Development of Gifted Education in Hong Kong

Preamble

This paper explains the framework for the development of gifted education in Hong Kong.

Background

2. The mission of education is to ensure that the educational needs of all students are met so that their potential, no matter where they lie in the ability spectrum, can be maximally developed.

3. Recognizing that it is the responsibility of schools, not special school, to stretch and nurture gifted students with appropriate learning opportunities and challenges, the Education Commission Report No. 4 (ECR4) recommended a 3-year “Pilot School-based Programme for Academically Gifted Children” in Hong Kong. A brief on the pilot project is at Appendix 1.

Need for Gifted Education

4. The positive outcome of the pilot project re-affirms the value of the gifted education programmes and highlights the need for a more systematic approach to nurture gifted students. The Third International Mathematics and Science Study (TIMSS) 1997 revealed that the top 10% students in Hong Kong were ranked the lowest amongst the academically brilliant students in other Asian countries. The outcome added urgency to the need for nurturing our talents in order to maintain competitiveness of Hong Kong in the international arena.

Principles of Gifted Education

5. Based on the experience from the pilot project, we advocate the following principles in meeting the educational needs of gifted students:

(a) Gifted education should be seen as part of quality education. The needs of gifted students, like their less able counterparts, should basically be met in their own school;

(b) A broad definition using multiple intelligences (MI) instead of a restrictive one, conﬁning only to the academically gifted, should be adopted;

(c) Nurturing MI is a fundamental goal of quality basic education and should be the mission of ALL schools;

(d) Special provisions will be made for (i) the very exceptionally gifted students whose learning needs cannot be fully stretched in school, and (ii) gifted yet with emotional/behavioural or learning (e.g. dyslexic) difficulties. These students will be identified through professional assessments provided by educational psychologists or specialists;

(e) Teachers are to identify and select students for extension work and enrichment activities in schools;

(f) Enrichment and extension activities should be seen as one way of catering for individual
learning differences at the upper end of the ability range. The label “gifted” should not be used to name a child joining these activities;

(g) Resources from various stakeholders should be pulled together to support schools in stretching the potential of gifted students;

(h) A more generic approach is recommended especially in primary schools.

6. Basic conditions required for the effective implementations of gifted education based on the above principles are:

(a) Strengthening and enhancement of existing curriculum and school activities;

(b) training for teachers and school heads;

(c) networking various stakeholders; and

(d) developing assessment guidelines and related tools for use by teachers and professionals.

However, the pace and extent of provisions expansion are subject to various resource constraints in particular in the present economic climate.

Proposals

7. Against this background, we propose the following approach in the promotion of gifted education in Hong Kong:

(a) The three core elements advocated in gifted education, i.e. higher order thinking skills, creativity and personal-social competence should be immersed in the curriculum for ALL students as the basis for nurturing talents and giftedness among our youngsters;

(b) Enrichment and extension activities should be provided across ALL subjects by breadth and depth to allow differentiated teaching strategies and learning opportunities for our high potential students inside the regular classroom; matching the needs of students with the appropriate programme or learning materials in school is basically the task of all teachers;

(c) Additional pull-out programmes conducted outside the regular classroom is needed to ensure that gifted students can be given systematic training as a homogeneous group, in which they are exposed to mutual challenges, cross-discipline exploration, in-depth studies and co-operative work. The nature of these programmes can range from generic to a specialized area e.g. The International Mathematical Olympiad;

(d) While the needs of the majority of gifted students are accommodated in mainstream schools, we should also have provisions for a minority of them with other types of special educational needs. They need educational psychologists’ assessment, special educational arrangement (e.g. early entry to university, mentorship, etc.), counselling service and school consultation service on Individualized Educational Programmes (IEP), etc.;

(e) A mechanism to network and mobilize various stakeholders has to be built up so that
activities such as competitions, scholarships, mentorship schemes, summer camps, etc. can be sponsored or developed in partnership with tertiary institutions and various business sectors;

(f) The Fung Hon Chu Gifted Education Centre (FHCGEC) should be re-established as a multi-functional resource centre for teacher training, sharing of views/researches/products among professionals and academics, providing consultation to schools/teachers/parents, experimentation and development of curriculum materials and resources, networking community resources and coordinating activities relating to gifted education in Hong Kong.

