School-based Gifted Education and Talent Pool Resource Kit

$$E=Mc^2$$

$$a+b$$

Part 1: Gifted Education in Hong Kong

⭐ Objectives of Gifted Education in Hong Kong

- To integrate gifted education as part of quality education
- To unlock students' full potential and foster their pursuit of excellence
- To provide students with appropriate opportunities to inspire thinking, cultivate creativity and develop personal-social competence

⭐ Definition of Gifted Children

"Giftedness", "intelligence", and "talent" are dynamic concepts that change with time, culture and societal values. Consequently, there remains no universally-agreed definition of giftedness to this day.

In Hong Kong, the Education Commission Report No. 4 (1990), drawing from the United States' Marland Report (1972), adopted a broad definition of giftedness. It defines gifted children as those who show exceptional achievement or potential in one or more of the following:

1.   a high level of measured intelligence;

2.   specific academic aptitude in a subject area;

3.   creative thinking – high ability to invent numerous novel and elaborate ideas;

4.   superior talent in visual and performing arts such as painting, drama, dance, music, etc.;

5.   natural leadership of peers – high ability to inspire others to achieve common goals; and

6.   outstanding ingenuity in athletics, mechanical skills or other areas requiring gross or fine motor co-ordination.

Given the broad definition of giftedness adopted in Hong Kong, it is not advisable to assess whether a student is gifted or not based on the result of a single IQ test. The Education Bureau (EDB) encourages schools to focus not only on elevating students' academic achievements, but also on nurturing students who are gifted in areas such as arts, sports, creativity and leadership. Schools are advised to develop school-based gifted education programmes, with regard to specific school context and students' attributes, to address the needs of gifted and more able students.

Gifted Education
in Hong Kong

Talent Pool

Levels 1 and 2:
School-based Gifted
Education

Level 3:
Off-school Support

Other Resources
and Support

Implementation Model for Gifted Education in Hong Kong

Gifted Education in Hong Kong primarily operates on a **Three-tier Implementation Model** (see Figure 1) to systematically and strategically identify and groom gifted students with the provision of education at appropriate levels. Schools are encouraged to adopt this model for planning and implementing their school-based gifted education, with short-term and long-term development targets set to better respond to the changing needs of society and major curriculum emphases. In addition, schools are advised to select suitable entry points for developing school-based gifted education, considering their school context and the readiness of their teaching staff, and using the Student Talent Pool as the tool for talent identification.

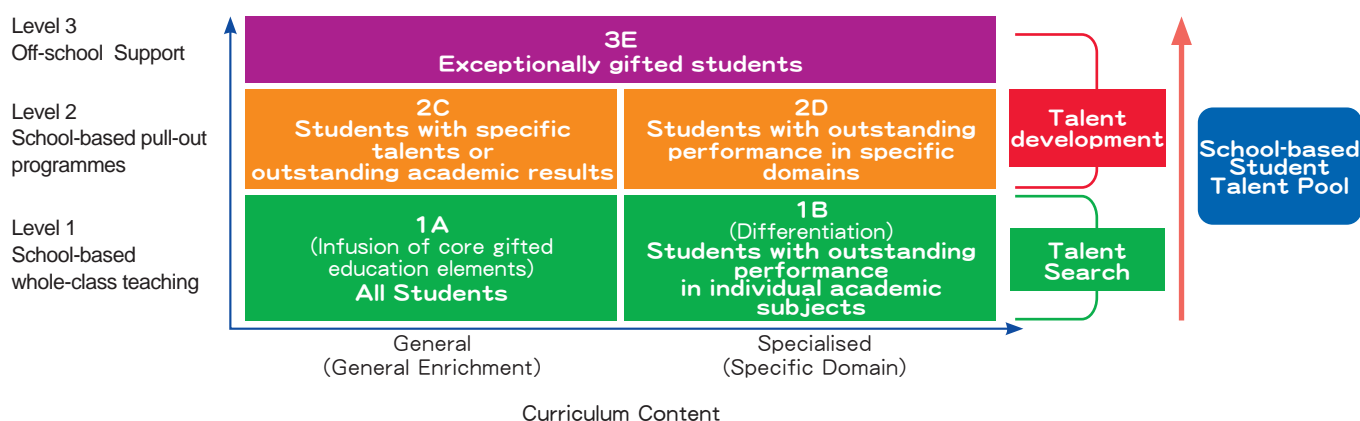## Three-tier Implementation Model for Gifted Education

Figure 1: The Three-tier Implementation Model for Gifted Education

Level 1: School-based whole-class teaching

A: Integrate the three core elements advocated in gifted education, i.e. **higher-order thinking skills**, **creativity** and **personal-social competence**, into the regular classroom for all students;

B: Adopt **differentiated instructional strategies** across all subjects in the regular classroom to cater for learner diversity. Teachers can design challenging learning tasks where gifted/ more able students can excel beyond their peers and gradually distinguish themselves in the **talent search** process.

Level 2: School-based pull-out programmes

C: Conduct **generic or cross-curricular pull-out enrichment programmes** (e.g. creative thinking workshops, leadership training, etc.) outside the regular classroom to provide systematic training for groups of students with similar abilities;

D: Conduct **specific pull-out extension programmes** (e.g. Young Writers Training Scheme, creative writing courses or mathematics enrichment classes, etc.) outside the regular classroom to provide systematic training for students with outstanding performance in specific domains.

Level 3: Off-school support

E: Schools may arrange for exceptionally gifted students to participate in enrichment and advanced programmes (e.g. off-school advanced learning programmes) provided by EDB, the Hong Kong Academy for Gifted Education (HKAGE), post-secondary institutions and non-governmental organisations to further develop their potential. Individualised educational arrangements (e.g. counselling, mentorship, early entry to advanced programmes) may also be offered to exceptionally gifted students.

⭐ "Gifted Education for All" and "Education for the Gifted"

When implementing gifted education, schools are advised to strike a balance between "Gifted Education "**for all**" and "**for talent**":

"Gifted Education for All" means infusing the core elements of gifted education into the regular classroom to inspire students' thinking, creativity and personal-social competence, so that every student has the opportunity to cultivate their potential. Through participation in diverse and challenging classroom activities, gifted / more able students will become more engaged in learning, gradually revealing their talents. Besides, teachers are encouraged to adopt **differentiated instructional strategies**, such as flexible grouping, tiered assignments or anchored teaching, to tailor programmes for students with outstanding performance in different learning areas, thereby fostering their interests and abilities in those areas.

"Education for the Gifted" emphasises the importance of providing systematic school-based gifted education programmes for students with outstanding performance in class. This includes offering different school-based pull-out programmes for students with similar abilities and interests, allowing them to further develop their potential through peer interaction. Alongside developing students' knowledge in specialised areas, schools can provide enhanced support for gifted students in emotional, social and values-related aspects by organising programmes on affective education and leadership training, ensuring the holistic development of gifted students.

The Three-tier Implementation Model for Gifted Education follows the logical sequence from "**talent identification**" (Level 1: **Talent Search**) to "**development of talent**" (Levels 2 and 3: **Talent Development**). It also encompasses the two key concepts: "Gifted Education for All" and "Education for the Gifted".

Unlocking Children's Potential from a Multiple Intelligences Perspective

Gifted students can demonstrate their exceptional abilities across various domains, including high intellectual capacity, academic excellence, leadership, scientific and technological aptitude, artistic flair and athletic prowess. Schools and parents should work together closely, observing children's behaviour in different aspects and encouraging them to engage in activities that align with their attributes and interests. This ensures that children, especially the gifted ones, can enjoy a healthy and happy upbringing. In unlocking children's potential, schools and parents can refer to the concept of "multiple intelligences" advocated by Dr Howard Gardner at Harvard University. While the list below describes common and distinctive characteristics of gifted children, it is important to note that not every gifted child exhibits all these traits, and observation of a child's characteristics is most relevant when compared to children of similar age.
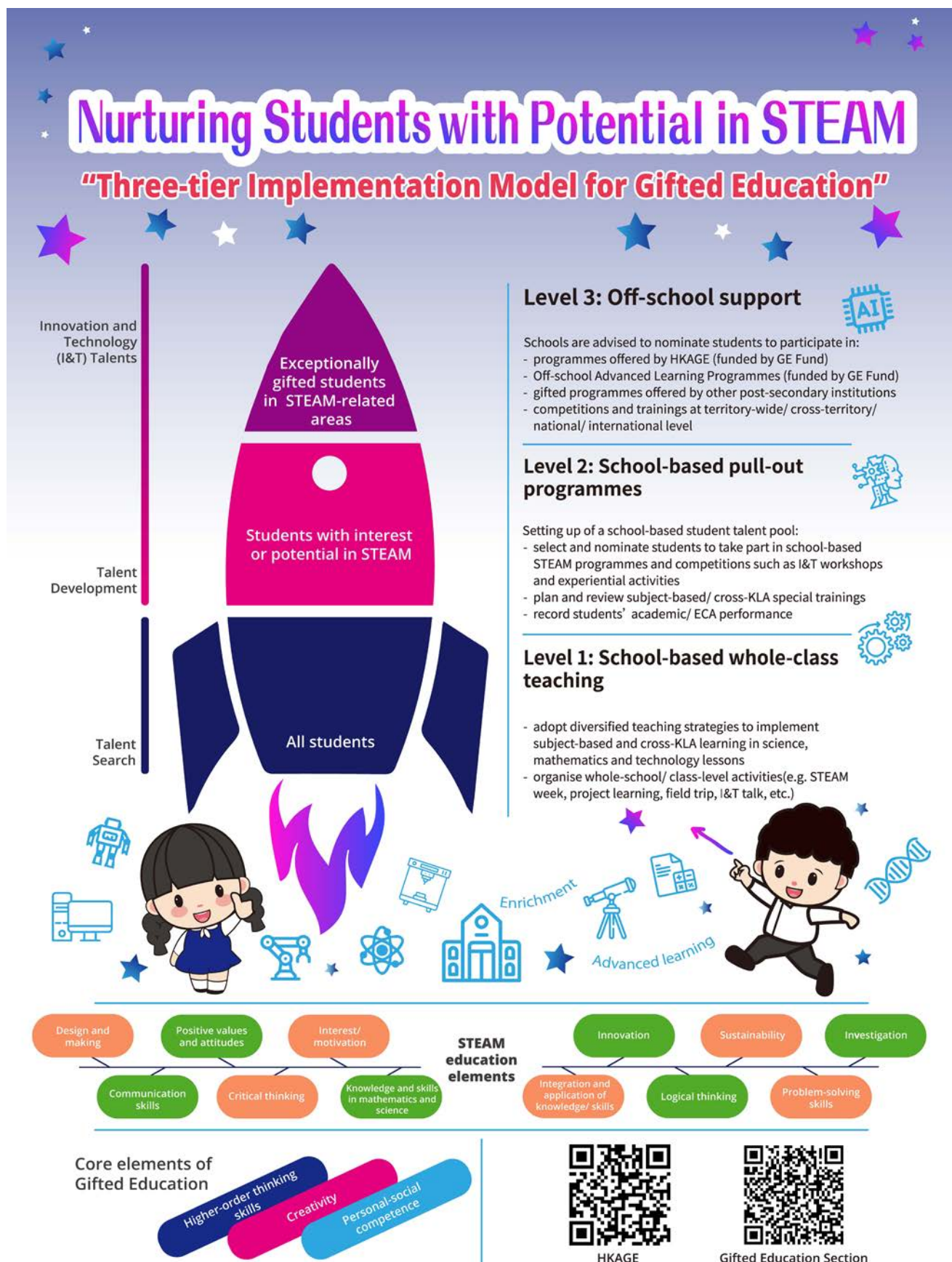
Characteristics	Multiple Intelligences (Gardner, 1983,1999)	Suggested activities
Articulates thoughts eloquently, concisely and expressively using rich vocabulary; proficient in listening, speaking, writing and reading	Linguistic intelligence	Recitation; public speaking; debates; extensive reading; thematic reading; riddle-solving; composing couplets, poetry, prose, novels and drama scripts
Proactively explores patterns, cause-and-effect relationships and logical connections; adept at abstract thinking	Logical-Mathematical intelligence	Mathematics games; board games; games requiring reasoning/logical thinking; scientific exploration, experimentation and invention
Effortlessly masters musical instruments, moves rhythmically with music, quickly memorises melodies and distinguishes tones and pitches	Musical intelligence	Singing; music appreciation (including operas and musicals); musical composition; studying music theory; playing and creating instruments; forming or joining a band or orchestra
Adept at navigating with directions, maps and route charts; appreciates two-dimensional and three-dimensional designs; skilled at memorising, describing, analysing and co-ordinating visual ideas and images	Spatial intelligence	Photography; painting; drawing; solving jigsaw puzzles; crafting three-dimensional models, maps, cross-section diagrams and sculptures; designing visual games such as mazes; orienteering

