- Review vocabulary prior to reading
- Provide preview questions
- Use videos/pictures related to the readings
- Do not require student to read aloud
- Talk through the material one-to-one after reading assignments

Curriculum

- Shorten assignments to focus on mastery of key concepts
- Shorten spelling tests to focus on mastering the most functional words
- Substitute alternatives for written assignments (posters, oral/taped or video presentations, projects, collages, etc.)

Classroom Environment

- Provide a computer for written work
- Seat student close to teacher in order to monitor understanding
- Provide quiet environment during intense learning times

Instruction and Assignments

Directions

Give directions in small steps and with as few words as possible
Break complex direction into small steps—arrange in a vertical list format
Read written directions to student, then model/demonstrate
Accompany oral directions with visual clues
Use both oral and written directions
Ask student to repeat; check for understanding

Writing

Use worksheets that require minimal writing
Provide a “designated note taker;” photocopy another student’s or teacher’s notes
Provide a print outline with video and pictures
Allow student to use a keyboard when appropriate
Allow student to respond orally
Grade only for content not spelling or handwriting
Have student focus on a single aspect of a writing assignment
Allow student to dictate answer to essay questions
Reduce copying tasks
Reduce written work

Math

Allow student to use a calculator without penalty
Use visuals and concrete examples
Use grid paper to help correctly line up math problems
Present information in small increments and at a slower pace
Take time to reteach if student is struggling to understand
Read story problems aloud
Break problems into smaller steps

Grading

Provide opportunity to test orally
Allow student to type responses
Read test to student
Evaluate oral performances more than written
Avoid penalizing for spelling errors, reversals, etc.

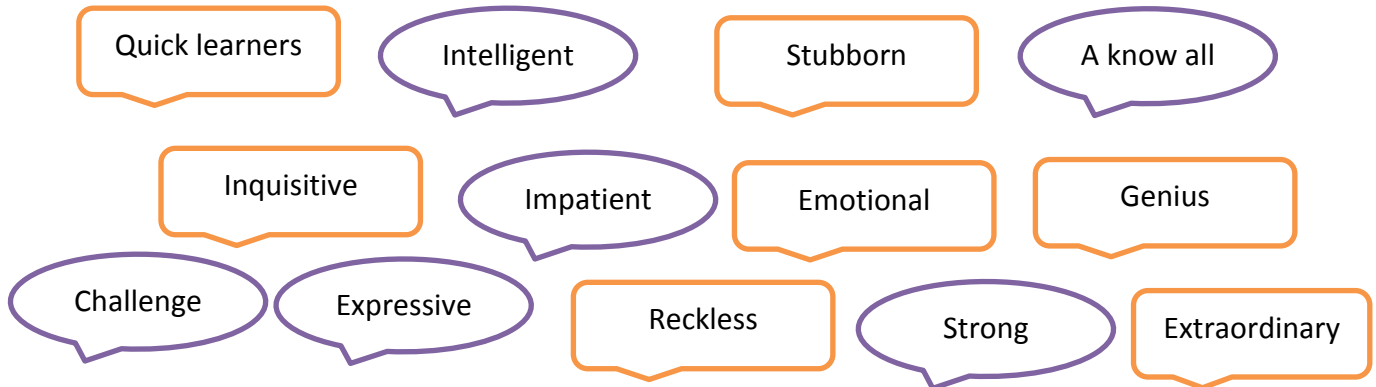
Testing

Go over directions orally
Permit as much time as needed to complete tests; avoid timed testing
Read test materials and allow oral responses
Provide typed test materials, not tests written in cursive
Allow student to respond on tape, with a typewriter, or by dictating answers to a tutor for assessment
Allow tests to be taken in a room with few distractions

Giftedness

How would you describe “gifted”?

Below given are some of the ways in which people have described “Giftedness”



The myths and facts of gifted education

It is not hard to notice that many people don't know much about “giftedness” along with a lot of misunderstandings. The mostly heard ones are;

- Gifted students are all-rounders. For instance children gifted in maths are also genius in language learning. Moreover, their learning ability and skills must outshine their peers. So they have better grades for sure.
- The gifted must be problematic and trouble makers. Because of their talents, they will have a bright future. Even with no guidance their talents will shine naturally.
- As for nurturing them it is thought that grade skipping is the best measure for giftedness.

General characteristics of gifted students

Due to these labels and one-sided understanding of the gifted many parents and teachers missed the golden chance to provide the children with more appropriate education or educate them in a wrong way. The gifted therefore are not able to get the desirable nourishment.

What are the characteristics of gifted students with respect to their personalities and learning abilities?

- They are autonomous learners
- Have strong inquisitiveness
- Keen observation
- Wide range of interests
- Unique insights towards everything (unique insights)
- They do not comply with others easily
- Stand firm on seeking truth (truth seeking)
- Comprehension of abstract and complex concepts
- Learn independently
- Good analytical ability
- Good problem solving skills
- Data organizing and classifying (they can organize information effectively, classify knowledge)
- Good memory (have excellent memory)

Identification and assessments for the gifted

Traditionally, some standardized assessments were used to identify gifted students. However, there are limitations in these tools and they might be able to reflect the multiple support of the gifted. Therefore, multiple tools and multiple criteria and multiple channels should be used to identify their talent in order to provide them with appropriate education. For instance observations by teachers and parents, peer assessment, etc. Together with the use of behavioral checklists we can be more sure of the different gifted potentials of the gifted students.

Tools for identifying gifted children

- *Torrance test for creative thinking*
- *Wechsler intelligence scale for children*
- *Behavioral checklist for students with high potential*
- *Performance based assessment*

Acceleration and enrichment


If gifted students are being asked to sit and learn in class surely they will soon lose their interest on going to schools. If there is no suitable adaptation for them their talents will be wasted and their personal growth will be affected.

To systematically educate gifted students in the proper direction countries like Hong Kong has formulated a 3-tiered implementation mode of gifted education. In this 3-tiered structure each level is packed with enrichment and extension programs to cater for the learning needs of gifted students. Reasonable acceleration will also be adopted according to their progress.

Enrichment means a greater diversity of learning experience outside classroom so gifted students will be able to investigate deeper into the topics through extension programs. Since they have multiple learning interests enrichment and extension of curriculum will be able to cater for their needs and enhance different kinds of learning techniques.

Acceleration means speeding up the pace of learning or teaching ahead of schedule so as to save time for enrichments and prevent them from losing interests with all the repetitions and waiting in class. Acceleration could be carried out in all the subjects at the same time which means grade skipping or in certain subjects or curriculum compacting. The Reference Manual on Acceleration produced by Hong Kong provides some guidelines and tools on practicing on acceleration by schools.

The Three-Tier mode of gifted education

Off Sight Support	3	Off sight extension, enrichment and acceleration programs for exceptionally gifted students	
Pull out	2	Pull out programs of generic nature. Eg: creativity or leadership training	Subject/Domain focused programs. Eg: Poetry writing
Whole class	1	Inclusion of the three core elements (thinking skills, creative skills and personal development) of gifted education into all curricular	Differentiation in regular classroom
Generic  Specialized			

Inclusive education and pull-out programs

To ensure gifted students to have a more comprehensive and a balanced development, a school based inclusive model need to be adopted for gifted education.

According to the characteristics interests and learning needs of gifted students, schools can set goals and allocated additional resources to promote school based enrichment programs. Learning together with other classmates, gifted students will be more able to build better peer relationship in mainstream schools as they can inspire and enrich one another.