The main focuses of the above framework for the development of gifted education in Hong Kong include selection of target students, teacher training, curriculum and special provision development. The detail implementation plan with indication of tasks involved, is provided in Appendix 2. In line with the gifted education policy in Hong Kong, schools can plan their school-based gifted development programme according to their current situation such as students characteristics, teachers’ professional knowledge, etc. For further information, please visit the web-site of Special Educational Needs Section (Gifted Team) of the Curriculum Development Institute at <http://cd.ed.gov.hk/sen/cindex.htm>.

Education Department

May 2000
A Brief on the Pilot School-Based Programme

Recommendations of ECR4

1. The Education Commission Report No. 4 (ECR4) adopted a broad definition of gifted children who are described as children with exceptional achievement or potentials in one or more of the following:
   (a) a high level of measured intelligence;
   (b) specific academic aptitude in a subject area;
   (c) creative thinking;
   (d) superior talent in visual and performing arts;
   (e) natural leadership of peers; and
   (f) psychomotor ability – outstanding performance or ingenuity in athletics, mechanical skills or other areas requiring gross or fine motor coordination.

2. However, ECR4 recommended that Hong Kong should, at the initial stage, focus on serving our academically gifted students, i.e. those showing exceptional achievement or potential in one or more of the areas (a) - (c) listed above.

3. ECR4 also laid down that Hong Kong should develop school-based programmes in mainstream schools to meet the needs of academically gifted students instead of segregating them in a special school setting.

The Three-Year Pilot Project

4. In 1994, the “Pilot School-based Programme for Academically Gifted Children” (SBP) was launched in 19 primary schools. Educational psychologists (EPs) of the existing manpower establishment under the Services Division provided teacher training and coordinated with a research team comprising academics from tertiary institutes to select the first batch of target students. From 1994-1997, these EPs provided regular school-based support to the 19 pilot schools on programme planning, curriculum development, student selection and teacher training.

5. A resource centre named Fung Hon Chu Gifted Education Centre (FHCGEC) was set up under the Curriculum Development Institute (CDI) in December 1995 to support the SBP. A professional team of curriculum officers was established under CDI in 1996.

Evaluation of the Pilot Project

6. The evaluation report of the SBP supported that the SBP, which involved three core areas of students’ development, i.e. higher order thinking skills, creativity and personal-social competency had brought about positive changes not only to the identified gifted students but also their classmates. This is because SBP was
conducted in two modes:

(a) inside the regular classroom for ALL students with enriched materials immersed in the existing subject-based curriculum so that the highly able students can be adequately stretched;

(b) as additional pull-out programmes conducted outside the regular classroom for a homogeneous group of gifted students to allow systematic training and mutual challenges among themselves.

7. Apart from positive changes detected among identified students and their peers, teachers’ growth in terms of attitude, repertoire of teaching strategies and skills were also reported.
Appendix 2

Putting Gifted Education into Perspective and Our Tasks Ahead

1. Gifted education should be an integral part of Quality Education, which the Education Department (ED) is striving towards.

   **Mission of ED:** To ensure that the educational needs of ALL students are met so that their potential, no matter where they lie in the ability spectrum, can be maximally developed.

   **Quality Education for ALL Students**

   Less Able Students ↔ Gifted Students

2. Our task is to put the long neglected educational needs of gifted students into its rightful place and to devise mechanism to maximise their development.

3. The proposed approach presented in the main Paper is diagrammatically represented below:

   **OPERATION**
   - Level 3: off-site support
   - Level 2: pullout (school-based)
   - Level 1: whole class (school-based)

   **NATURE**
   - Generic (General enrichment)
   - Specialized (Subject/Domains focused)

<table>
<thead>
<tr>
<th>Level 3: off-site support</th>
<th>E</th>
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<tbody>
<tr>
<td>Level 2: pullout (school-based)</td>
<td>C</td>
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<tr>
<td></td>
<td>D</td>
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<tr>
<td>Level 1: whole class (school-based)</td>
<td>A</td>
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<td></td>
<td>B</td>
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   **Level One**
   - **A:** immersion of the core elements advocated in gifted education i.e. high order thinking skills, creativity and personal-social competence in the curriculum for ALL students in regular classrooms
   - **B:** differentiated 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 Two**
   - **C:** pullout programmes of generic nature conducted outside the regular classroom to allow systematic training of a homogeneous group of students
   - **D:** pullout programme of specific nature (e.g. maths, art, etc.) conducted outside the regular classroom to allow systematic training of students with outstanding performance in specific areas

   **Level Three**
   - **E:** individualised educational arrangement for the exceptionally gifted who requires resource support outside the regular school (e.g. Counselling, mentorship, early entry to advanced class, etc.)