Characteristics	Multiple Intelligences (Gardner, 1983,1999)	Suggested activities
Approachable; good at interpreting facial expressions; attuned to other's emotions, thoughts and behaviours; demonstrates leadership abilities; well-liked in social circles; adept at forming positive relationships across age groups	Interpersonal intelligence	Enhanced parenting activities and family conversation circles; participating in uniformed groups, volunteer services, "junior reporter" training, leadership training and cultural exchanges; peer mentoring
Self-aware of interests and preferences; expresses emotions effectively; reflects on daily experiences; engages in self-evaluation, self-analysis and self-improvement	Intrapersonal intelligence	Writing introspective and motivational journals, autobiographies and blogs; exploring personal interests; participating in self-awareness, self-esteem, self-affirmation and emotional management training; practising solitary reflection and sharing insights
Proficient in one or multiple sports; demonstrates good physical co-ordination and quick reflexes; prefers hands-on learning; effectively expresses ideas through body language and physical actions	Bodily-Kinesthetic intelligence	Engaging in sports, gymnastics, martial arts, dance, mime, acrobatics and magic; seizing opportunities to learn, train, perform and compete
Passionate about nature; keen on astronomy and geography; fascinated by rural or marine life; environmentally conscious; insightful about ecological principles	Naturalistic intelligence	Studying flora, fauna and natural ecology methodically; sorting and classifying species; taking field trips; exploring celestial bodies and phenomena; reading about natural life sciences; understanding ecological principles and human-nature relationships through animal care, plant cultivation and birdwatching

Unlocking Children's Potential from a Multiple Intelligences Perspective — Nurturing Students with Potential in STEAM

Mathematics, science and technology constitute a key domain of giftedness. To support the development of innovation and technology (I&T), as well as identifying and nurturing students with potential in STEAM, schools are advised to adopt the "Three-Tier Implementation Model" to develop a school-based student talent pool, strengthen support for student learning in STEAM and foster the holistic development of STEAM talents.
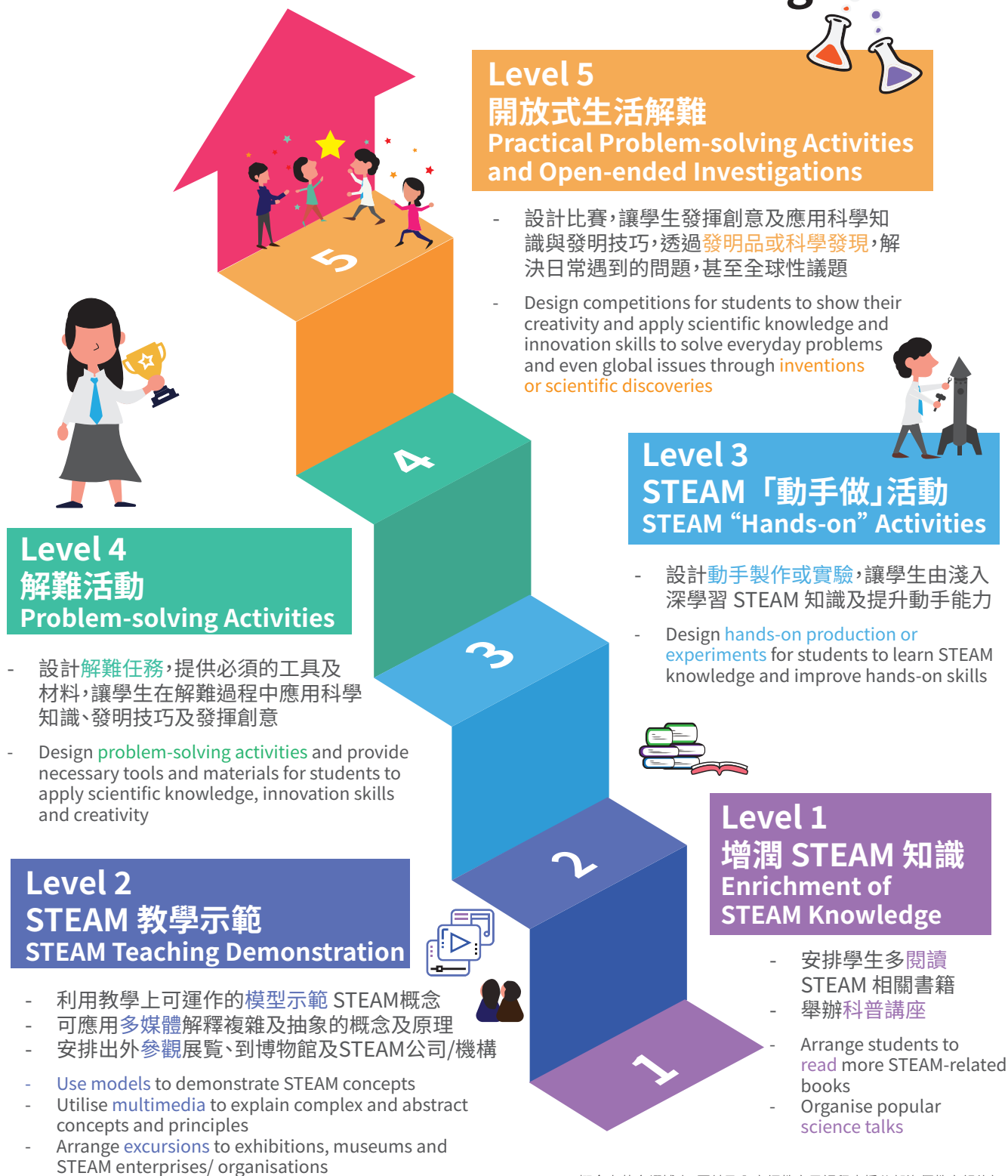

Nurturing Students with Potential in STEAM
"Three-tier Implementation Model for Gifted Education"

Innovation and Technology (I&T) Talents

Exceptionally gifted students in STEAM-related areas

Talent Development

Students with interest or potential in STEAM

Talent Search

All students

Level 3: Off-school support

Schools are advised to nominate students to participate in:
- programmes offered by HKAGE (funded by GE Fund)
- Off-school Advanced Learning Programmes (funded by GE Fund)
- gifted programmes offered by other post-secondary institutions
- competitions and trainings at territory-wide/ cross-territory/ national/ international level

Level 2: School-based pull-out programmes

Setting up of a school-based student talent pool:
- select and nominate students to take part in school-based STEAM programmes and competitions such as I&T workshops and experiential activities
- plan and review subject-based/ cross-KLA special trainings
- record students' academic/ ECA performance

Level 1: School-based whole-class teaching

- adopt diversified teaching strategies to implement subject-based and cross-KLA learning in science, mathematics and technology lessons
- organise whole-school/ class-level activities(e.g. STEAM week, project learning, field trip, I&T talk, etc.)

Enrichment

Advanced learning

STEAM education elements

- Design and making
- Positive values and attitudes
- Interest/ motivation
- Communication skills
- Critical thinking
- Knowledge and skills in mathematics and science
- Innovation
- Sustainability
- Investigation
- Integration and application of knowledge/ skills
- Logical thinking
- Problem-solving skills

Core elements of Gifted Education
- Higher-order thinking skills
- Creativity
- Personal-social competence

HKAGE

Gifted Education Section

6

FIVE Levels of STEAM Teaching

Schools may make use of "5 Levels of STEAM Teaching" to inspire students' interest in STEAM.

校本資優教育及人才庫系列
School-based Gifted Education and Talent Pool Series

STEAM 五層教學法
5 Levels of STEAM Teaching

Level 5
開放式生活解難
Practical Problem-solving Activities and Open-ended Investigations

- 設計比賽，讓學生發揮創意及應用科學知識與發明技巧，透過發明品或科學發現，解決日常遇到的問題，甚至全球性議題
- Design competitions for students to show their creativity and apply scientific knowledge and innovation skills to solve everyday problems and even global issues through inventions or scientific discoveries

Level 3
STEAM「動手做」活動
STEAM "Hands-on" Activities

- 設計動手製作或實驗，讓學生由淺入深學習 STEAM 知識及提升動手能力
- Design hands-on production or experiments for students to learn STEAM knowledge and improve hands-on skills

Level 4
解難活動
Problem-solving Activities

- 設計解難任務，提供必須的工具及材料，讓學生在解難過程中應用科學知識、發明技巧及發揮創意
- Design problem-solving activities and provide necessary tools and materials for students to apply scientific knowledge, innovation skills and creativity

Level 1
增潤 STEAM 知識
Enrichment of STEAM Knowledge

- 安排學生多閱讀 STEAM 相關書籍
- 舉辦科普講座
- Arrange students to read more STEAM-related books
- Organise popular science talks

Level 2
STEAM 教學示範
STEAM Teaching Demonstration

- 利用教學上可運作的模型示範 STEAM概念
- 可應用多媒體解釋複雜及抽象的概念及原理
- 安排出外參觀展覽、到博物館及STEAM公司/機構
- Use models to demonstrate STEAM concepts
- Utilise multimedia to explain complex and abstract concepts and principles
- Arrange excursions to exhibitions, museums and STEAM enterprises/ organisations

概念自黃金耀博士，圖片及內容經教育局課程支援分部資優教育組修訂
Concept proposed by Dr WONG Kam-yiu, Graphics and content adapted by
Gifted Education Section, Curriculum Support Division, Education Bureau

Talent Pool

Levels 1 and 2: School-based Gifted Education

Level 3: Off-school Support

Other Resources and Support

Gifted Education for All | Education for the Gifted

Gifted Education for All

In the regular classroom:

1. immerse the **three core elements of gifted education** (creativity, higher-order thinking skills and personal and social competence)
2. design **diversified** and **challenging** classroom activities
3. utilise **differentiated instructional strategies**

Talent Search

Education for the Gifted

To provide students with outstanding performance in class:

1. **systematic** school-based pull-out programmes
2. affective education, leadership and creative thinking programmes
3. strengthening support on the holistic development of gifted students

Talent Development

Definition of Giftedness

Adoption of a **broad definition of giftedness**

Academic performance

Creative thinking

Leadership

Hands-on activities

The Theory of Multiple Intelligences

Linguistic
Logical-mathematical
Naturalistic
Musical
Bodily-kinesthetic
Spatial
Intrapersonal
Interpersonal

Three-tier Implementation Model

Level 3 Off-school Support

Level 2 School-based pull-out programmes

Level 1 School-based whole-class teaching

3E Exceptionally gifted students	
2C Students with specific talents or outstanding academic results	2D Students with outstanding performance in specific domains
1A (Infusion of core gifted education elements) All Students	1B (Differentiation) Students with outstanding performance in individual academic subjects

Talent development

Talent identification

Curriculum Content

General (General Enrichment) — Specialised (Specific Domain)

School-based Student Talent Pool

1. Identify gifted/ more able students using **multiple criteria, channels and tools**
2. Better utilise the talent pool to select students to participate in school-based training and **nominate** them for **off-school advanced programmes and competitions**

To maximise every student's potential to the fullest

HKAGE Webpage

Gifted Education Section Webpage

Gifted Education Section
Curriculum Support Division
Education Bureau

Part 2: Talent Pool

Identifying and Selecting Gifted/More Able Students

The Student Talent Pool is an essential tool for talent identification in the development of school-based gifted education. Schools should establish their Student Talent Pool to systematically collect, store and update information on students' learning progress, including exceptional academic performance, non-academic achievements and interests in specific areas of study. This information facilitates a comprehensive **understanding of students' interests, attributes and abilities**, as well as the **identification of their potential**. It enables teachers to provide appropriate support according to students' learning needs and strategically plan school-based gifted education programmes to facilitate students' diversified development.

