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It is time to jump on the 'STEAM' train

The Sun, Malaysia



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LETTERS letters@thesundaily.com

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IN the 21st century, students and future graduates are expected to be equipped with transferable skills.

The best educational experiences prepare learners for the real world, providing them with skills and knowledge to adapt to complex situations they may face later in life.

Learners should be taught to think not only critically, but creatively too.

Even history's greatest inventors would not have accomplished what they had without their less-than-conventional ideas.

STEAM (Science, Technology, Engineering, Arts and Mathematics) education fills this gap, encouraging learners to think outside the box, hence, changing the way they perceive and navigate the world.

It can also help to nurture individuals who are better prepared to address complex global concerns.

Furthermore, if we hope to enter Industrial Revolution 4.0 well-prepared, we need to boost our efforts in nurturing a skilled workforce and STEAM education is a crucial component of this.

Evolving from STEM, the inclusion of Arts helps recognise the field as being equally important to one's development and teaches students the value of creativity, innovation and communication.

It also includes a broader range of subjects, such as liberal arts, fine arts, performance arts, language, design and more, widening students' perspectives on a problem and how best to approach it.

The University of Nottingham Malaysia's Faculty of Science and Engineering and Faculty of Arts and Social Sciences recently delivered a masterclass on STEAM, with over 500 high school students from 100 schools across Malaysia participating physically and virtually.

During this masterclass, we presented current topics such as "The Luck of (Genetic) Draw", "3D print your future", "How to be a real influencer", "How to build a diversified investment portfolio" and "Korean 101 (and Foreign

Language Learning)".

The masterclass aimed to provide young learners with a taste of the latest trends, and the skills and knowledge they will one day need to contribute to the future economy.

In addition, we wanted to increase accessibility to STEAM education for our young learners and to reintroduce it in a way that was interactive and fun, proving that STEAM is not as intimidating as it's often made out to be.

STEAM education can also help equip learners for some of 2022's most in-demand jobs in Malaysia as listed by JobStreet, such as information technology, software development, digital marketing, finance, business development, medicine and education.

To develop industry-ready graduates, exposure to STEAM can provide our young learners with the competitive advantage needed to navigate jobs of the future, jobs which we can only expect to increase in demand over time.

From the success we have had, we hope to see more educational institutions and their educators take the initiative to boost STEAM education for all.

We also call for parents and guardians to recognise the impact and benefits of STEAM education on a child's development, academically and otherwise.

We continuously speak of the need to produce a skilled workforce, but it must begin with us making these programmes accessible for all young Malaysians.

Only when they grow, can we grow as a nation.

Dr Kher Hui (Marina) Ng
Associate Professor and
Associate Dean of the Faculty
of Science and Engineering
University of Nottingham
Malaysia

Dr Joanne Lim Bee Yin
Associate Professor and
Associate Dean of the Faculty
of Arts and Social Sciences
University of Nottingham
Malaysia



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KEMENTERIAN TERANG, SAINS, TEKNOLOGI,
ALAM SEKITAR DAN PERUBAHAN IKLIM

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SUMMARIES

IN the 21st century, students and future graduates are expected to be equipped with transferable skills. The best educational experiences prepare learners for the real world, providing them with skills and knowledge to adapt to complex situations they may face later in life. Learners should be taught to think not only critically, but creatively too. Even history's greatest inventors would not have accomplished what they had without their less-than-conventional ideas.