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Preface

In order to publicise the development of gifted education in Hong Kong and to strengthen the understanding of gifted education among general public, especially the stakeholders in primary and secondary schools, the Gifted Education Section (GE Section) of the Education Bureau (EDB) has produced a series of four videos together with four booklets on gifted education in Hong Kong. These materials provide the essential knowledge of gifted education to interested parties or gifted education co-workers. Some food for thought and extended reading are included to inspire readers to think about or further study these topics.

We believe that to achieve the ultimate goals of ‘gifted education for all’ and ‘education for the gifted’, it is necessary to let more people know about gifted education and dispel the misconception that ‘gifted education means elite education’. In doing so, all students in Hong Kong will be able to enjoy high-quality learning at school. At the same time, with the help and support of the community, including Non-governmental Organisations (NGOs), tertiary institutions, professional bodies and school sponsoring/educational bodies, gifted students or students with higher ability will be provided with suitable development opportunities inside and outside school to unleash their potentials. In fact, your support and active participation is of crucial importance to the future development of gifted education and the creation of a high quality ‘Talent Pool’ in Hong Kong.

Gifted Education Section, EDB
The Education Bureau, following the recommendation of the Education Commission Report No.4 (1990), suggests that Hong Kong should develop school-based gifted development programmes in mainstream schools. This formally starts the advocacy of a school-based approach for gifted education provision. The following table records various milestones in the development of gifted education in Hong Kong.

<table>
<thead>
<tr>
<th>Year</th>
<th>Significant Events</th>
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<tbody>
<tr>
<td>1990</td>
<td>The Education Commission Report No.4 outlined the direction for the development and implementation of gifted education in Hong Kong by recommending the development of school-based programmes to cater for the needs of gifted students. The report also explored the definition of gifted children and their learning needs.</td>
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<tr>
<td>1992</td>
<td>A research team that consisted of academics from Hong Kong universities was formed to launch research studies on the adaptation of assessment tools and the distribution of academically gifted children in local schools. The outcome of this research study included the adaptation of the Torrance Tests of Creative Thinking and the Scales for Rating the Behavioural Characteristics of Superior Students for use with local children.</td>
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<td>1994</td>
<td>A three-year ‘Pilot School-based Programme for Academically Gifted Children’ was launched by the Education Department*. Regular school-based support was provided to the pilot schools on programme planning, curriculum development, identification of students and teacher training.</td>
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<tr>
<td>1995</td>
<td>Fung Hon Chu Gifted Education Centre was established according to the recommendation of Education Commission Report No. 4. It functioned as a gifted education hub to provide resources for the development of gifted education and support services to teachers, gifted students and their parents.</td>
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<tr>
<td>1996</td>
<td>In the Report of the Sub-committee on Special Education by the Board of Education, it was recommended that gifted education should be included in initial teacher education, refresher courses and long term development programmes for teachers. Tertiary institutions in Hong Kong should consider offering a local post-graduate degree course to train up professionals in gifted education.</td>
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<tr>
<td>Year</td>
<td>Event</td>
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<tr>
<td>1997-1998</td>
<td>The Education Department* examined the implementation and effectiveness of the ‘Pilot School-based Programme for Academically Gifted Children’. Recommendations on the direction of Hong Kong gifted education were made.</td>
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<td>2000</td>
<td>The current gifted education policy in Hong Kong was formulated. It operates under a three-tier framework in which schools are encouraged and supported to provide school-based gifted development programmes to meet the needs of gifted children.</td>
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<td>2003</td>
<td>Gifted Education Section, under the purview of Curriculum Development Institute of Education &amp; Manpower Bureau* was formally established to implement the gifted education policy.</td>
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<tr>
<td>2006</td>
<td>Fung Hon Chu Gifted Education Centre was moved from Tsuen Wan to 3/F, East Block, EDB Kowloon Tong Education Services Centre.</td>
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<tr>
<td>2007</td>
<td>Young Achievers’ Gallery (YAG) was set up at the podium, EDB Kowloon Tong Education Services Centre, displaying the outstanding achievements of Hong Kong students in different domains in national and international competitions.</td>
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<tr>
<td>2008</td>
<td>The Hong Kong Academy for Gifted Education (HKAGE) was set up to provide services, information, advice and support to gifted students, their parents and teachers.</td>
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<td>2008</td>
<td>The first Annual Gifted Education Conference was jointly organised by the GE Section and The Hong Kong Academy for Gifted Education. It offers a platform for the gifted education community to share experiences of nurturing gifted students. Starting from 2012, the GE Conference has become biennial.</td>
</tr>
<tr>
<td>2008</td>
<td>A number of Gifted Education Teachers Networks were formed to provide opportunities for frontline teachers of the same Key Learning Area (including Chinese Language, English Language, Mathematics, Science and Technology, General Studies, Humanities and Affective Education) for professional exchange and learning from one another.</td>
</tr>
<tr>
<td>2012</td>
<td>The HKAGE and the GE Section of the EDB jointly formulated a new professional development framework for gifted education. It offers clear professional development pathways for teachers in Hong Kong so as to enable a sustainable development of school-based gifted education.</td>
</tr>
</tbody>
</table>