Schools are advised to employ **multiple criteria, channels and tools** to identify gifted/more able students, as well as utilising the talent pool to select students for internal training and recommending students for external programmes and competitions, thereby helping them unleash their potential.

●Multiple criteria, channels and tools include:
   (1) Student talent pool
        e.g. CloudSAMS Talent Databank Module
   (2) Toolkit tailored for subjects/specific domains
   (3) Academic performance of students
   (4) Non-academic achievements and performance of students (e.g. special talent, creativity and leadership, etc.)
   (5) Observations from teachers and parents
   (6) Teacher nomination/ parent nomination/student self-nomination

Criteria and steps suggested by Dr Joseph Renzulli for setting up a talent pool to identify gifted children are shown below:

Test score criteria (Approximately 50% of the Talent Pool)	Step 1	Admitting students who score above the 92nd percentile in tests and examinations as the base of the Talent Pool	The whole Talent Pool consists of approximately 15% of the student population
Non-test criteria (Approximately 50% of the Talent Pool)	Step 2	Teacher nomination	
	Step 3	Alternative pathways, such as self-nomination, parent nomination or peer nomination	
	Step 4	Special nomination from, for example, resource teachers, previous teachers of transfer students	
	Step 5	Notification to parents	
	Step 6	Teacher nomination of students who demonstrate intense interest or excel in particular areas through observation in the regular classroom or external activities	

Gifted Education
in Hong Kong

Talent Pool

Levels 1 and 2:
School-based Gifted
Education

Level 3:
Off-school Support

Other Resources
and Support

After students have been identified and included in the talent pool, schools will gain a better understanding of the characteristics and needs of their gifted students. Schools can then plan systematically for enrichment programmes and match their gifted students with suitable programmes or learning activities based on the development needs of both the students and the school:

Type I (aimed at helping students **discover** their gifted potential and develop their interests):

To offer a wide variety of general exploratory activities, such as seminars, demonstrations, performances, film and short video shows, visits or field trips

Type II (aimed at **equipping** students with the necessary skills to pursue further learning):

To provide training in basic skills, including creative thinking, problem solving, critical thinking, research methodologies, written, verbal and visual communication skills, and affective education

Type III (aimed at providing students with **opportunities** to **realise** their ideas and creativity):

To encourage students to conduct independent studies and apply their interests, knowledge, creative ideas and skills to explore real-life topics of their choice

For more information on identifying and selecting gifted/more able students, please visit the following webpage:

https://www.edb.gov.hk/en/curriculum-development/curriculum-area/gifted/
guidelines-on-school-based-gifted-development-programmes/
identification-and-selection-procedures.html

Talent Databank Module

The Talent Databank Module was introduced to CloudSAMS (previously known as WebSAMS) in the 2018/19 school year to assist schools in **gathering student data and information** through various channels for the **analysis of the characteristics and distribution of their gifted/more able students**. The module also provides reference to help teachers formulate suitable school-based gifted education policies and enrichment programmes tailored to the development needs of both the students and the school.

The Talent Databank Module can retrieve data from CloudSAMS via three channels (namely Academic Results, Competition Results and Others), which enables schools to identify and select gifted students and establish a school-based student talent pool (see Figure 2).

Gifted Education
in Hong Kong

Talent Pool

Levels 1 and 2:
School-based Gifted
Education

Level 3:
Off-school Support
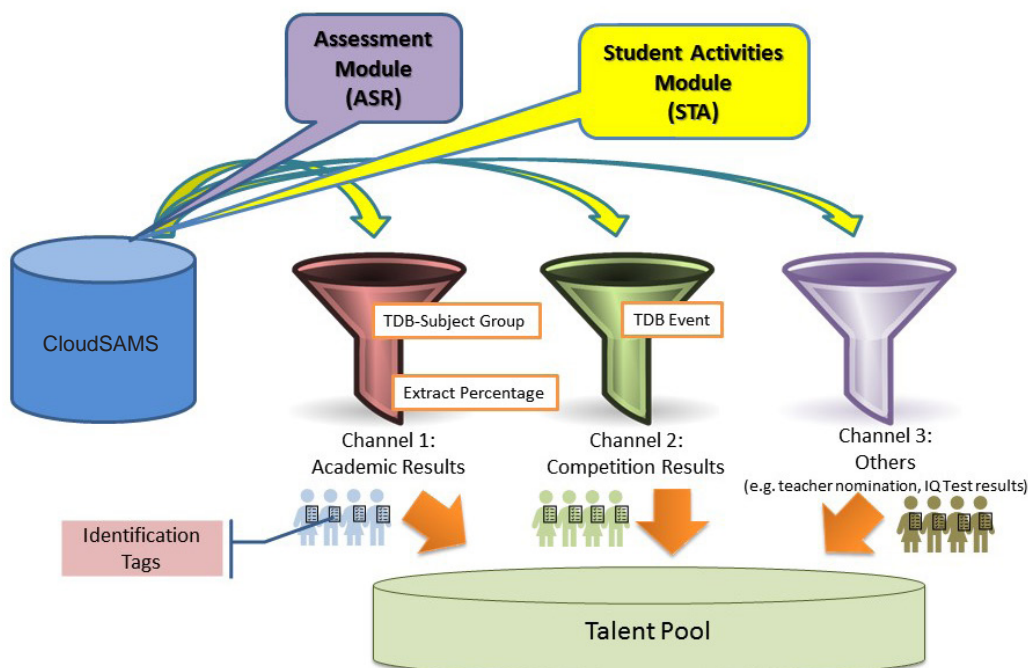
Other Resources
and Support

Figure 2: CloudSAMS Talent Databank Module (Concept map)

In using the three aforementioned channels for student selection, schools can assign appropriate identification tags to selected students (e.g. Linguistic Intelligence, Logical-mathematical Intelligence, Leadership, etc.) to record their gifted attributes. Some identification tags are pre-defined in the system for schools' reference and use, while schools can also create custom tags according to their specific context.

Once students are included in the school-based student talent pool, there will be two types of built-in reports available on CloudSAMS (see Figure 3). These reports assist schools in devising development plans for school-based gifted education and support strategies for gifted students from the macro (whole-school level) and micro (individual student level) perspectives.
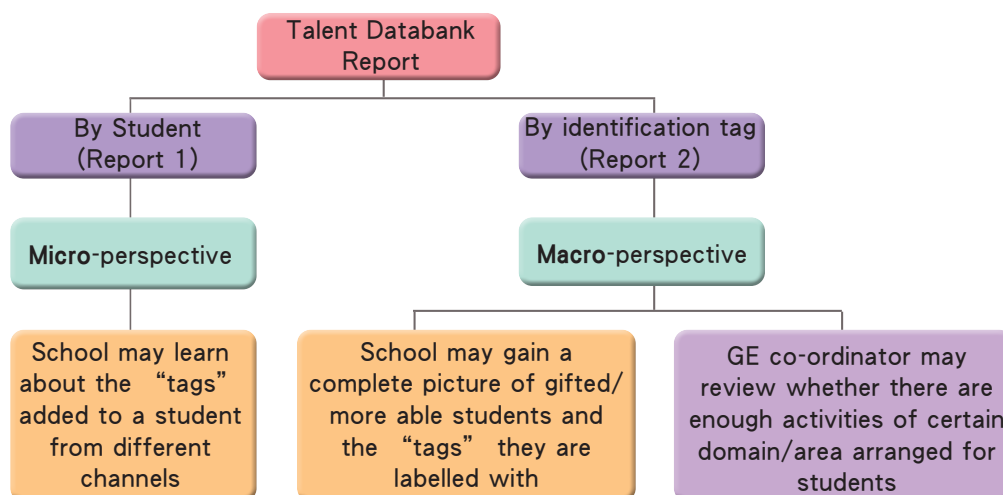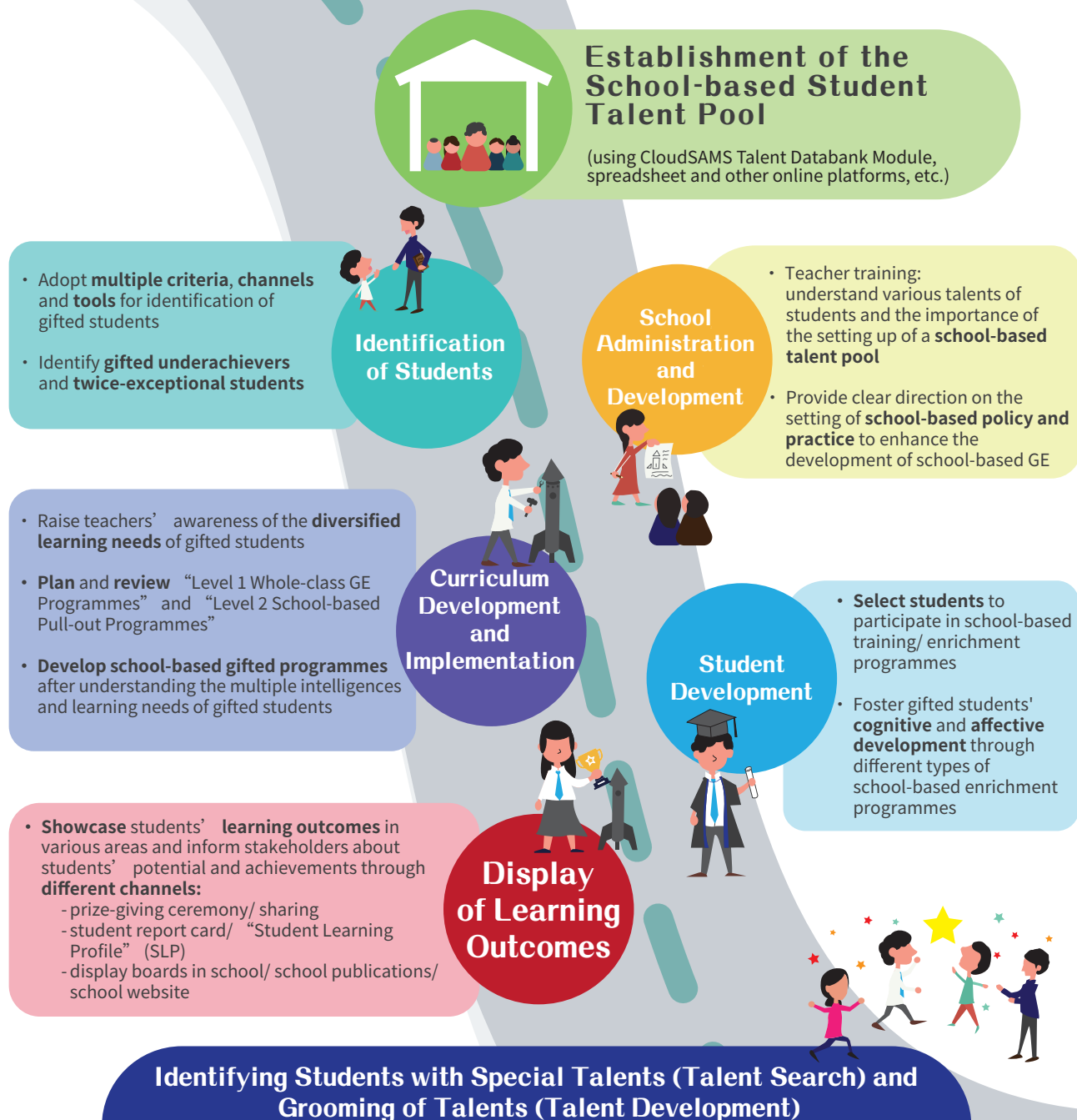
Figure 3: CloudSAMS Talent Databank Module report templates and their applications

For more information on the operation of the Talent Databank Module and other related modules, please visit the following website (https://cdr.websams.edb.gov.hk/) and consult the relevant user manual at the following path (Homepage > Module Information > Talent Databank > User Manual).

