FCR(2016-17)82

問:

- (a) 當局如何量度擬議撥款在提升學生對 STEM 相關科目的興趣方面的成效,包括基數評估(baseline assessment)的方法、局方擬於未來 3 年考察的學校數目、考察次數、考察人員的組成(是否有教育局以外的專家參與)和考察的內容為何;及局方如何評估擬議撥款的整體績效(姚松炎議員和陳志全議員要求;會議時間分別為:15:47:14 及 16:56:38)及
- 答:STEM 教育並非一個全新的課程,推行 STEM 教育是優化科學、 科技及數學學習領域課程的教學策略,以增強學生的綜合和應用 STEM 相關知識與技能的能力。

事實上,政府向學校提供的經常性的撥款當中,已包括配合推行相關課程和與 STEM 相關的學習活動的需要。向學校發放一筆過撥款的目的是給予學校額外的動力,支援學校持續推行及/或加強現時的校本 STEM 教育計劃,以及開展其他新計劃。

就學校運用撥款,我們已為中學舉辦兩場簡介會,講解有效使用一 筆過撥款的方法,亦會持續監察學校運用撥款的情況,以及識別良 好示例,與其他學校分享。

在檢視推動 STEM 教育成效方面,我們會以一個整體和多角度的方法來評估學生在 STEM 教育方面的學習成果,包括透過問卷調查(例如「中學課程實施調查研究 2016/17」)、學校探訪、焦點小組會議等不同渠道,收集不同持份者就推動 STEM 教育的意見,整體地評估本港推動 STEM 教育的成效。

STEM education does not constitute a completely new curriculum. It involves the enrichment of pedagogies in the Science, Technology and Mathematics Education Key Learning Areas in order to strengthen students' ability to integrate and apply STEM-related knowledge and skills.

In fact, the recurrent funding provided to schools by the Government could be employed for meeting the needs of implementing relevant curricula and STEM-related learning activities. As for the disbursement of the one-off STEM grant, it aims to provide schools with a stronger incentive to keep up and/or enhance their existing school-based activities/projects on STEM education and kick-start new initiatives.

For effective use of the one-off grant, we have already organised two briefing sessions to secondary schools on effective use of the grant. In addition, we will continue to monitor the use of grant by schools and identify good practices for sharing with other schools.

To review the effectiveness of the promotion of STEM education, we will assess students' learning outcome in a holistic and multi-perspective approach. Various channels would be used to collect feedback from different stakeholders about the promotion of STEM education, which include questionnaires (e.g. "Secondary School Curriculum Implementation Survey 2016/17"), school visits, focus group meetings, etc.

- (b) 就大學 STEM 相關科目的收生要求而言,大學接受學生在修讀新高中學制課程時沒有選修 STEM 相關科目的情況為何 (胡志偉議員要求;會議時間:16:16:38)。
 - 答:大學教育資助委員會(教資會)資助大學可自行決定收生事宜。每 所院校按照公平和擇優而取的原則,就不同學士學位課程自行制訂 收生政策和標準,以評核學生通過大學聯合招生辦法(聯招)或循非 聯招途徑遞交的申請。

根據教資會資助大學的資料,所有學士學位課程學生均須經過嚴謹全面的評核才獲錄取。院校會從多方面評核申請人,包括他們的學歷、成績、面試表現、個人品格、非學術成就、興趣和經歷,以及報讀課程的選擇優次等。

據我們了解,部份院校的理學院或工程學院在收生時有不同要求, 例如訂明聯招生必須修讀相關數理科;修讀數學延伸課程單元一及 二的聯招生報讀理工科時可獲加分;或部份學院或學系對選修數理 科選修科目(即並非四科必修科目)的分數比重會提高等。

Student admission is within the autonomy of the University Grants Committee (UGC)-funded universities. Following the principles of fairness and merit-based selection, each university administers its own admission policy and criteria for different undergraduate programmes to assess applications submitted through the Joint University Programmes Admissions System (JUPAS) and non-JUPAS routes.

According to the UGC-funded universities, undergraduate admission is conducted on the basis of a rigorous and holistic assessment of applicants in a variety of aspects, including their academic qualifications and results, interview performance, personal attributes, non-academic achievements, interests and experiences, as well as programme preferences, etc.

According to our understanding, the faculty of sciences or engineering of some institutions may have different admission requirements, e.g. JUPAS applicants must enroll in relevant subjects in mathematics and sciences; JUPAS applicants taking Module 1 (M1) and Module 2 (M2) of Mathematics (Extended Part) will get extra scores if they apply for sciences or engineering subjects; or that some faculties or departments would accord higher weightings on elective subjects of mathematics or sciences (i.e. not the four required subjects).