

Education Bureau Circular Memorandum No. 68/2017

From : Permanent Secretary for Education To : Supervisors / Principals of Government,
Aided (including special schools), Caput
and Direct Subsidy Scheme Secondary
Schools

Ref. : EDB/CDI/SC/821

Date : 28 March 2017

Provision of One-off Grant to Secondary Schools for the Promotion of STEM Education

Summary

This circular memorandum sets out the details about the disbursement of the one-off grant for secondary schools to strengthen the support to them in the promotion of STEM¹ education.

Background

2. In the 2015 and 2016 Policy Addresses, the Government pledged to promote STEM education with a view to nurturing students' learning interest, enhancing their creativity, collaboration and problem solving skills as well as developing their innovativeness. Furthermore, students are encouraged to pursue the study of STEM-related subjects and relevant careers in the future for the sustainable development of Hong Kong. In this regard, the Education Bureau (EDB) is taking actions to promote STEM education among schools in a holistic and coherent manner, including updating the relevant curricula, enriching students' learning activities, providing suitable learning and teaching resources, and enhancing teachers' professional development.

Details

3. To encourage schools to build on their existing practice and kick-start new school-based initiatives on STEM education and further enrich their STEM-related learning activities/projects, EDB is going to release a one-off grant (hereafter STEM grant) to all the government, aided and caput secondary schools, including special schools², and also secondary

¹ STEM is an acronym that collectively refers to the academic disciplines of Science, Technology, Engineering and Mathematics. In the curriculum context of Hong Kong, STEM education is promoted through Science, Technology and Mathematics Education.

² Special schools with only the secondary section will receive a grant of HK\$200,000. For special schools having primary and secondary sections, since a one-off grant of HK\$100,000 was already disbursed to the primary level in March 2016, they will receive a grant of HK\$100,000 in March 2017. Schools can use the grant disbursed last year across years until 31 August 2018 whereas the grant disbursed in March 2017 can be used across years until 31 August 2019.

schools under the Direct Subsidy Scheme (DSS) in the 2016/17 school year. The amount of the grant is HK\$200,000 per school.

4. The grant aims at strengthening the support to secondary schools for the promotion of STEM education. Since schools may start from different grounds on promotion of STEM education and individual schools may have their own emphases or priority of development, schools may use the STEM grant flexibly to kick-start or enhance school-based STEM education that can cater for the interest and needs of their students. Schools can use the STEM grant in the following areas:

- To procure resources (e.g. teaching aids, consumables, learning and teaching resource materials) and/or upgrade some existing resources for the implementation of school-based STEM-related activities including projects and competitions;
- To organise STEM-related activities such as school-based scientific and technological activities/competitions; and
- To support students to participate in various STEM-related local, national and international competitions/exhibitions/programmes.

5. Two identical seminars on “Use of Resources Support for Implementation of STEM Education in Secondary Schools” will be organised on 20 April 2017 and 4 May 2017 to share with principals and middle managers of STEM-related Key Learning Areas good practices on effective implementation of STEM education in schools. Please refer to the Training Calendar System of EDB (<http://tcs.edb.gov.hk>) for details about the seminars.

6. To facilitate the implementation of STEM education, EDB will provide relevant information to schools from time to time. School heads are requested to provide the names and email addresses of the contact persons for Science, Technology, Mathematics Education Key Learning Areas, IT in Education and/or STEM education so that we may deliver the latest information on STEM education to teachers concerned for schools’ reference. Please complete the Reply Slip in Annex 1 and return it to us by fax on or before 10 April 2017.

Grant disbursement and accounting arrangement

7. The STEM grant will be disbursed to all the aided and caput secondary schools, including special schools², and also secondary schools under the Direct Subsidy Scheme (DSS) in March 2017. Schools can use the STEM grant across years from the 2016/17 school year till the end of the 2018/19 school year. EDB will claw back any unspent balance of the grant as at 31 August 2019 based on schools’ annual audited accounts.

8. For government schools, the STEM grant will be provided in the form of budget allocation in March 2017. The unspent balance can be carried forward for use until 31 August 2019. Any unspent balance as at 31 August 2019 will lapse.

9. If a deficit is incurred on the STEM grant in any year, schools may deploy the surplus under EOEBG or the General Domain of OEBG for aided schools, or DSS Subsidy for DSS schools, or Expanded Subject and Curriculum Block Grant (ESCBG) for government schools, or Fee Subsidy for caput secondary schools, whichever appropriate, to cover the deficit of the grant. If there is still unsettled deficit, it should be topped up by schools' own fund.