Utilising the Student Talent Pool to Plan and Implement School-based Gifted Education

Establishment of the School-based Student Talent Pool

(using CloudSAMS Talent Databank Module, spreadsheet and other online platforms, etc.)

Identification of Students

- Adopt **multiple criteria**, **channels** and **tools** for identification of gifted students
- Identify **gifted underachievers** and **twice-exceptional students**

School Administration and Development

- Teacher training: understand various talents of students and the importance of the setting up of a **school-based talent pool**
- Provide clear direction on the setting of **school-based policy and practice** to enhance the development of school-based GE

Curriculum Development and Implementation

- Raise teachers' awareness of the **diversified learning needs** of gifted students
- **Plan** and **review** "Level 1 Whole-class GE Programmes" and "Level 2 School-based Pull-out Programmes"
- **Develop school-based gifted programmes** after understanding the multiple intelligences and learning needs of gifted students

Student Development

- **Select students** to participate in school-based training/ enrichment programmes
- Foster gifted students' **cognitive** and **affective development** through different types of school-based enrichment programmes

Display of Learning Outcomes

- **Showcase** students' **learning outcomes** in various areas and inform stakeholders about students' potential and achievements through **different channels:**
  - prize-giving ceremony/ sharing
  - student report card/ "Student Learning Profile" (SLP)
  - display boards in school/ school publications/ school website

Identifying Students with Special Talents (Talent Search) and Grooming of Talents (Talent Development)

Nominate students to:
- participate in inter-school/ territory-wide/ cross-territory/ national/ international competitions
- be student members of the Hong Kong Academy for Gifted Education
- take part in Off-school Advanced Learning Programmes (funded by GE Fund)/ gifted programmes offered by post-secondary institutions
- join study/ scholarship schemes

Gifted Education Section
Curriculum Support Division
Education Bureau

Teacher's Sharing: "Utilising School-based Student Talent Pool - Competition Training and Establishment of a Talent Glooming System at School"

Mr YEUNG Wing-shing
Associate Principal
Member, Curriculum Development Council Committee on Gifted Education

When discussing gifted education in schools, many teachers immediately think of external competitions. While these contests undoubtedly provide gifted students with opportunities to showcase their potential, teachers often face a common challenge: an abundance of competitions coupled with a limited number of students. Moreover, given the diverse talents of many gifted students, there is often a "competition" across subjects and disciplines for getting the talented students to join their activities/ competitions. Students may find themselves in a dilemma, simultaneously recruited by multiple teachers for various competitions and struggling to decline such opportunities. Consequently, these students experience immense pressure as they attempt to balance their academic commitments with competition obligations, often leading to results counterproductive to their well-being.

Establishing a school-based student talent pool can help address this issue by tapping into a wider pool of talent within the school. Through diverse nomination and record-keeping channels, schools can maintain comprehensive records of students' talents across different areas, enabling teachers to make informed choices when needed.

Experience sharing on the CloudSAMS module

The CloudSAMS Talent Databank Module provides a platform for schools to establish a customised school-based student talent pool. When designing and planning the school-based student talent pool, teachers should first consider the practical operation of student search, followed by creating their school-based identification tags. These identification tags function similarly to hashtags (#) on the internet. When added to the talent pool, students are assigned different identification tags to record their gifted attributes. Teachers can then simply look up specific tags to locate relevant student information. Therefore, identification tags that are simple, easy to understand, and tailored to the school's specific context are definitely conducive to their future use.

On CloudSAMS, teachers can add students to the talent pool via three channels, namely "Academic Results", "Competition Results" and "Others". This systematic approach allows school to maintain comprehensive records of students with potential in various aspects. Through flexible use of different settings, the talent pool can facilitate longer-term and sustainable planning for the development of school-based gifted education. For instance, under "Academic Results", schools may raise the "Extract Percentage" of students in lower year levels to screen more students for the talent pool. This provides teachers-in-charge of different school teams with a wider selection of candidates in accordance with the appropriate screening mechanism. Under "Competition Results", schools can establish a structured coding system to record the competitions participated in by students across different disciplines. This enable schools as to review their provision of "Level Two pull-out programmes" in general. Finally, "Others" offers schools the flexibility to allow more students with potential to join the talent pool through teacher and parent nomination, or even self-nomination.

School-based student talent pool

Gifted/more able students

Competitions

Gifted Education
in Hong Kong

Talent Pool

Levels 1 and 2:
School-based Gifted
Education

Level 3:
Off-school Support

Other Resources
and Support
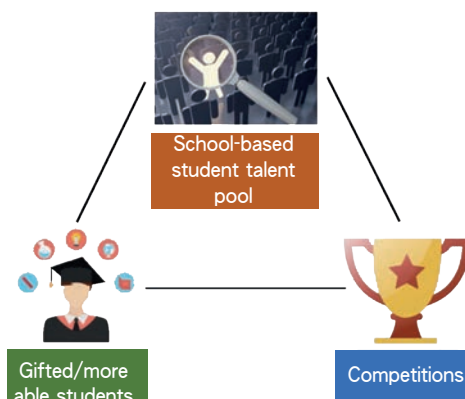
Establishing a talent glooming system for school teams

Once the school-based student talent pool has been well established, it can be utilised to foster the development of a talent glooming system for various school teams and can even address the problem of talent competition. For example, a school's Chinese Debate Team has been in operation for some years, with a major inter-school debating competition as its priority. To train more team members as replacements or successors, the teacher-in-charge can check the talent pool for students who excel in Chinese Language (Channel 1) and have been nominated by their teachers (Channel 3), but have not yet joined the debate team. A teacher newly in charge of the team can also search the talent pool for students with past participation records (Channel 2) but are no longer in the team. As for new or ad-hoc competitions, such as certain STEAM-related contests, teachers can make use of the information in the talent pool to form new teams. If the competition requires students to formulate a plan to address a social issue, make a model, and present their ideas, the teacher can search the talent pool for students with relevant identification tags, such as Programming, Arts, Creativity, Humanities or Language Competence. They can then select those without many activity records or multiple tags, as they may be the "hidden gems". This approach helps teachers avoid over-relying on a small number of "brilliant students" and expands the school-based student talent pool. It is hoped that this sharing can enhance teachers' understanding of the function of the talent pool. The key element is the "school-based" nature of the Student Talent Pool. As long as it caters for the specific needs of a school, it can be a suitable tool, regardless of its design.

Part 3: Level 1 and Level 2 - School-based Gifted Education

⭐ Professional Development of Teachers

The Education Bureau (EDB) has taken several initiatives to support schools in implementing gifted education in accordance with the "Three-Tier Implementation Model", particularly school-based gifted education programmes at Levels 1 and 2, and to enhance teachers' capacity in identifying gifted students and addressing their learning needs in schools. These include offering relevant teacher professional development programmes, launching the Gifted Education School Network, and providing learning and teaching resources. Schools are advised to set up a gifted education task force to undertake the following related tasks:

- Overseeing the overall planning of school-based gifted education, including the strategic development of gifted education programmes and deployment of resources
- Co-ordinating the implementation of school-based gifted development programmes to enhance the effectiveness of learning and teaching
- Arranging for teachers to attend appropriate professional development programmes on gifted education

⭐ Teacher Professional Development Programmes

To facilitate the sustainable development of school-based gifted education, the Gifted Education Section of the Curriculum Support Division of the Education Bureau organises professional development programmes for teachers each year, with the aim to enhance teachers' knowledge and understanding of various topics related to gifted education, including:

- EDB **Online Foundation Course** for Teachers (details on)
- Gifted education advanced courses (details on)
- Addressing the learning needs of gifted/more able students using **differentiated instructional strategies**
- Fostering **higher-order thinking skills, creativity and personal-social competence** of gifted/more able students in the regular classroom
- **Affective education** for gifted/more able students
- Establishing and using the **school-based student talent pool** to facilitate the planning for school-based gifted education
- Briefing session on the **School Nomination Mechanism of the Hong Kong Academy for Gifted Education**

For more information on teacher professional development programmes (gifted education), please visit the following webpage:
https://www.edb.gov.hk/en/curriculum-development/curriculum-area/gifted/resources_and_support/pdp/programmes/index.html

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Professional Development for Teachers

Education Bureau (EDB) provides teachers with various professional development opportunities, aiming to support schools to develop gifted education. Schools may make reference to the list of Gifted Education Professional Development programmes for teachers and arrange teachers to attend professional development programmes organised by EDB and Hong Kong Academy for Gifted Education (HKAGE).

EDB Online Foundation Course for Teachers – Gifted Education

EDB Online Foundation Course for Teachers - Affective Education of Gifted/ More Able Students

Target participants: Newly-joined teachers and in-service teachers

School-based Talent Pool Series

Target participants: Principals, vice principals, teachers responsible for school-based gifted education, panel chairpersons and STEAM co-ordinators

School-based Gifted Education Series (KLA-based)

Target participants: Teachers of all KLAs

Gifted Education Advanced Courses

Target participants: Vice principals and teachers responsible for school-based gifted education

Gifted Education School Network

Annual Lecture

Gifted Education Biennial Conference

Thematic Talks and Workshops

Host: ■ Gifted Education Section, Curriculum Support Division, Education Bureau ■ HKAGE

Gifted Education for All **Education for the Gifted**

HKAGE Webpage

Gifted Education Section Webpage

Gifted Education Section
Curriculum Support Division
Education Bureau

⭐ Gifted Education School Network

The Gifted Education School Network (the Network) aims to promote experience sharing and professional exchanges among frontline teachers specialising in the same Key Learning Area/domain. This enables them to apply gifted education theories and provides information on good practices and references for enhancing school-based gifted education programmes. The purposes of the Network are:

● facilitating and enhancing the holistic planning of school-based gifted education programmes in collaboration with teachers, and using differentiated instructional strategies to address the learning/ affective needs of gifted and more able students;

● strengthening teachers' understanding of gifted education and their professional competence in addressing learner diversity (especially for gifted/more able students) to enhance the effectiveness of learning and teaching on an ongoing basis; and

● sharing and promoting good practices and resources related to effective school-based gifted education, thereby facilitating exchanges among schools.

For more information on the Network, please visit the following webpage:
https://www.edb.gov.hk/en/curriculum-development/curriculum-area/gifted/resources_and_support/school_network/detail_info.html

⭐ Learning and Teaching Resources for Gifted Education

The Gifted Education Section of the Curriculum Support Division of the Education Bureau is dedicated to developing learning and teaching resources for different learning areas, including Chinese Language, English Language, Mathematics, STEAM Education, Personal, Social and Humanities Education, and Affective Education. These resources are intended for reference and use by frontline teachers. Teachers are encouraged to make school-based adaptations according to students' interests and abilities to better meet their needs. The learning and teaching resources are categorised into two main groups: Level 1 whole-class teaching (including 1A and 1B) and Level 2 pull-out programmes (including 2A and 2B), all of which have been tried out in class. Some of these resources are derived from the Fung Hon Chu Gifted Education Centre's enrichment programmes, with adjustments and enhancements; others are designed in collaboration with partner schools; and some are co-developed by schools in the Gifted Education School Network and officers of the Gifted Education Section. These teaching materials not only serve as guides and aids for teachers, but also empower them to confidently design school-based gifted education programmes.

