

# International study shows Hong Kong students' good performance in reading, mathematical and scientific literacy

The Education Bureau (EDB) today (December 3) said that Hong Kong students as a whole performed well in the Programme for International Student Assessment (PISA) 2018, maintaining their achievements in the previous assessment.

PISA is organised by the Organisation for Economic Co-operation and Development (OECD) and conducted every three years with a view to assessing the mother tongue reading, mathematical and scientific literacy of 15-year-old students.

A spokesman for the EDB said, "Among the 79 countries/economies participating in the study, Hong Kong's 15-year-old students ranked fourth in both mother tongue reading and mathematical literacy, and ninth in scientific literacy. Their performance in these three areas was significantly higher than the international level. The achievements can be attributed to the efforts of schools and teachers, as well as the support of various stakeholders in providing quality education.

"It is also encouraging that Hong Kong students' socio-economic status seems to have less effect on their performance as compared with other participating countries/economies. In general, the education system of Hong Kong has done well in providing an education opportunity with high quality and equity for all students on the whole, which in turn facilitates social mobility."

In mother tongue reading literacy, Hong Kong ranked fourth. Although Hong Kong's ranking dropped slightly from second in PISA 2015 and its score dropped marginally from 527 to 524, the score was still significantly above the OECD average of 487. The results reveal that Hong Kong students are able to sustain their good performance. To further enhance the reading interests and abilities of students, the EDB will continue its efforts in the promotion of "Reading to Learn", one of the four key tasks implemented under the curriculum reform. The EDB will also continue to strengthen the support for schools, including the provision of a recurrent grant to facilitate schools to further promote reading starting from the 2018/19 school year, implementing the new "Reading across the Curriculum" initiative, the reform of the Chinese Language Curriculum introduced in recent years, as well as continuous programmes/training for teachers' professional development and the learning and teaching resources on reading to help teachers (including teacher-librarians) employ appropriate reading strategies and organise reading activities.

In mathematical literacy, Hong Kong's ranking dropped slightly from

second in PISA 2015 to fourth, but its score increased from 548 to 551, which was significantly above the OECD average of 489. The design of the EDB's Mathematics Curriculum enables teachers to provide students with learning opportunities to apply their mathematical knowledge in real-life situations, to nurture their positive attitudes in the learning of mathematics and to appreciate the subtleties of mathematics. With the progressive implementation of the renewed "Mathematics Education Key Learning Area Curriculum Guide (Primary 1 – Secondary 6) (2017)", which emphasises constructing mathematical knowledge in different strands and developing critical thinking skills, logical thinking skills and creativity through the "inquiry and investigation" approach, the EDB believes that the performance of Hong Kong students in mathematical literacy will remain outstanding in the years to come.

In scientific literacy, Hong Kong kept its number nine ranking, while its score dropped slightly from 523 to 517, which was still much higher than the OECD average of 489. The relevant data indicate that Hong Kong students have maintained high standards in science internationally. Over the past few years, the EDB has introduced various measures to strengthen science education. The renewed "Science Education Key Learning Area Curriculum Guide (Primary 1 – Secondary 6) (2017)" puts emphasis on developing scientific literacy of students and encourages teachers to provide students with a variety of learning experiences including hands-on and minds-on learning activities. Through collaborating with others in experimental activities, scientific investigations and project learning, students enhance their understanding of science knowledge and develop science process skills. Students also develop an understanding of the interrelationship between science, technology, society and environment. As well, the Government has attached great importance to the promotion of science, technology, engineering and mathematics (STEM) education in recent years to equip students with necessary knowledge and skills, including science literacy, as well as values and attitudes in response to the challenges in the 21st century. The EDB will continue to strengthen the support measures to schools, including the provision of professional development programmes, so as to have a sustainable impact on student learning in science/STEM areas.

"Our education, which is geared towards facilitating students' learning, provides a broad spectrum of knowledge and nurtures high-level thinking, generic skills and positive values to achieve whole-person development. Our primary concern in curriculum design and delivery is the interest of students and their learning outcomes. We shall draw reference from, among others, the findings of international studies to understand the strengths and weaknesses of our students so as to enhance their learning. Our focus is therefore not on the international ranking of our students' performance but rather on conducting regular reviews for the purpose of providing high quality education," the spokesman added.

Background information and key statistics of PISA 2018 are at the Annex.