

LAMPIRAN 1
THE SUN (SPEAK UP) : MUKA SURAT 8
TARIKH : 31 MEI 2018 (KHAMIS)

LETTERS

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BM will do well for science

I REFER to "Learning science and maths – why English matters" (Letters, May 22).

I agree that the success stories of Japan and China in teaching science and maths in their mother tongues had been cited so often by detractors of PPSMI that it has become a cliché. But it is not the only reason why Malaysia should ditch PPSMI and teach science in the national language.

A more important reason is the failure of PPSMI to improve science and maths achievements of students.

The failure can be tracked in two international rankings, the Trends in International Mathematics and Science Study (TIMSS) for 8th grade students and the Programme for International Student Assessment (PISA) for 15-year-old students.

The Malaysian TIMSS results from 1999 (before PPSMI was introduced) to 2015 (after its introduction) declined compared to other countries, who except for Singapore and Hong Kong, used their mother tongues or national languages to teach both subjects.

Malaysian students' science rankings rose slightly from 22nd place in 1999 (492) to 20th place above the international average in 2003 (510), but then declined steadily in terms of rank and score below the international average to 21st in 2007 (471) and 32nd in 2011 (426) but recovered slightly to 24th place in 2015 (471).

A similar trend was seen in maths achievement, which rose dramatically from 16th place in 1999 (519) to 9th place above the international average in 2003 (508), but then declined steadily below the international average to 20th in 2007 (474) and 27th in

2011 (440) but recovered slightly to 22nd place in 2015 (465).

Although Malaysian students' science ranking in PISA rose from 53rd place in 2012 (421) to 48th in 2015 (443) and in maths rose from 52nd in 2012 (420) to 46th place in 2015 (446), it is still below the international average and well below countries that use their mother tongue.

It is significant that Malaysia's score and rank are consistently well below countries, except for Singapore and Hong Kong, which use their mother tongues or national languages to teach science and maths.

The positive testimonies by a few successful PPSMI graduates like the writer are anecdotal at best and cannot be used as evidence to decide on PPSMI that involves the student population and the future of the country that depends on them.

Education Minister Dr Maszlee Malik and Prime Minister Tun Dr Mahathir Mohamad should base their decision on whether to reintroduce PPSMI or continue with the DLP (Dual Language Programme) on hard data scientifically validated by TIMSS and PISA and not on weak anecdotal evidence of a few graduates or the whim of some parents.

I recommend Maszlee and Mahathir scrap the DLP, not reintroduce the failed PPSMI and reintroduce teaching of maths and science in Bahasa Melayu for the scientific development of the country.

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LAMPIRAN 2
THE STAR (EVENTS) : MUKA SURAT 22
TARIKH : 31 MEI 2018 (KHAMIS)

Window into China's space race

Rockets and spacecraft models on display at Tech Dome Penang in July

PENANG

By N. TRISHA
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YOU probably have read about China's space missions or even seen them on television. Now is the chance to get a rare insight into its aerospace programme at the Space Exploration Gallery at Tech Dome Penang.

The China Science and Technology Museum has brought space models worth about RM1mil for the gallery in July. They are four rockets and two spacecraft models.

The rockets are the Long March 2F, Long March CZ-3A, Long March 5 and Long March 7 while the spacecraft models are the Chang'e 3 Lunar Lander and Yutu Lunar Rover.

Chang'e 3 is China's first lunar surface exploration mission using a lander and rover, and in 2013, performed the nation's first-ever soft landing on the moon.

Tech Dome Penang chief executive officer Dr Khong Yoon Loong said they were first told they would only get one rocket.

"Before we knew it, they said they were bringing four rockets and two spacecraft models.

"We are very happy about it as we only planned for one rocket so now, we are making preparations for the display to cater to four rockets and two spacecrafts.

"During the launch sometime in July, there will be a sharing session on the China Space Programme as well as workshops.

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Dr Khong Yoon Loong

"Each one of these rockets tells a story of China's space exploration and these are great stories, from where it started to now.

"China has landed a craft on the moon.

"This is remarkable progress and we are very proud to have this here with us," he said at the preview of the space models at Tech Dome Penang in Komtar.

Finance Minister Lim Guan Eng who was guest of honour said the two years of planning had now become a reality.

"We thank the Chinese government for giving us the space models as they are very expensive, costing almost RM1mil.

"It is a very good opportunity for children who love space to experience the models first-hand," he said.

Also present was Consul-General of China to Penang Wu Jun, among others.



Lim and Wu Jun (both in white) sharing a light moment as they visit the preview set-up of the rockets donated by China Science and Technology Museum to Tech Dome Penang in Komtar, Penang.

Astronomical Society of Penang president Dr Chong Hon Yew giving an explanation on a full-scale model of the Chang'e 3 Lunar Lander (in gold) and Yutu Lunar Rover (in front) donated by China Science and Technology Museum to Tech Dome Penang. — Photos: ZHAFFARAN NASIB/The Star