(*The Education Department was renamed as the Education and Manpower Bureau on 1st January 2003; the Education and Manpower Bureau was renamed as the Education Bureau on 1st July, 2007)*
Chapter 2

Definition of Giftedness in Hong Kong

Currently, there is no universally agreed definition of giftedness. “Giftedness”, “intelligence”, and “talent” are fluid concepts subject to different contexts, time and culture.

In Hong Kong, the Education Bureau adopts a broad definition of giftedness based on the recommendation from the Education Commission Report No. 4, with reference to the US Marland Report (1972). In the Report, gifted children are defined as those who show exceptional achievement or potential in one or more of the following:

1. a high level of measured intelligences;
2. specific academic aptitude in a subject area;
3. creative thinking – high ability to invent 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. psychomotor ability – outstanding performance in athletics, mechanical skills or other areas requiring gross or fine motor coordination.

With the broad definition of giftedness adopted in Hong Kong, it is not possible to assess whether a student is gifted based on the result of a single IQ Test. Hence the Education Bureau encourages schools not to focus only on students’ academic achievements, but also nurture students who are gifted in other areas such as arts, sports, creativity and leadership. It is suggested that schools should develop school-based gifted development programmes according to the school situation and characteristics of students in order to cater for the diverse needs of gifted students.

Extended reading

The Theory of Multiple Intelligences

According to Dr. Howard Gardner’s Theory of Multiple Intelligences, human intelligence can be classified into at least eight intellectual capacities, namely linguistic, spatial, logical-mathematical, bodily-kinesthetic, musical, interpersonal, intrapersonal and naturalistic intelligence.

<table>
<thead>
<tr>
<th>Multiple Intelligences</th>
<th>Characteristics</th>
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<tbody>
<tr>
<td>Linguistic</td>
<td>Effective speaking and writing skills; good at expressing and explaining ideas and thoughts through language; can understand profound meanings in language; love reading, writing, editing and story-telling</td>
</tr>
<tr>
<td>Spatial</td>
<td>Sensitive to colours, lines, shapes, format, space and the relationship between them; think and express in image and figures; love painting, sculpture, graphic design, photography and architecture</td>
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<tr>
<td>Logical-mathematical</td>
<td>Effective use of numbers and logical reasoning; love to explore rules, causal relationship or logical relations between things; good at abstract thinking; love mathematical calculation, inferences, induction and analysis</td>
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<tr>
<td>Bodily-kinesthetic</td>
<td>Good co-ordination of limbs; like to use different body parts to express thoughts and feelings; prefer to use gestures and actions to communicate; develop ideas through physical sensation</td>
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<tr>
<td>Musical</td>
<td>Highly sensitive to melodies, rhythm and pitch; able to understand music pieces thoroughly; good at expressing ideas and thoughts through music; love performing, playing musical instruments and acoustics</td>
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<tr>
<td>Interpersonal</td>
<td>Observant to others’ emotion, thoughts and behaviours and able to respond appropriately; good at communicating and getting along with people from all walks of life and different age groups; have empathy for others</td>
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<tr>
<td>Intrapersonal</td>
<td>Place a high value on self-understanding; able to know one’s strengths and weaknesses; keen on self-reflection on daily events and analysis of the relationship with others and the world; have a strong sense of self-awareness that drives them to plan their life</td>
</tr>
</tbody>
</table>
Dr Gardner believes that everybody possesses the multiple intelligences mentioned above. Yet the degree of the performance in each intelligence may vary from people to people, some are better while some are weaker. In fact, a certain level of achievements in all the above intelligences can be achieved through learning and training. Generally speaking, gifted students have better performances in one or more than one of the above intelligences. Nowadays, many countries or regions (including Hong Kong) develop their gifted education policy with reference to this broad view of giftedness.

Do you agree with Gardner’s definition? Besides the eight intelligences suggested by him, can you think of other intelligences?

Are my students gifted in one of the intelligences mentioned above? Does my school nurture their intelligences?