4. Target students of groups A-D (i.e. school-based programmes) will not bear the label “gifted”. Target group E is a highly selected group of exceptionally gifted students.
5. Breakdown of tasks ahead:

<table>
<thead>
<tr>
<th>Mode Level</th>
<th>Student Coverage</th>
<th>Identification</th>
<th>Teacher Training</th>
<th>Curriculum / Special Provision Development</th>
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<tbody>
<tr>
<td><strong>Level 1 A</strong></td>
<td>- For all students (100% student-coverage)</td>
<td>- Not required</td>
<td>- Initial/In-service/Refresher courses on 3 core elements to all teachers, other professional training courses to be delivered by teacher training institutions (TTIs) or ED</td>
<td>- Curriculum enhancement by immersing the 3 core elements (high order thinking skills, creativity, and personal/social competence) advocated in gifted education into all Key Learning Areas</td>
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<td><strong>Level 1 B</strong></td>
<td>- Top 10% students of a school, in any class that the school intends to use differentiated teaching</td>
<td>- Using school results, test papers/examination papers, Target Oriented Assessment (TOA), Hong Kong Attainment Tests (HKAT), etc., - Teachers/parent observation checklist</td>
<td>- Briefing and experience sharing sessions for school-heads/teachers (coordinators) on strategies and issues related to differentiated teaching</td>
<td>- Curriculum guideline on extension and enrichment to allow differentiated teaching within various Key Learning Areas</td>
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<tr>
<td><strong>Level 2 C &amp; D</strong></td>
<td>- Students with superior intelligence, or with excellent performance in specific areas like creativity, leadership, etc., or students academically achieving at the top 2-4% in a school</td>
<td>- Multiple criteria - By teachers using multiple criteria based on guidelines and instruments to be suggested and developed by ED - Using school results, TOA, HKAT, other testing instruments to be developed - Teacher/parent observation checklist - Internal and external awards for outstanding performance - Student products - Off-ceiling testing</td>
<td>- Training of gifted education coordinators from schools interested to run school-based gifted development programme on topics such as: identification, teaching strategies, programme design and evaluation, specialised topics in a subject, etc. by TTIs or ED</td>
<td>- Guidelines/framework for systematic training of slightly specific nature - Curriculum exemplars from previous school-based and centre-based programmes - Vetting of proposals for programme funds - School consultation on planning of school-based gifted development programme</td>
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<tr>
<td><strong>Level 3 E</strong></td>
<td>- Top 0.1% (around 1,000 cases) of the student population (across all levels: from P1 to S7) of Hong Kong</td>
<td>Alternatives to be considered: - Mechanism to identify the exceptionally gifted to be devised by a panel consisting of subject specialists, educational psychologists and other experts in gifted education and related fields - Nominated by teachers according to criteria set up by ED (e.g. specific traits/achievement/skills) and selected by a panel of specialists. Using criteria such as aptitude tests, intelligence tests, social-emotional assessment, creativity and other checklists for assessment / quality of exceptional ability (e.g. leadership), etc.</td>
<td>- Training of class teachers/guidance teachers/gifted education coordinators on identification, design/delivery of Individualized Educational Programmes (IEP) and meeting special educational and social/emotional needs of exceptionally gifted students</td>
<td>- Specially designed localised curriculum - Consideration for acceleration, class skipping, etc. - Gifted development programme of more generic or specific nature to develop all round competency as leaders to be - Design of mechanism for early entry to university in consultation with panel of specialist and university admission office - Mentorship - Scholarship - Attachment to University, business corporations - Individualised support/counselling and guidance/IEP.</td>
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