中國語文	英國語文	數學
Chinese	English	Mathematics
常識 / STEAM	常識 / 人文學科	情意教育
General Studies / STEAM	General Studies / Humanities	Affective Education

For more information on the learning and teaching resources, please visit the following webpage:
https://www.edb.gov.hk/en/curriculum-development/curriculum-area/gifted/resources_and_support/l_and_t/index.html

Gifted Education
in Hong Kong

Talent Pool

Levels 1 and 2:
School-based Gifted
Education

Level 3:
Off-school Support

Other Resources
and Support

EDB Online Foundation Course for Teachers

Course features:

| Flexible learning mode | Free of charge | Available in both Chinese and English | Course duration: approximately 12/16 hours only |

Course One: Gifted Education

Target participants:
- Principals and teachers from Hong Kong primary and secondary schools seeking a general understanding of gifted education
- Students enrolled in education-related programmes at Hong Kong post-secondary institutions
- Student guidance personnel (e.g. educational psychologists and social workers) working in Hong Kong primary and secondary schools

Upon completion, participants will:
- acquire basic knowledge in implementing school-based gifted education, establishing a foundation for participating in related advanced EDB programmes.

Course outline:

Book 1 Learning about Gifted Education	Book 2 Listen to the Hearts of Gifted Students	Book 3 A Deeper Look at Learning and Teaching of Gifted Students	Book 4 A Whole Community Approach to Gifted Education
• Basic concepts of gifted education and gifted education policy in Hong Kong	• General characteristics of gifted students	• Introduction to curriculum models tailored to the diverse needs of gifted students	• Roles of various stakeholders in nurturing gifted students

Course Two: Affective Education for Gifted/More Able Students

Target participants:
- Principals and teachers from Hong Kong primary and secondary schools seeking basic knowledge in implementing affective education for gifted students

Upon completion, participants will:
- acquire basic knowledge in implementing affective education for gifted students, thus enhancing their ability to identify and address the affective needs of gifted students.
- establish a foundation for participating in advanced EDB programmes related to services for gifted students.

Course outline:

Book 1 Introduction: Affective Characteristics of Gifted Students	Book 2 Affective Education for Gifted Students	Book 3 Gifted Students at Risk and with Different Learning and Affective Needs	Book 4 Implementing Affective Education at School and Beyond
• Basic concepts of gifted education • Why is it important for teachers to understand the affective needs of gifted students?	• General strategies of affective education for gifted students • Journey of self-discovery and self-assurance of gifted students • Social and psychological adjustment in school and beyond • Life and career planning	• Understanding underachievement in gifted students • Understanding gifted students at risk of having emotional and psychological difficulties • Understanding gifted students from diverse backgrounds • Understanding students with twice-exceptionality or multiple exceptionalities	• Implementing a framework for launching affective education programmes at school • Instructional strategies to enhance affective development of gifted students

＊ *EDB reserves the right to approve applications for the above courses.*

Enrolment method:

Stay updated on EDB's Training Calendar System (TCS) and apply for listed courses using an e-Services account.

For more information on the courses, please visit the following webpages:

Course One: Gifted education

https://www.edb.gov.hk/en/ge_foundation

Course Two: Affective education for gifted/more able students

https://www.edb.gov.hk/en/ge_affective

Gifted Education
in Hong Kong

Talent Pool

Levels 1 and 2:
School-based Gifted
Education

Level 3:
Off-school Support

Other Resources
and Support

Gifted Education Advanced Courses

Target participants:

School principals, vice principals and teachers responsible for school-based gifted education

Upon completion, teachers will:

- master knowledge and strategies for implementing school-based gifted education, with a view to creating a blueprint for it
- apply SWOT analysis to promote the development of school-based gifted education
- understand the rationale of "Three-tier Implementation Model for Gifted Education" and strategies to effectively implement and evaluate school-based gifted education

* An e-Certificate of "Gifted Education Advanced Courses" will be awarded upon successful completion of all six modules (18 hours in total).

Course outline:

Advanced Course (A)	Setting Out the Blueprint for School-based Gifted Education and Talent Pool
Advanced Course (B)	SWOT Analysis for the Implementation of School-based Gifted Education and Talent Pool
Advanced Course (C)	Practical Cases Analysis: Three-tier Implementation Mode for Gifted Education – Level 1 Whole-class Instruction
Advanced Course (D)	Practical Cases Analysis: Three-tier Implementation Mode for Gifted Education – Level 2 Pull-out Programme
Advanced Course (E)	Student Cases Analysis & School-based Experience Sharing: Realising the Potential of Students and Nurturing Giftedness
Advanced Course (F)	Professional Development for Teachers and Resources Deployment for Gifted Education

Schools must address the social, emotional and learning needs of gifted students when planning and implementing school-based gifted education. This involves integrating the three core elements of gifted education (higher-order thinking skills, creativity and personal-social competence) into Level 1 whole-class teaching programmes, employing different teaching strategies (including differentiated instruction) in the regular classroom to unlock students' potential across various domains, as well as providing gifted students with disciplinary or interdisciplinary enrichment through Level 2 school-based pull-out programmes.

Differentiated Instruction

"Differentiated instruction" involves the adaptation of learning content, teaching strategies and assessment method in a way that meets the readiness, interests and abilities of students. Its purpose is to engage all students in challenging and meaningful learning activities, while also supporting gifted/more able students in advancing from surface learning to deep learning, fostering the development of reflective, inquisitive and self-regulating learners. The four elements of differentiated instruction are illustrated in Figure 4.

Learning content

Remove learning constraints and provide students with a comprehensive, varied and structured knowledge base

Learning process

Enhance higher-order thinking skills and creativity, promoting adept application of acquired knowledge

Core curriculum

Learning outcome

Offer opportunities for gifted/more able students to unleash their potential

Learning environment

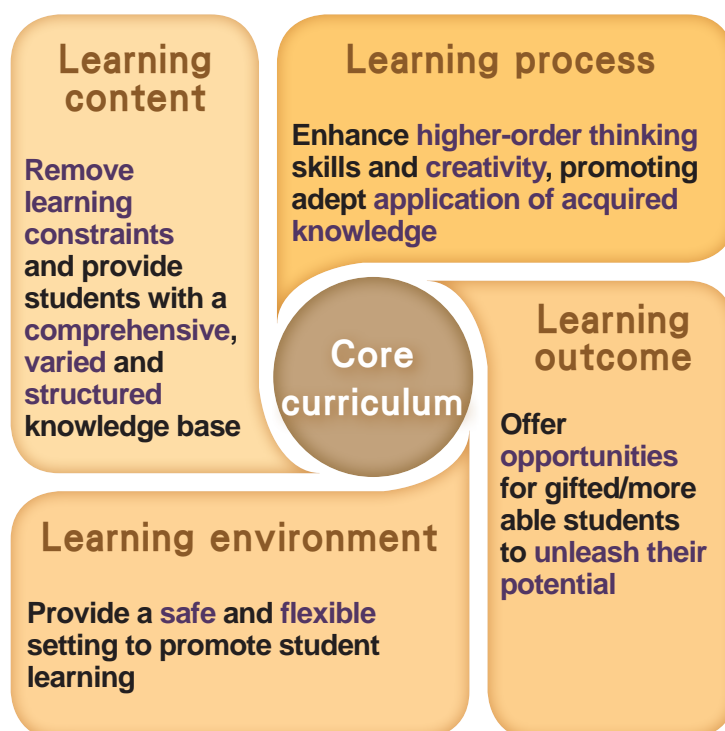Provide a safe and flexible setting to promote student learning

Figure 4: The four elements of differentiated instruction

In daily classroom teaching, teachers can, with regard to different learning objectives, teaching content, as well as students' learning styles, abilities, interests and needs, flexibly employ one or a combination of differentiated instructional strategies, including:
- Tiered assignments
- Choice board
- Flexible grouping (such as ability, performance, homogeneous or heterogeneous grouping)
- Anchor activities
- Tiered questioning
- Learning stations
- Challenge corners
- Inquiry-based collaborative learning
- Independent study

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Gifted Education
in Hong Kong

Talent Pool

Levels 1 and 2:
School-based Gifted
Education

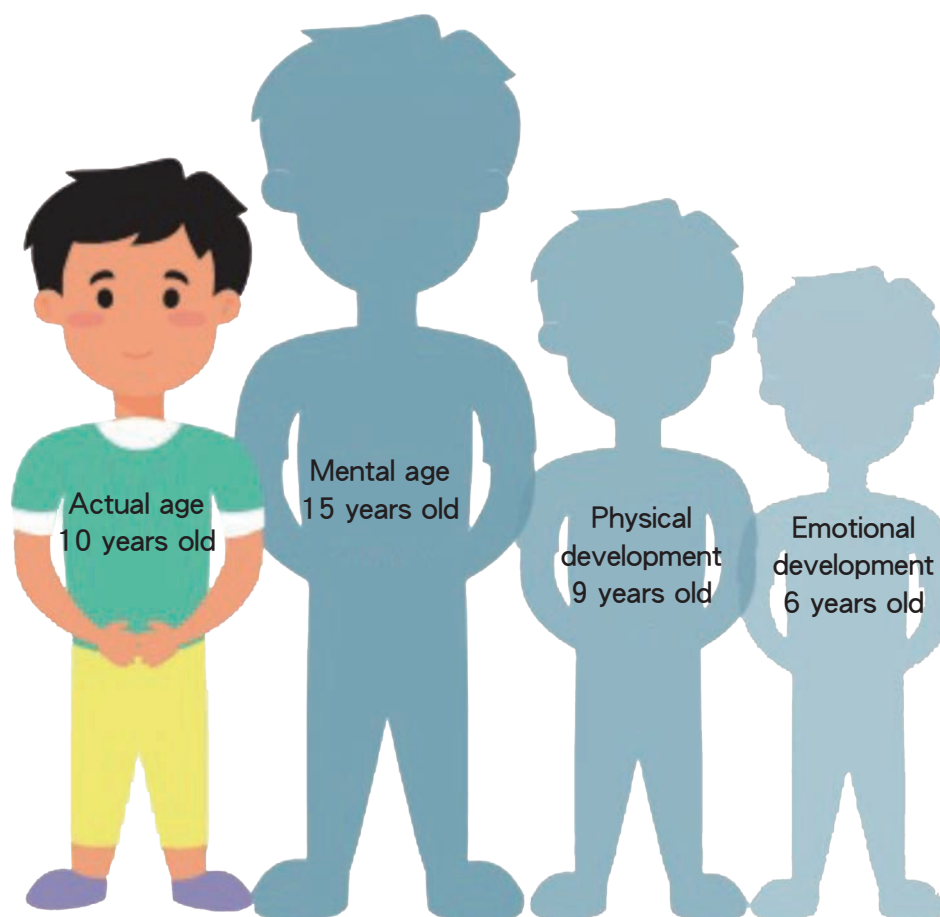Level 3:
Off-school Support

Other Resources
and Support

Affective Needs of Gifted Students

Every gifted student is unique, and schools should address their individual affective needs. This includes supporting gifted underachievers and those who are twice-exceptional. Given the diverse qualities displayed by gifted students across various domains, significant individual differences are expected among them. Due to asynchronous cognitive, physical, emotional and social development, some gifted students may experience emotional or behavioural challenges. Generally, gifted students exhibit cognitive and affective development that differs from their peers of the same age.

