

Responses of ASHK to the Task Force on Review of School Curriculum

The Hong Kong Academy of Sciences (ASHK) is glad to see the Task Force on Review of School Curriculum (TF) responding to the general call for trimming down and increasing flexibility on the four Core Diploma of Secondary Education (DSE) subjects. These have taken up an undue proportion of teaching time at the expense of other elective subjects and learning activities. ASHK is also happy to see many universities adjusting their admission requirements to increase flexibility to cater for student diversity and to offer incentives to DSE students taking Advanced Mathematics and science subjects. There are, however, places in the report that require clarifications. The following are ASHK's observations:

1. Framework for a new secondary curriculum should be set

The vision of breadth and depth of knowledge and the balance of broad-based science and humanities education, which were clearly spelled out in the last education reform (implemented since 2000), are unfortunately missing in this report. ASHK believes such a vision should remain as the guiding principle behind the present TF underlying the changes beyond those recommended items. ASHK suggests that the TF should delineate a clear framework of what it views as essential education for a secondary school student, in addition to the generic skills but also the knowledge required for his/her transition towards post-secondary education and/or vocation training, and to correct the imbalance created by emphasising literacy and social aspects over science and mathematics in the current DSE curriculum.

2. Advanced Mathematics education should be a separate subject

TF should acknowledge and address the problem of low enrolment of DSE students in Advanced Mathematics, which constitutes the foundation of many science and technology subjects. By highlighting that taking the Foundational part of Core Mathematics is enough to earn Level 4 grade, the TF signals that taking less mathematics is good enough for a subset of students. It is important, however, for the TF to provide corresponding incentives for students to take Advanced Mathematics. For example, the TF should consider giving Advanced Mathematics a separate subject status either in the Core or in the Electives to provide proper recognition for the subject.

3. Encourage students to take more Elective subjects

ASHK observes a general narrowing of knowledge of DSE students, with more than 80% of the last cohort taking only two or fewer electives. It does not dovetail with the increasingly complex world that requires multi-dimensional and multi-disciplinary skills and knowledge for problem solving. ASHK therefore recommends the TF should explicitly encourage students to take more Elective subjects, now that more time and space can be freed from the Core subjects. As some university departments have already started using six-subjects to calculate admission scores, the others should follow the trend to give incentives to students taking more Electives to acquire a broader foundation of knowledge.

4. STEM education should not be a separate subject

While advocating the importance of science and mathematics education, ASHK agrees that the EDB may facilitate schools' planning and implementation of STEM education but it should not provide in any form a learning framework or curriculum guides. ASHK supports schools and organizations to continue to hold different STEM activities and mathematics competitions, but the general STEM activities should only be a means to an end. Science and mathematics education are built on layers of fundamental knowledge that require incremental assembly of principles and concepts. Proper science and mathematics education should not be replaced by general STEM activities. Therefore, ASHK strongly recommends that the EDB approaches the needs of science and mathematics education by providing students with adequate learning opportunities (through freeing up the study hours for the Core subjects) and instilling the concept of interdisciplinary knowledge integration and application through extra-curricular activities.

5. General Entrance Requirements should not be linked with the review of school curriculum

The TF recommends the universities should maintain the General Entrance Requirements (GER) of 3322 in the Core subjects as the basic requirement for university admissions in principle yet encourages universities to exercise greater flexibility in admitting students who demonstrate talents and competencies through other means despite not fully meeting the GER. ASHK reads the two recommendations above with great interest. The TF argues that full relaxation of GER might convey a wrong message to society and the international community that Hong Kong is compromising on the academic rigour of secondary education and abilities of students. It is unclear, however, how GER would inform the public about the quality of school education in Hong Kong. ASHK would therefore recommend that the TF refrains from recommending any GER while the school curriculum is being reviewed (and presumably reformed).

In conclusion, the TF has taken a horizontal approach to look at curriculum reform, in that the Consultation Document addresses students' whole-person development, value education, creating space and catering for learner diversity, and applied learning opportunities. ASHK believes that the TF should provide more vision and recommendations in the vertical dimension, i.e., addressing the quality as well as the depth and breadth of students' learning experiences. As information and technological change gathers pace, the amount of knowledge to be acquired by our next generation are becoming increasingly formidable to adapt to the new world's needs of scientific talents, the driving force of our future economy.

Full version of the response of ASHK to the Task Force on Review of School Curriculum:

http://www.ashk.org.hk/files/projects_events/38/Response%20English.pdf

The above information is released by AsiaNet Communications Ltd on behalf of ASHK.

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