Extended reading


◆ The George Lucas Educational Foundation: Edutopia (online community) http://www.edutopia.org/mi-resources

◆ The Website of Johns Hopkins University: http://education.jhu.edu/PD/newhorizons/strategies/topics/mi/

◆ The Website of Howard Gardner: http://howardgardner.com/multiple-intelligences/

Naturalistic

| Great interests and curiosity about plants and animals; good at observing the discipline and change cycle of nature; able to identify the relationships between different elements of the natural environment |

(Adapted from: The Theory of Multiple Intelligences by Katie Davis (Harvard University), Joanna Christodoulou (Harvard University), Scott Seider (Boston University) & Howard Gardner (Harvard University) https://howardgardner01.files.wordpress.com/2012/06/443-davis-christodoulou-seider-mi-article.pdf)
Chapter 4

The Three-ring Conception of Giftedness

Dr Joseph Renzulli maintains that giftedness should include factors other than intelligences. In his Three-ring Conception of Giftedness, Dr Renzulli regards above-average ability, creativity and task commitment as three elements crucial for the development of gifted behaviours. He believes that one who possesses these three elements is more likely to develop gifted behaviours.

- Have above-average or special ability in multiple domains and/or a specific domain
- Individuals who attain the top 15-20% performance in any domain
- Flexibility, fluency, and originality of thought
- Have a high level of curiosity and an openness to different experiences
- Sensitivity to some particular perspective or event
- Dare to take risks
- Have a high level of interest, enthusiasm, endurance and commitment in a particular area of study
- Demonstrate perseverance, hard work, self-confidence

Do you agree with Renzulli’s Three-ring Conception of Giftedness? In your opinion, which factor is the most important for gifted children to display gifted behaviours?

Did I just focus on searching and nurturing students with high intelligence, but neglect students who show creativity and task commitment?

**Extended reading**


- The Hong Kong Academy for Gifted Education *Nurturing the Gifted* http://ge.hkage.org.hk/en/parents/publications
  - Issue No. 7, May 2012, *3-Ring Model of Giftedness I – Enhancing Creativity of Gifted Learners*
  - Issue No. 8, September 2012, *3-Ring Model of Giftedness II – Enhancing Task Commitment of Gifted Learners*
  - Issue No. 9, January 2013, *3-Ring Model of Giftedness III – Exploring Ability of Gifted Learners*
Dr Françoys Gagné proposed a clear distinction between the two concepts: ‘Giftedness’ and ‘Talents’, which are commonly used in the field of gifted education. In his DMGT, ‘giftedness’ (G) refers to superior natural abilities which are displayed without training; ‘Talents’ (T) refers to the mastery of knowledge and skills through systematic learning and training in at least one discipline.

Dr Gagné believes that while some people have outstanding gifts, it is necessary for them to undergo systematic learning and training in order to develop their talents. Besides, chance, intrapersonal catalysts and environmental catalysts are also key factors for the successful development of gifts into talented behaviours.
Other than the factors suggested by Dr Gagné, what are other factors affecting the developmental process?

What is my role in the developmental process when I nurture my gifted students?

**Developmental Process (D)**
- A person must be gifted in the first place before his/her talent can be developed. It is possible that giftedness never develops into talents
- The process of talent development involves systematic learning and training

**Intrapersonal (I)**
- Mental factors: e.g. motivation, volition, self-management
- Physical factors: e.g. appearance, gender, disabilities, health conditions

**Environmental (E)**
- Milieu:
  - macroscopic level (e.g. geographic, demographic)
  - microscopic level (e.g. personality, parenting style of caregivers)
- Significant events: e.g. the death of a parent, winning of a prize, suffering a major accident or illness
- Individuals: e.g. parents, teachers, peers, siblings
- Provisions: e.g. gifted education programmes and services within or outside the school

**Chance (C)**
- Refers to some uncontrollable factors, e.g. genes, place of birth or family background, parental nurturance, school education

(Adapted from Gagné, F. (2008) Building gifts into talents: Brief overview of the DMGT 2.0

**Extended reading**
- Gagné, F. (n.d.). Building gifts into talents: Brief overview of the DMGT 2.0
Gifted Education Policy in Hong Kong

Rationale and Principles

The mission of gifted education is to identify and develop the potential of gifted students systematically and strategically by providing them with appropriate opportunities so that they can unleash their potential under a flexible teaching and learning environment.

To cater for the educational needs of gifted students, the following principles are advocated:

- Gifted education should be the mission of ALL schools;
- Gifted education should be part of quality education. Schools should meet the basic educational needs of both gifted and non-gifted students;
- A broad definition of gifted education, such as using multiple intelligences, should be adopted;
- Inspiring students to think and to extend their creativity and social skills should be the focus of gifted education;
- Schools should provide sequential and diversified educational activities to gifted students at different levels;
- Resources from individuals and educational bodies should be gathered as far as possible to support schools.
**Operation Mode of Gifted Education in Hong Kong**

The Education Bureau advocates the adoption of a school-based approach in the implementation of the ‘Three-tier Model’ to cater for the social, emotional and learning needs of gifted students.

