For discussion on 11 May 2018

Legislative Council Panel on Education

Injection into the Gifted Education Fund

Purpose

This paper briefs Members on the measures of strengthening gifted education and talent development in Hong Kong and seeks Members' support for a proposed injection of \$800 million into the Gifted Education Fund.

Background

Gifted education policy in Hong Kong

- 2. Nurturing local gifted students and enabling them to develop their potential play an important part in enriching Hong Kong's pool of talents and increasing our competitiveness. Gifted education in Hong Kong adopts an inclusive approach which seeks to accommodate learner diversity. This is premised on the belief that all children have multiple intelligences that can be fully developed when given learning opportunities. Currently, the gifted education provision in Hong Kong operates under a three-tier implementation model promulgated in 2000:
- (a) Level 1 refers to using pedagogies that could tap the potential of students in creativity, critical thinking, problem solving or leadership in the regular classroom;
- (b) Level 2 refers to offering pull-out programmes in disciplinary or interdisciplinary areas for the more able students within the school setting;

and

(c) Level 3 refers to the provision of learning opportunities for the exceptionally gifted students in the form of specialist training outside the school setting.

A detailed elaboration of the framework is at the **Annex**.

3. Over the years, the Education Bureau (EDB) has been supporting schools and teachers to provide Levels 1 and 2 programmes for gifted students. The support includes organising professional development programmes, providing curriculum resources and financial resources in the form of grants such as the Capacity Enhancement Grant and the Diversity Learning Grant to enable schools to cater for the needs of gifted students at Levels 1 and 2.

Services offered by the Hong Kong Academy for Gifted Education (HKAGE) and the setting up of the Gifted Education (GE) Fund

- 4. The HKAGE provides Level 3 gifted education provision for exceptionally gifted students. In the 2016/17 school year, the number of student members is around 11 500. At present, the HKAGE provides enrichment programmes and services including parent education programmes, workshops and peer-support groups for parents of these students to engage parents to work in collaboration to better support their gifted children. For the past three years, the HKAGE has catered for an average of about 4 500 parents of gifted students through around 80 programmes annually. The HKAGE also offers teachers introductory talks on gifted education and shares up-to-date information in gifted education through its quarterly publication.
- 5. The Finance Committee (FC) of the Legislative Council (LegCo) approved vide FCR(2016-17)48 in June 2016 the setting up of the GE Fund with an endowment of \$800 million for generating investment returns to support the operation of the HKAGE. The GE Fund was later set up in November 2016. To tap the views and expertise of the relevant stakeholders,

the Advisory Committee on Gifted Education (ACGE) has been set up to advise the Secretary for Education on the use and management of the GE Fund. The Committee is chaired by a non-official and comprises representatives from different sectors, e.g. post-secondary institutions, schools, parents, the private sector, experts with knowledge on local and overseas gifted education practices, professional bodies, and ex-officio members from the EDB.

Development of gifted education in the future

- 6. The gifted education programmes currently offered by the HKAGE are predominantly enrichment in nature (i.e. broadening the exposure of students beyond their experience in the school curriculum). For example, in 2017/18 around 100 STEM-related enrichment programmes categorised under mathematics, multi-disciplinary programmes, science as well as technology (e.g. Introductory Course in Aeronautics, Intermediate Course in Robotics, Introduction to Newton's Laws of Motion) are provided. Individual programmes providing advanced learning experiences (e.g. mentorship programmes, leadership programmes, etc.) are offered in collaboration with local and non-local partners for only a very small number of high ability gifted students. Separately, opportunities and related training for top-tier gifted students to participate in prestigious international competitions such as the International Mathematical Olympiad, the International Physics Olympiad, the International Junior Science Olympiad, etc. are also offered.
- 7. These enrichment programmes serve to broaden students' vision, enhance their interest and motivation to pursue excellence but may not fully help groom exceptionally gifted students to attain higher achievements and excel in their respective talented areas. As to gifted students' participation in international competitions, their performance is very encouraging.
- 8. Gifted education in various overseas countries has been developing rapidly in recent years. Individualised advanced learning experiences are

offered to top-tier gifted students to help them develop their potential to the full. Involvement of post-secondary institutions, non-government organisations and private technology enterprises are common in talent development in various overseas countries.

- 9. Taking reference from the development of gifted education elsewhere in the world, we see a need for more advanced level programmes to expose top-tier gifted students to high quality and challenging learning experiences in their talented areas or, where suitable, in a wider range of disciplines or even across disciplines. To this end, there is a need to engage a larger community, including post-secondary institutions and innovation and technology enterprises, more extensively, in the provision of such Academics in the post-secondary institutions programmes. professionals from innovation and technology enterprises possess the specific knowledge, skills and experience in their respective disciplines that would stimulate gifted students to further develop their potential so that they can attain higher achievement in their specialised areas. Practically, these sectors can help identify exceptionally gifted students and develop advanced level programmes or organise year-long mentorship programmes under which students can work alongside scientists from post-secondary institutions or practising professionals from different fields.
- 10. The HKAGE, being the major education service provider for gifted students, has been planning to expand its services to offer more advanced level programmes for more students with active participation and outstanding performance while continuing with the face-to-face and online enrichment programmes. It should, nonetheless, not be overlooked that there are also gifted students outside the HKAGE and other institutions providing learning experiences for gifted students, though not on as large a scale as the HKAGE. The AGCE has been deliberating on how best to step up gifted education with reference to overseas development through inducing more stakeholders to take part in the identification of gifted students and development of advanced programmes or research projects for them. We propose to set aside some funding from the GE Fund for implementing measures recommended by the ACGE to this end.