If teachers can understand the uniqueness and the affective and social needs of gifted/more able students, and demonstrate acceptance and encouragement through a whole-school policy and collaboration with relevant personnel, they can foster a balanced cognitive and affective development among these students, and support the development of healthy, positive self-concepts and interpersonal relationships. Ultimately, this will help gifted/more able students unleash their inner potential, and gain achievements.

Asynchronous development

Actual age
10 years old

Mental age
15 years old

Physical development
9 years old

Emotional development
6 years old

For "Strategies on Supporting Gifted/More Able Students' Affective and Learning Needs Within and Beyond the Classroom" (Chinese version only), please visit the following webpage:
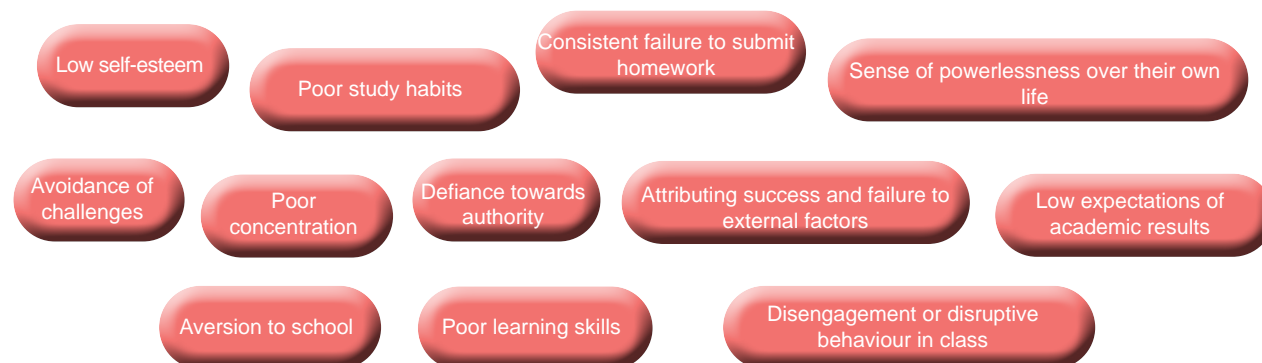https://www.edb.gov.hk/en/curriculum-development/curriculum-area/gifted/resources_and_support/l_and_t/ae/index.html

Addressing the Affective Needs of Gifted Students: Supporting Gifted Underachievers
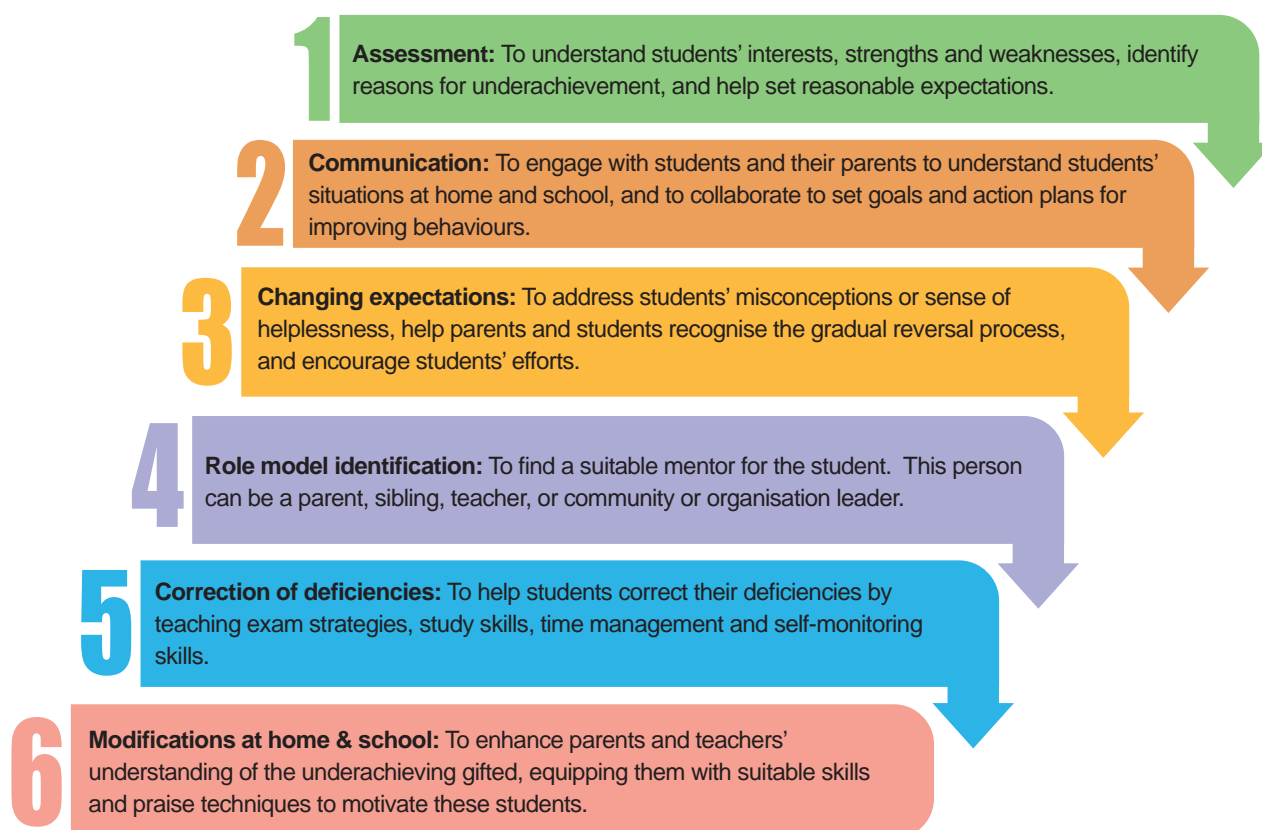
Definition of gifted underachievers

"Underachievement" in gifted students occurs when there is a persistent discrepancy between a student's school performance and indicators of their actual competency, as demonstrated through measures of intelligence, achievements, creativity or other observable data.

Common characteristics of gifted underachievers

- Low self-esteem
- Poor study habits
- Consistent failure to submit homework
- Sense of powerlessness over their own life
- Avoidance of challenges
- Poor concentration
- Defiance towards authority
- Attributing success and failure to external factors
- Low expectations of academic results
- Aversion to school
- Poor learning skills
- Disengagement or disruptive behaviour in class

Addressing underachievement in gifted students

Addressing underachievement in gifted students requires a multifaceted approach. Research identifies schools, families and students themselves as three primary contributing factors, which must be addressed to effectively tackle this issue. Underachievement is learned behaviour, and therefore it can be unlearned. Teachers who understand the underlying causes of underachievement are better equipped to prevent and tackle this issue. Dr Sylvia Rimm's "Trifocal Model" offers a six-step approach to help gifted students overcome underachievement:

1 Assessment: To understand students' interests, strengths and weaknesses, identify reasons for underachievement, and help set reasonable expectations.

2 Communication: To engage with students and their parents to understand students' situations at home and school, and to collaborate to set goals and action plans for improving behaviours.

3 Changing expectations: To address students' misconceptions or sense of helplessness, help parents and students recognise the gradual reversal process, and encourage students' efforts.

4 Role model identification: To find a suitable mentor for the student. This person can be a parent, sibling, teacher, or community or organisation leader.

5 Correction of deficiencies: To help students correct their deficiencies by teaching exam strategies, study skills, time management and self-monitoring skills.

6 Modifications at home & school: To enhance parents and teachers' understanding of the underachieving gifted, equipping them with suitable skills and praise techniques to motivate these students.

⭐ Addressing the Affective Needs of Gifted Students: Supporting Twice-exceptional Students

Definition of twice-exceptional students

Twice-exceptional students are those who possess gifted qualities while simultaneously having one (Twice exceptionality) or more (multiple exceptionalities) of the following learning difficulties.

1. Specific learning difficulties: e.g. dyslexia.
2. Behavioural, emotional and social developmental needs: e.g. attention deficit/hyperactivity disorder or autism spectrum disorder.
3. Sensory, communication and physical needs: e.g. visual impairment, hearing impairment, speech disorders or cerebral palsy.

Learning performance of twice-exceptional students

Learning performance of twice-exceptional students

Gifted qualities:

*   Intensely engaged in areas of interest
*   Proficient in holistic analysis, conceptual understanding and comprehensive thinking
*   Adept at oral communication
*   Strong metacognitive abilities (self-awareness of cognitive process)
*   Highly creative
*   Adept at abstract thinking
*   Strong problem-solving abilities
*   Highly motivated when faced with challenging tasks

Characteristics of learning difficulties:

*   Struggle with memorising and understanding unrelated information
*   Poor written communication skills
*   Weak organisational and task management skills
*   Poor short-term or long-term memory
*   Significant performance disparities across subjects
*   Failure to sustain attention
*   Difficulty completing assignments on time
*   Struggle with extracting information from lengthy text
*   Asynchronous development across different domains

Emotional and mental stress of twice-exceptional students

Twice-exceptional students often experience frustration and helplessness in learning due to interplay between their learning difficulties and gifted qualities. Certain situations, including academic performance falling short of personal and external expectations, a lack of challenging and supportive classroom learning environments, strained peer relationships and tense teacher-student relationships, can contribute to significant psychological stress, potentially impairing their intellectual and affective development.   To address these challenges, schools not only tackle students' learning difficulties, but also employ appropriate strength-based strategies that embed the "SWAM", a principle of guidance, to help develop students' gifted talents while enhancing their sense of competence and self-confidence.

Principle of Guidance – "SWAM" (Strength-based strategies)

S Strength-based

W Weakness Compensatory Strategies

A Accommodation

M Management
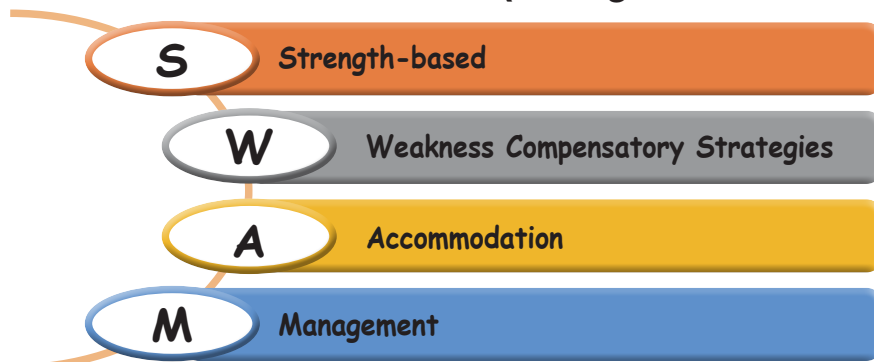
Supporting twice-exceptional students with school-based gifted education policies and measures

Schools should strive to establish a safe, inclusive and inspiring environment that values and embraces student diversity. They should adopt an open and diverse approach to identify students with various potential (including twice-exceptional students), and provide appropriate training and support programmes. This includes incorporating elements of affective education and specific support for twice-exceptional students into regular lesson designs, identifying students with affective or special educational needs, and offering group-based programmes tailored to students' potential in both academic and non-academic aspects.