**Operation Mode**

- **Level 1:**
  - **A:** To immerse the core elements advocated in gifted education i.e. high-order thinking skills, creativity and personal-social competence in the curriculum for all students;
  - **B:** To differentiate teaching through appropriate grouping of students to meet the different needs of the groups with enrichment and extension of curriculum across all subjects in regular classrooms.

- **Level 2:**
  - **C:** To conduct pull-out programmes of generic nature within or after regular school hours to allow systematic training for a homogeneous group of students (e.g. creativity training, leadership training);
  - **D:** To conduct pull-out programmes in specific areas (e.g. Math, Visual Arts.) within or after regular school hours to allow systematic training for students with outstanding performance in specific domains.

- **Level 3:**
  - **E:** To provide off-site challenging enrichment and extension learning opportunities for the exceptionally gifted students.

The implementation of the Three-tier Model is complied with the logical sequence from talent search (in Level 1) to talent development (in Levels 2 and 3). It also covers the two key concepts: ‘Gifted Education for All’ and ‘Education for the Gifted’.
‘Gifted Education for All’ and ‘Education for the Gifted’

‘Gifted Education for All’ means infusing the core elements of gifted education in regular classes to promote students’ high-order thinking skills, creativity and personal-social competence so that all students are provided with the opportunities to develop their potential. Through participating in diversified and challenging classroom activities, gifted students or students with higher ability will become more engaged in learning and thus their talent can be developed. Besides, teachers are encouraged to adopt differentiated teaching strategies, such as flexible grouping, tiered assignments or anchored activities to cater for the needs of students with outstanding performance in different Key Learning Areas so as to enhance their interests and ability.

‘Education for the Gifted’ stresses the provision of 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 so that they can further develop their potential through interacting with their peers. Besides, in parallel to developing students’ knowledge in specialised areas, schools can also organise courses on affective education and leadership training to cater for students’ social and emotional needs so as to ensure the holistic development of gifted students.

Do you think the three-tier operation mode of gifted education is feasible?

Do I know how to implement the Level 1 and Level 2 school-based gifted education programme?

Extended reading
◆ Development of Gifted Education in Hong Kong, Education Bureau:
The Hong Kong Academy for Gifted Education (HKAGE), a non-governmental organisation, was set up in 2008 with the support of a special funding by the Government of the HKSAR. It works closely with the Education Bureau to provide systematic, structured and challenging off-site programmes for students with exceptional talent, as well as support for the students’ parents and teachers.

The work of the HKAGE covers four main areas:

◆ Student Services

Each year the Academy invites schools to nominate students who have demonstrated outstanding performance or high potential in Humanities, Leadership, Mathematics and Science for membership. Besides school nomination, the HKAGE also admits students through ‘Nurturing the Gifted Scheme’ and ‘Self Nomination Scheme’. (For more information, please visit its website: http://ge.hkage.org.hk/en/students/student-membership). The Academy works closely with local tertiary institutes and educational bodies to provide a wide range of programmes in Languages, Mathematics, Science, Humanities, Personal-social competence development and Leadership for gifted students aged between 10 and 18.

◆ Support for Parents

The Academy provides parents with knowledge, skills and information about nurturing gifted children through its Parent Education Programme. There is a Consultation and Assessment Centre in the Academy to provide professional assessments and counselling services for gifted children. Outreach seminars and customised programmes for parents are also organised by the Academy. Besides, the E-forum provides a platform for parents to share their experiences and discuss problems about nurturing gifted children. Parents are encouraged to participate in the discussion on a variety of topics at the forum. The Academy also publishes a biannual magazine: *Nurturing the Gifted*, and other publications for parent information.

◆ Support for Teachers

The Academy provides a variety of learning opportunities for primary and secondary school heads, teachers and social workers to enrich their knowledge in gifted education and to enhance their ability in identifying gifted students and designing suitable programmes to meet the educational needs of gifted
Are the services provided by the HKAGE adequate? What can be added or removed?

Has my school made good use of the resources provided by the HKAGE to meet the needs of gifted students and their parents?

**Research**

The Research Division of the Academy is committed to conducting research about gifted education to enhance the quality of its programmes and services; to realise the development and implementation of gifted education in Hong Kong, and to strengthen the understanding of gifted education among general public.

**Extended reading**

- For the latest information and provision of the HKAGE, please visit its website: http://hkage.org.hk/