To: Principals / Panel Heads of Science, Mathematics, General Studies and Liberal Studies

Dear Sir/Madam,

**STEM Initiative Hong Kong**
**Invitation to Seminars**
**Global Education Trend – How to implement STEM Education**
**Speaker: Prof. Jonathan Osborne, Stanford University**
**on 20th & 22nd June 2016**

STEM has been advocated across the globe and regarded as the future trend of education. Originated from the US, this innovative curriculum blends four specific disciplines – **Science, Technology, Engineering** and **Mathematics** – into an integrated approach of analytical thinking and problem-solving skills. Students are equipped to apply their knowledge in real-world applications in order to prepare for the changes and challenges brought by the global development of economy, science and technology.

Last year, the Education Bureau highlighted STEM as the focus of future curriculum development. In hopes of further promoting the principles and applications of STEM to local educators, **STEM Initiative Hong Kong** takes pleasure in inviting Prof. Jonathan Osborne of Stanford University, a key author of the STEM framework in the US, to host a seminar entitled “**New Directions in Teaching Science**” on 20th June and another on “**Assessing Scientific Literacy and Competency: Lessons from PISA and NGSS**” on 22nd June. Please refer to the attached for programme and registration details.

You are cordially invited to the seminars. Should you be interested, please complete the enclosed reply slip and send it to us at your convenience. Due to the popularity of the seminars, seats are available on a **first-come-first-served basis**.

Thank you for your kind attention and we look forward to your reply.

Yours faithfully,

Nisa Leung
Founder of **STEM Initiative Hong Kong**
**New Directions in Teaching Science**

Date: 20th June 2016 (Monday)
Time: 4:00pm
Venue: Chambers 1A & 1B, InnoCentre, 72 Tat Chee Avenue, Kowloon Tong

Abstract: The Next Generation Science Standards (NGSS) are currently implemented in 16 states in the US to promote STEM education. These standards represent a change from teaching science core ideas with a focus on inquiry, to a focus on scientific practices where argumentation is a core feature. The seminar will explore the rationale for this change, why it is seen as an improvement, and the implications for science teaching.

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**Assessing Scientific Literacy and Competency: Lessons from PISA and NGSS**

*(With a panel discussion moderated by Prof. Lap-Chee Tsui)*

Date: 22nd June 2016 (Wednesday)
Time: 4:00pm
Venue: The Leighton Hill Community Hall, G/F, 133 Wong Nai Chung Road, Happy Valley

Abstract: Under the Next Generation Science Standards (NGSS), the learning outcomes are defined in terms of what students are able to do, not just what they know or can recall. Hence a new system of assessments is needed. The seminar will discuss how to design a system to meet the vision of NGSS, review the existing items and their suitability for NGSS, measure the scientific practice of arguing from evidence, as well as the issues and challenges for the field.
Invitation to Seminars

Global Education Trend – How to implement STEM Education

Speaker: Prof. Jonathan Osborne, Stanford University

About Prof. Jonathan Osborne

Prof. Osborne holds the Kamalachari Chair in Science Education at the Graduate School of Education, Stanford University. He was a member of the US National Academies Panel that produced the Framework for K-12 Science Education as the basis for the new Next Generation Science Standards. Currently, he is chair of the expert group for producing the framework for PISA (Programme for International Students Assessment) 2015 and 2018. He has been invited by organizations worldwide to share his insights about science education and STEM education.

About STEM Initiative Hong Kong

STEM: Inspiration for Infinite Possibilities Tomorrow

We at **STEM Initiative Hong Kong** are dedicated to inspiring our young to a great future and preparing them for tomorrow’s infinite possibilities in a fast-changing and increasingly technology-intensive world. We believe that children from a tender age should develop a lifelong, scientist-like passion to always wonder and explore, to learn by trying and experimenting, and to succeed through perseverance. We aim at fostering a challenging, interdisciplinary, experiential and multifaceted learning environment in local schools at all levels that excites, engages and enriches students through a unique, learn-by-doing curriculum of **Science**, **Technology**, **Engineering**, **Mathematics** subjects to help prepare them for excellence in life through positive thinking, exemplary critical skills, hard work and strong ethics.

Website: STEMHK.ORG
**STEM Initiative Hong Kong**  
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Global Education Trend – How to implement STEM Education  
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**Reply Slip**  
(Please email to jackie@seedland.hk or fax to 3583 1331  
OR fill in our online form at [https://goo.gl/ZBSNzt](https://goo.gl/ZBSNzt))

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For enquiries, please contact Miss Liu or Miss Leung at 3583 3100.