Schools should set up a designated task force on gifted education for planning and co-ordinating school-based gifted education programmes. This task force should collaborate with the special education task force to provide comprehensive support and case management for twice-exceptional students, adhering to the principles of strength-based strategies. Moreover, schools are advised to formulate procedures and methods for case handling and referral of gifted students with learning or behavioural problems (See Figure 5).
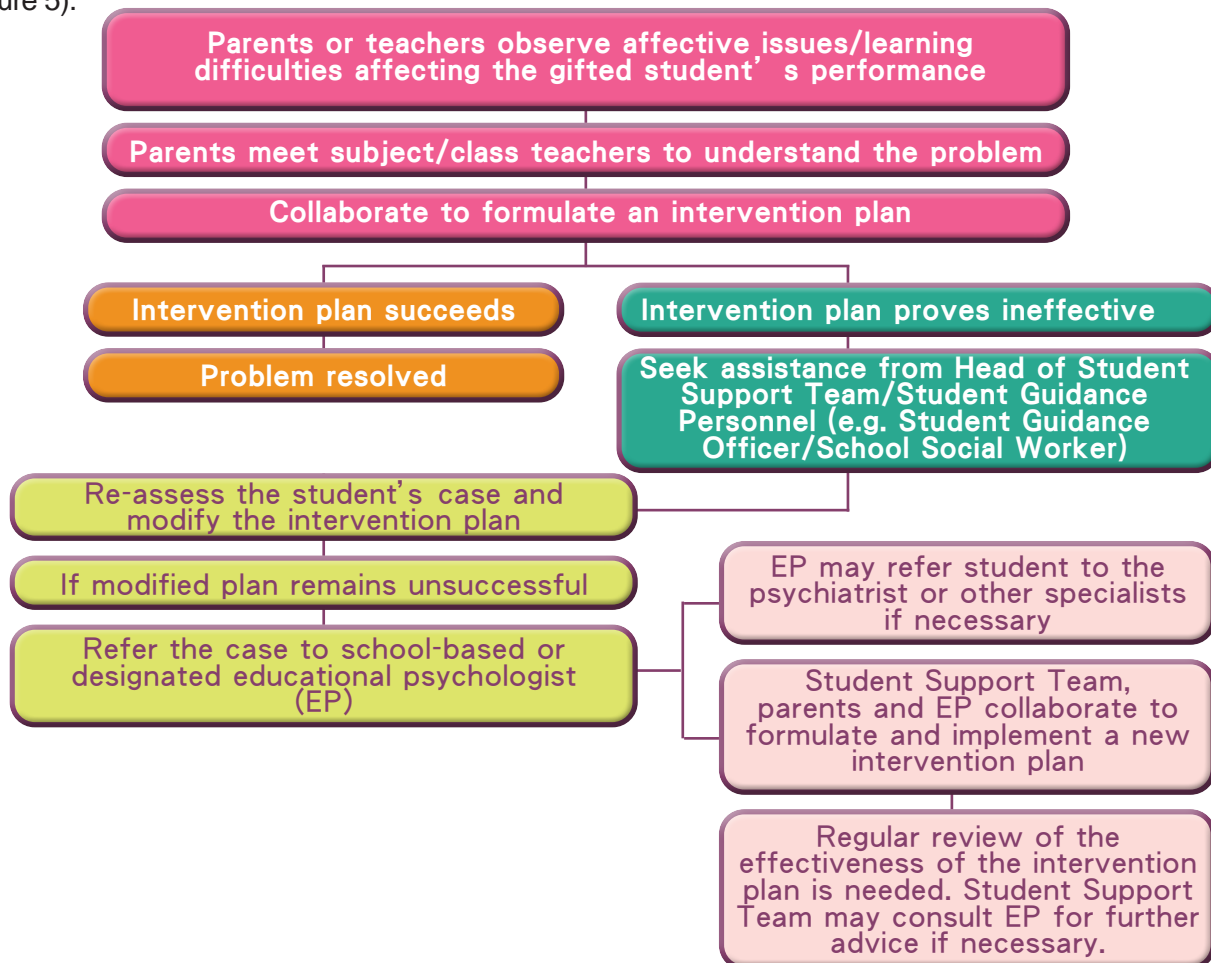
Parents or teachers observe affective issues/learning difficulties affecting the gifted student's performance

Parents meet subject/class teachers to understand the problem

Collaborate to formulate an intervention plan

Intervention plan succeeds → Problem resolved

Intervention plan proves ineffective → Seek assistance from Head of Student Support Team/Student Guidance Personnel (e.g. Student Guidance Officer/School Social Worker)

Re-assess the student's case and modify the intervention plan

If modified plan remains unsuccessful

Refer the case to school-based or designated educational psychologist (EP)

EP may refer student to the psychiatrist or other specialists if necessary

Student Support Team, parents and EP collaborate to formulate and implement a new intervention plan

Regular review of the effectiveness of the intervention plan is needed. Student Support Team may consult EP for further advice if necessary.

Figure 5: Suggested procedures and methods for handling and referring gifted students with learning or behavioural problems

Part 4: Level 3 - Off-school Support

⭐ Gifted Education Fund

The Education Bureau (EDB) set up the Gifted Education Fund (the Fund) in 2016 and injected a total of $1.6 billion into the Fund in 2016 and 2018. The investment return thus generated is used to support the development of gifted education by the Hong Kong Academy for Gifted Education (HKAGE), implement measures recommended by the Advisory Committee on Gifted Education, and encourage the provision of quality advanced learning programmes for gifted students by gifted education service providers.

To step up STEAM education in primary and secondary schools, develop students' potential and nurture gifted students with potential in STEAM, an additional $600 million has been injected into the Fund in 2023-24 to:

(1) strengthen support for HKAGE to conduct training, activities and competitions at the territory-wide, cross-territory, national and international levels and provide more quality and challenging off-school educational services, specific to STEAM-related areas, for the exceptionally gifted;

(2) encourage and support more tertiary institutions, non-governmental organisations, professional bodies and I&T enterprises through the Fund to extend or deepen the Off-school Advanced Learning Programmes, so that students with exceptional potential can be provided with high-quality and challenging learning experiences in a wider range of disciplines or even across disciplines, enabling them to develop their potential in different areas.

EDB has always attached great importance to the nurturing of gifted students in order to expand the talent pool of Hong Kong and align Hong Kong's competitiveness with international standards. HKAGE has always been a close partner of EDB. As such, EDB will continue to strengthen support for HKAGE and provide gifted students with high-quality and challenging off-school gifted programmes and training to nurture elite students. In celebration of its 15th Anniversary, HKAGE has launched a series of events that highlighted its achievements, showcased the talents of its students, and promoted gifted education in Hong Kong.

Celebration of the 15th anniversary of the HKAGE
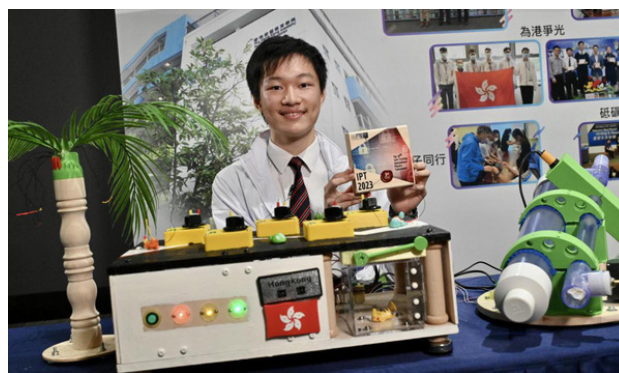
Gifted students in Hong Kong participated in international or territory-wide I&T competitions

To view the related reports and videos of the Information Services Department, please visit the following website:
https://www.news.gov.hk/eng/2023/07/20230727/20230727_160644_643.html

Enhance gifted education and nurture students with potential in STEAM

Level 3
Off-school support

Level 2
School-based pull-out programmes

Level 1
School-based / whole-class teaching

Gifted Education in school

International, national and local competitions

Science

Aerospace

AI

Maths

Robotics

GI FT

Post-secondary institutions

NGOs

Professional bodies

Technology enterprises

Fund-supported OSALPs

Off-School Advanced Learning Programmes

★ High quality

★ Challenging

★ Diversified

Talent Development in HKAGE

🏆 Personalised -Becoming Eminent

👍 Specialisation -Towards Expertise

Advanced Learning -Developing Competence

🔍 Enrichment Programmes -Exploring Interests

香 港 資 優 教 育 學 苑
The Hong Kong Academy for Gifted Education

Development of Gifted Education and Gifted Education Fund

HKAGE

GE Fund

HKAGE ardently promotes STEAM Education

To dovetail with EDB's goal of promoting the development of gifted education, HKAGE, being one of the subvented organisations of EDB, is committed to providing off-school specialised or cross-disciplinary enrichment programmes and training for exceptionally gifted students. The service targets of the HKAGE are gifted students aged 10 to 18 studying in Hong Kong schools. HKAGE invites students of suitable age to participate in the screening to become HKAGE student member through various channels, including School Nomination (including Principal's Nomination), Parent Nomination, Nurturing the Gifted Scheme and Web-based Learning Courses for Gifted/ More Able Students.

Admission of student members through various channel

HKAGE endeavours to secure appropriate learning and development opportunities for gifted students aged 10 to 18 currently studying in a local school. HKAGE admits student members of appropriate age mainly through different nomination schemes every school year. Schools and teachers are encouraged to nominate gifted students to become HKAGE student members (see Figure 6).

1.School Nomination

2. Principal's Nomination
(Starting from the 2022/23 school year, "Principal's Nomination" is added under "School Nomination" to facilitate the admisision of students with good leadership.)

3.Parent Nomination

4. Nurturing the Gifted Scheme
(Invitations are extended to students of suitable age who have demonstrated exceptional performance in various significant competitions or scholarships to participate in the nomination screening.)

5. Web-based Learning Courses for Gifted/ More Able Students
(Jointly administered by EDB and HKAGE)

Figure 6: Nomination Channels of HKAGE

From enrichment to specialisation

To facilitate gifted students' acquisition of optimal learning outcomes from the opportunities provided by HKAGE, HKAGE offers a structured curriculum with reference to the "Talent Development Model" which comprises four stages, i.e. "Exploring Interests", "Developing Competence", "Towards Expertise" and "Becoming Eminent". The model is designed to cater for the different needs of student members, from enrichment to personalised learning, so that student members could discover their own interest in subjects/domains, pursue in-depth study and ultimately develop expertise in those subjects/domains. (see Figure 7).
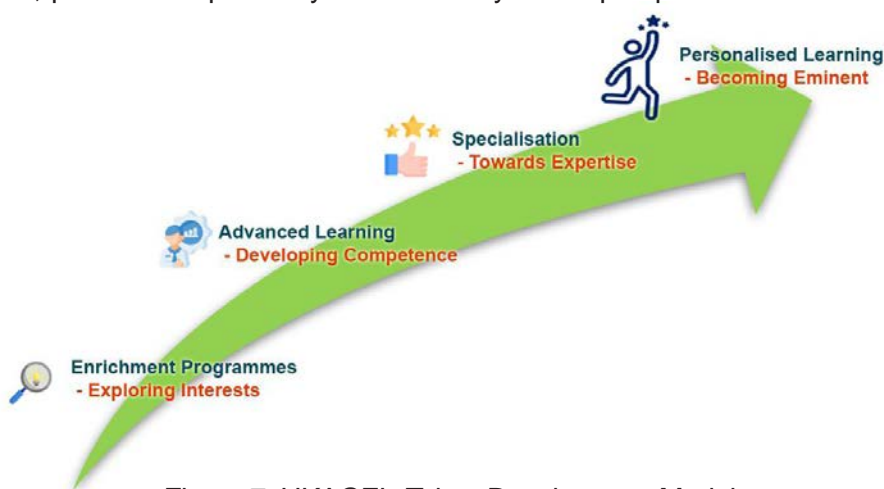
Personalised Learning
- Becoming Eminent

Specialisation
- Towards Expertise

Advanced Learning
- Developing Competence

Enrichment Programmes
- Exploring Interests

Figure 7: HKAGE's Talent Development Model

Specialised STEAM programmes and competitions

To cater for student members' strong demand for knowledge in the STEAM education, HKAGE organises different STEAM programmes each year and encourages its student members to participate in STEAM-related competitions. Those specialised programmes cover areas including Astronomy, Aviation, Quantum Computation, Space Missions, etc. Apart from theoretical knowledge, the programmes also emphasise first-hand learning experiences. For example, while student members have the opportunity to build their own telescopes and carry out small-scale research projects in the Astronomy course, the Aviation course allows them to visit the restricted area of the airport and explore its latest facilities, gaining insights into the building of Hong Kong's smart airport. As for competitions, they cover subjects like mathematics, science, technology, aerospace technology, etc. Examples include the International Mathematical Olympiad, International Physics Olympiad, International Blockchain Olympiad and the "Safe Cracking" International Physics Tournament.