10. Being accountable for the use of the STEM grant, schools are required to comply with relevant guidelines issued by EDB. The use of the grant will also be subject to monitoring as other purpose-specific grants to schools, including reflecting the income and expenditure in the audited accounts to be submitted to EDB annually. Schools should keep a separate ledger account to record the income and expenditure of the grants, with related breakdowns. They should also make available such records and related receipts/invoices to EDB for inspection when necessary.

11. When devising the implementation plan, schools should discuss with teachers about the strength and needs of the school in order to strengthen STEM education in the development of the school curriculum. Based on the set objectives, schools should evaluate the STEM programmes/activities and the usage of the STEM grant regularly, and report to the Incorporated Management Committee/School Management Committee. Guidelines on the use of the STEM grant for organising STEM-related activities are attached in Annex 2 for schools' reference.

Enquiry

12. For enquiries, please contact the Science Education Section of the Curriculum Development Institute, EDB (Tel: 3698 3445).

Sheridan S L LEE
for Permanent Secretary for Education

c.c. Heads of Sections

**Contact Persons for
Science, Technology, Mathematics Education Key Learning Areas,
IT in Education and/or STEM Education**

Reply Form

(Please return by fax on or before **10 April 2017**)

[Fax no.: 2877 7954]

To : Administration Team (Kowloon Tong Education Services Centre)
Curriculum Development Institute

The names and email addresses of the contact persons for Science, Technology, Mathematics Education Key Learning Areas, IT in Education and/or STEM education (panel heads/coordinators/teachers) are as follows:

Contact Persons	Name (in English)	Name (in Chinese)	Commonly used email address *	e-Services account *
Science				@eservices.hkedcity.net
Technology				@eservices.hkedcity.net
Mathematics				@eservices.hkedcity.net
IT in Education				@eservices.hkedcity.net
STEM education.				@eservices.hkedcity.net

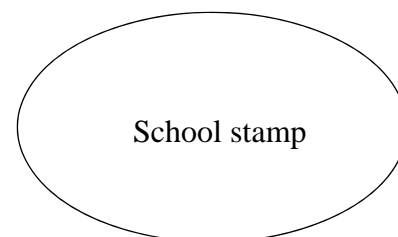
* Please use block letters.

Signature of Principal :

Name of Principal :

Name of School :

Tel. No.:



Guidelines on the Use of the One-off STEM Grant
in Secondary Schools

1. Characteristics of STEM-related activities

- offering opportunities for students to integrate and apply STEM-related knowledge and skills through solving problems and creating innovative designs
- being embedded with learning and teaching strategies that can facilitate students to integrate and apply STEM-related knowledge and skills
- providing challenging learning activities that can arouse students' interest in STEM-related areas, and enhance their creativity, collaboration and problem solving skills

2. Ambit of the grant

- to procure resources (e.g. teaching aids, consumables, and teaching and learning resource materials) and/or upgrade some existing resources for the implementation of school-based STEM-related activities including projects and competitions
- to organise STEM-related activities such as school-based scientific and technological activities/competitions
- to support students to participate in various STEM-related local, national and international competitions/exhibitions/programmes

3. Procurement arrangement

- When hiring outside services and making purchases, schools should observe relevant EDB circulars and guidelines as appropriate.

4. Examples of the use of the grant

- For purchase of equipment/instruments/tools (e.g. experimental instruments, equipment for biotechnology, data loggers, robotics kits, electronic modules, virtual reality tools, 3D printers, laser cutting machines) and relevant consumables/raw materials/parts
- For purchase/development of mobile applications/related software (e.g. software for development of Virtual Reality/3D graphics, mobile apps for data collection and processing, development tools for mobile apps)
- For purchase of reference books/periodicals/magazines/self-learning kits for extended learning

- For enhancement of resources in the resources corner or the activity room
- For payment of registration fees for students to participate in competitions and relevant expenses (e.g. purchase of materials, cost for set up of the exhibition booth)
- For expenses for students and teachers to participate in various STEM-related local, cross-boundary or overseas competitions (e.g. fees for travelling and accommodation)
- For student' enrolment in STEM-related activities/courses (e.g. those on computer programming, scientific investigations) offered by tertiary institutions/ non-profit making organisations/academic associations/professional bodies)
- For procurement of services from external course providers (e.g. tertiary institutions/ non-profit making organisations/academic associations/professional bodies) to organise on-site STEM-related activities or training courses for students

5. Examples of *inappropriate use of the grant*

- To procure services from external service providers for organising activities that are irrelevant to STEM education
- To spend the whole grant on procurement of services from external service providers
- To purchase equipment/tools for school administrative purposes
- To purchase computer hardware/software for general purposes
- To purchase mobile computing devices
- To serve guests with food and beverage
- To purchase consumables such as flowers or fruit baskets for celebration or ceremony
- To employ teaching and non-teaching staff
- To subsidise teachers for participation in local, regional and overseas professional development programmes