11. Seeing the importance of affective education to gifted students, courses and counselling services to cater for the affective needs of the gifted students, related training for teachers and parents to equip them for supporting the personal development of the gifted students are also provided by the HKAGE. The HKAGE will also strengthen the provision in this aspect.

Need for injection into the GE Fund

- 12. Starting from March 2017, the GE Fund has been placed with the Exchange Fund (EF) which is administered by the Hong Kong Monetary Authority (HKMA) for investment. The rate of return was 2.8% per annum for 2017 and the income so generated was \$22.4 million and was not sufficient for the HKAGE to meet its operational expenses at the existing level of work¹. In 2018, the rate of return is estimated to be 4.6% (\$36.8 million). There is limited room for the HKAGE to expand the scale and scope of its services to cover quality advanced level programmes for more exceptionally gifted students, to strengthen affective education for gifted students and related training for teachers and parents and to implement recommendations of the ACGE.
- 13. While it remains the intention that the HKAGE should seek to augment its income through further donations, sponsorships and course fees, at a time when the landscape of gifted education elsewhere in the world is fast-changing and Hong Kong is seeking to expand our work on gifted education, the HKAGE has hitherto not attracted donations and sponsorships. While the HKAGE is considering the possibility of charging fees for its programmes, a balance will have to be struck between generating revenue and deterring gifted students (who may have not yet been so identified) to enroll. Thus it can be foreseen that any fees charged in the future would not

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¹ In the 2017/18 school year, the amount of funding for supporting the operation of HKAGE was around \$36 million. The EDB had to redeploy resources to support the HKAGE in continuing its committed programmes.

be pitched at a level that can help generate a significant level of revenue. Levying a high level of fees would also not be in line with the public's expectation of the Government's commitment to gifted education. The most immediate way of providing more resources to enable more work be done for the exceptionally gifted and for affective education is to increase the investment return of the GE Fund by increasing the amount of the endowment. It is proposed to inject \$800 million into the GE Fund to enable the new initiatives set out in paragraphs 9 to 11 to be taken forward. Assuming a rate of return in the range of 3.7% to 4.9% a year from 2019 to 2022, the annual investment income to be generated by the \$1.6 billion GE Fund would be around \$59.2 million to \$78.4 million. This would be able to support the operation of the HKAGE with an expanded scope and implement measures recommended by the ACGE to induce more stakeholders to take part in gifted education.

Control and monitoring mechanism

14. The GE Fund has been established as a trust fund under the Permanent Secretary for Education Incorporated. Upon the proposed injection, the GE Fund will continue to be managed in accordance with its Trust Deed which stipulates the framework and the salient features necessary for its proper management and administration. The existing control and monitoring mechanism will continue to apply. More specifically, the Permanent Secretary for Education Incorporated will act as the trustee of the GE Fund; the ACGE will advise SED on the use and management of the GE Fund; and the EDB will table before the LegCo the annual audited accounts of the GE Fund.

Financial implications

15. We have earmarked sufficient provision in the 2018-19 draft Estimates for the proposed injection of \$800 million into the GE Fund.

Subject to the approval of the FC of LegCo for the proposed injection, we will make appropriate investment arrangement.

Advice sought

16. Subject to Members' views on the proposed injection, we will seek funding approval from the FC for creating a new commitment for injection into the GE Fund in due course.

Education Bureau May 2018

The Three-tier Implementation Model for Gifted Education

Level 3 Off-school support	3E Exceptionally gifted students	
Level 2 School-based pull-out programmes	2C Students with specific talents or outstanding academic results	2D Students with outstanding performance in specific domains
Level 1 School-based whole-class teaching	1A All students	1B Students with outstanding performance in individual academic subjects
General Curriculum Content Specialised (General Enrichment) (Specific Domain)		n Content Specialised (Specific Domain)

Since 2000, the EDB has adopted an *inclusive approach* of accommodating learner diversity, through three levels of engagement of mainstream schools, for providing gifted students with appropriate challenges and learning opportunities. The three-tier model facilitates the implementation of the gifted education policy with classroom-based learning in schools (Level 1), supplemented by school-based pull-out enrichment and extension programmes (Level 2), as well as off-school intensive support services (Level 3).

Level 1

- A. immersion of the three core elements advocated in gifted education, i.e. higher order thinking skills, creativity and personal-social competence in the curriculum for ALL students in the regular classroom.
- 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 the regular classroom.

Level 2

- C. pull-out programmes of generic nature conducted outside the regular classroom to allow systematic training of a homogeneous group of students.
- D. pull-out programmes of specific nature (e.g. mathematics, art) conducted outside the regular classroom to allow systematic training of students with outstanding performance in specific areas.

Level 3

E. individualised educational arrangement for the exceptionally gifted students who require resource support outside the regular school setting (e.g. counselling, mentorship, early entry to advanced class).