The "Safe Cracking" International Physics Tournament

International Blockchain Olympiad

Astronomy Programme

Aviation Programme

Parent Education and Training

In nurturing gifted students, HKAGE adopts a three-pronged approach, with students, parents and teachers as its service targets. To facilitate the nurturing of gifted students, HKAGE walks alongside parents through encouraging them to attend relevant training programmes on parent education organised by HKAGE. HKAGE also provides professional development opportunities for teachers and collaborates with EDB in organising teacher training programmes to help teachers understand and acquire the strategies and resources required to support parent education for gifted students.

HKAGE's programmes on parent education are comprehensive in content, covering topics from the characteristics of gifted students, their cognitive and affective development needs, to the roles and limitations of their parents. In addition, the programmes come in a diverse format, from standard seminars and workshops, to parent-child courses and parent support groups, etc.

Parent Seminars

Parent-child Workshops

For more information on HKAGE, please visit its website on https://www.hkage.edu.hk/#gsc.tab=0 or by scanning the QR code on the right.

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Gifted Education
in Hong Kong

Talent Pool

Levels 1 and 2:
School-based Gifted
Education

Level 3:
Off-school Support

Other Resources
and Support

Gifted Education Fund: Off-school Advanced Learning Programmes

To unleash the potential of gifted students, the Education Bureau (EDB) provides funding through the Gifted Education Fund (GE Fund) to organise a variety of Off-school Advanced Learning Programmes (OSALPs), enabling gifted students to gain personalised, high quality and challenging learning experiences in their areas of talent or, where suitable. In addition to focusing on the knowledge and skills development of gifted students, these programmes also place emphasis on their affective development and the cultivation of positive values.

Key Features of the Programmes
• Challenging • Comprising diversified learning and teaching activities • Focusing on students' personalised and self-initiated learning • Focusing on Values Education and students' affective development
Programme Themes (The EDB will review the programme themes from time to time and conduct timely updates.)
• <u>STEAM-related Mentorship Programmes</u> To provide programmes or research activities on such topics as biotechnology, artificial intelligence, smart city, financial technology, information security, sports technology and arts technology. • <u>Humanities and Social Science Research Programmes</u> To provide programmes or research activities on such topics as education, history and cultural heritage, environment and urban planning. • <u>Apprenticeship and Entrepreneurship Programmes</u> To provide opportunities for senior secondary students to explore the professional work-related fields across different enterprises such as finance and information technology, legal services, construction and architecture, medical and healthcare services, engineering and surveying, journalism and design. • <u>Self-initiated Research Studies</u> To provide guidance and learning opportunities for gifted students in their areas of interest, led by scholars and/or professionals.
Programme Providers
• Post-secondary institutions (including relevant faculties, departments, centres, etc. or staff with proveb support from respective unit of post-secondary institutions) • Non-governmental organisations • Professional bodies • Technology enterprises

From the 2024/25 school year onwards, all OSALPs funded by the GE Fund will only be open to student members of Hong Kong Academy for Gifted Education (HKAGE). In this connection, schools and parents are encouraged to actively nominate exceptionally gifted students to enrol to become student members of HKAGE through different admission channels (including through recognised competitions), allowing them to receive systematic training through HKAGE and further stretching their potential.

For details on the GE Fund: OSALPs, please visit the website of the GE Fund and the Advisory Committee on Gifted Education at https://www.edb.gov.hk/en/curriculum-development/curriculum-area/gifted/ge_fund/gef_and_acge.html, or access the website by scanning the QR code on the right.

⭐ Web-based Learning Courses for Gifted/More Able Students

To cater for the autonomous and independent learning styles of gifted students, the Gifted Education Section of the Curriculum Support Division of the Education Bureau launched a range of web-based learning courses. These courses, covering areas such Astronomy, Mathematics, Earth Science, Palaeontology, and the Changing Hong Kong Economy, provide gifted students with more diversified learning opportunities, empowering them to showcase their talents in different domains. .

These courses are provided by the Gifted Education Section of the Curriculum Support Division of the Education Bureau and HKAGE. For details, please visit HKAGE's website at:
https://www.hkage.edu.hk/en-us/articles/master-programme-table?mode=Self&participant=Student.

⭐ Student Competitions and Related Resources

Division of the Education Bureau, in collaboration with different educational bodies, the HKAGE and non-governmental organisations, organises territory-wide competitions in different learning areas such as Chinese Language, English Language, Mathematics, Science and Technology, etc. Meanwhile, EDB also selects outstanding students to represent Hong Kong to take part in national and international competitions.

To provide schools with enriched resources for designing school-based gifted programmes, or to prepare their students for competitions, the Gifted Education Section collates and compiles the questions from these competitions into resource packages for teachers' reference. Examples include: the anthologies of Elite Student Project in Chinese Language (Primary & Secondary) and the Hong Kong Budding Poets (English) Award Anthology, as well as the booklets of Mathematics Creative Problem Solving Competitions for Primary and Secondary Schools and Hong Kong Budding Scientists Award Collection of Students' Proposals. Teachers are encouraged to make flexible use of these resource packages to design Levels 1 and 2 school-based gifted programmes, so as to benefit a wider population of gifted/more able students in schools.

For more information, please visit the following webpage:
https://www.edb.gov.hk/en/curriculum-development/curriculum-area/gifted/resources_and_support/competitions/student_competitions.html

Gifted Education
in Hong Kong

Talent Pool

Levels 1 and 2:
School-based Gifted
Education

Level 3:
Off-school Support

Other Resources
and Support

⭐ Gifted Education Learning Activities Calendar

Schools can identify and nominate students with potential to participate in different external competitions and advanced programmes through establishing a Student Talent Pool. EDB has compiled the "Gifted Education Learning Activities Calendar" for schools' reference, thus enabling them to systematically arrange for students to engage in gifted education activities and nurture those with exceptional talents. For details, please refer to the EDB's circular memorandum and the website of HKAGE.

Month of Application	Learning Activities	Remarks
September	• International Biology Olympiad – Hong Kong Contest	• Student nomination
	• The "School Nomination" and "Parent Nomination" Schemes of the HKAGE	• School and parent nomination
October	• Web-based Learning Courses for Gifted/ More Able Students (including Earth Science, Palaeontology, Astronomy, Mathematics, and the Changing Hong Kong Economy)	• School nomination
	• Hong Kong Budding Scientists Award	• School nomination
	• Hong Kong Youth Science & Technology Innovation Competition	• School nomination
	• Primary STEAM Project Exhibition	• School nomination
November	• Web-based Learning Courses for Gifted/ More Able Students	• Individual application
	• Hong Kong Budding Poets (English) Award	• School nomination
	• Hong Kong Mathematics Creative Problem Solving Competition	• School nomination
February	• International Mathematical Olympiad Preliminary Selection Contest - Hong Kong	• School and student nomination
	• STEAM Young Talents Cup	• School nomination
	• China Girls' Mathematical Olympiad – Aptitude Test and Training	• Student application •
March	• Hong Kong Physics Olympiad	• School and student nomination
	• Elite Students Project in Chinese Language - Writing Competition	• School nomination
April	• Off-school Advanced Learning Programmes	• School and student application
	• Elite Students Project in Chinese Language - Writing Seminar	• Winners of the Writing Competition of the Project
May	• Hong Kong Blockchain Olympiad	• Open enrolment (School team and Non-school team)
June	• International Junior Science Olympiad – Hong Kong Screening	• School nomination
July	• The "Safe Cracking" International Physics Tournament – Hong Kong Regional Final	• Enrolment by team mentors/ teachers
	• The study tour of Elite Students Project in Chinese Language	• The Gold Award Winners of the Project
August	• International Biology Olympiad – Hong Kong Contest	• School nomination

Part 5: Other Resources and Support (Examples)

⭐ Video Resources on Gifted Education

To further promote gifted education and provide teachers/the public with more relevant information, EDB has produced a variety of promotional videos that centre around gifted education policies in Hong Kong, EDB Gifted Education Fund: Off-school Advanced Learning Programmes, and affective education for gifted students, etc.. The following videos have been uploaded onto EDB Educational MultiMedia for public viewing, and can be accessed via the QR codes on the right.

Promotional video	Introduction	QR code
Gifted Education Policy in Hong Kong and the Hong Kong Academy for Gifted Education	To introduce gifted education policy in Hong Kong as well as the services and latest development of the HKAGE	
Gifted Education	To introduce the development direction of gifted education in Hong Kong and the rationales of School-based Gifted Development Programmes; the support and teacher training provided by EDB for promotion of school-based gifted development programmes, as well as strategies and good practices of schools in implementing these programmes	
Gifted Children and Gifted Education	To introduce the definitions of giftedness and the implementation models of gifted education in Hong Kong, debunk common myths about gifted education, and share the experiences in relation to the implementation of gifted education	
EDB Gifted Education Fund: Off-school Advanced Learning Programmes	To introduce the Off-school Advanced Learning Programmes, funded by the Gifted Education Fund, which have been launched by EDB for gifted students in primary and secondary schools to further develop their potential	
Affective Education for Gifted Students: Perseverance, Diligence and Collaboration	To deepen various stakeholders' understanding of affective education for gifted students through an animated approach. The story tells us how gifted students develop the qualities of perseverance, diligence and collaboration through participating in an I&T competition.	

⭐ Examples of Local Gifted Education Resources and Support

Local organisation/ resource	Contact information
Gifted Education Section, Curriculum Support Division, Education Bureau (offering teacher professional development programmes, curriculum resources, student activities and competitions)	Website: http://www.edb.gov.hk/cd/ge Telephone: 3698 3472 Email: gifted@edb.gov.hk
The Hong Kong Academy for Gifted Education (offering student activities and programmes, teacher training, parent education and support, and assessment services)	Website: http://www.hkage.org.hk Telephone: 3940 0101 Email: programme@hkage.org.hk

Post-secondary institution (provision of student activities/ gifted programmes)	Contact information
Academy for the Talented, The University of Hong Kong	Website: https://talented.hku.hk/ Telephone: 3917 5100 Email: talented@hku.hk
Centre for Advancement in Inclusive and Special Education, Faculty of Education, The University of Hong Kong	Website: http://caise.edu.hku.hk/talent/ Telephone: 3917 5828 Email: caise@hku.hk
Program for the Gifted and Talented, Faculty of Education, The Chinese University of Hong Kong	Website: http://www.fed.cuhk.edu.hk/pgt Telephone: 2603 7444/ 2603 7485 Email: pgt@fed.cuhk.edu.hk
The Center for the Development of the Gifted and Talented, The Hong Kong University of Science and Technology	Website: http://www.cdgt.ust.hk/ Telephone: 2358 5084 Email: cdgt@ust.hk

Non-government organisation (provision of student activities/ gifted programmes)	Contact information
Hong Kong New Generation Cultural Association	Website: http://sic.newgen.org.hk/ Telephone: 2792 3639 Email: sic@newgen.org.hk
The Boys' & Girls' Clubs Association of Hong Kong	Website: https://www.bgca.org.hk/ Telephone: 2527 9121
Creative Education Unit, The Hong Kong Federation of Youth Groups	Website: https://ce.hkfyg.org.hk/ Telephone: 2561 6149 Email: ccst@hkfyg.org.hk
Creative Education Unit, The Hong Kong Federation of Youth Groups	Website: http://lsdc.yang.org.hk/ Telephone: 2171 4171 Email: lsdc@yang.org.hk