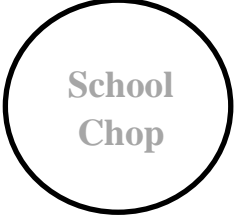


School Survey on the Updating of the Science Education Key Learning Area Curriculum (P1-S6)

School Name: _____	School Number: <table border="1" style="width: 100%; height: 20px; border-collapse: collapse;"><tr><td style="width: 15%;"></td><td style="width: 15%;"></td><td style="width: 15%;"></td><td style="width: 15%;"></td><td style="width: 15%;"></td><td style="width: 15%;"></td></tr></table>						
<input type="radio"/> Primary school <input type="radio"/> Secondary school							
Name of Contact Person / Post: _____							
Telephone Number: _____							
Principal's Signature: _____							

Background

Ongoing Renewal of School Curriculum - *Focusing, Deepening, Sustaining*

In order to sustain the Learning to Learn curriculum reform launched in 2001 and to keep abreast of the various contextual changes in society over the past decade or so, we are entering into a stage of sustainable and ongoing curriculum renewal and updating (also known as “Learning to Learn 2.0”). In this new phase of curriculum renewal, the educational aims of promoting whole-person development and lifelong learning as well as the overall curriculum framework and learning goals will be kept, particularly the improvement of its quality and effectiveness. The curriculum will remain learner-centred and continue to focus on learning and teaching. However, to maintain Hong Kong’s competitive edge and to prepare our students well for the local and global changes taking place in various fields, considerations for curriculum planning under the curriculum renewal are recommended for sustaining, deepening and focusing on in school-based curriculum development so that the positive impacts of the Learning to Learn curriculum reform can be reinforced and students will be better equipped for future challenges.

Purpose

The purpose of this questionnaire is to collect views from **principals, vice-principals, subject panel heads (or primary General Studies panel heads) and teachers** for the Curriculum Development Council on the broad direction of the onward curriculum development of the Science Education Key Learning Area (KLA) in the context of the enhanced version of Learning to Learn 2001 of which promoting **STEM education** is a key emphasis (Please refer to the *Overview on the Promotion of STEM Education - Unleashing Potential in Innovation and Consultation Brief on Updating the Science Education KLA Curriculum (Primary 1 to Secondary 6)* for details). It is part of the consultation on the updating of the KLA curriculum guides, during which the content would be revisited and considerations for curriculum planning under the curriculum renewal would be proposed as suggestions for further development of the school-based curriculum in each KLA. In parallel, other stakeholders will be consulted through various channels, including briefing sessions and focus group interviews. The feedback collected will be consolidated to facilitate further deliberations on the updating of the curriculum guides of the KLAs concerned.

Return of Questionnaire

The Science KLA coordinator(s) / panel heads of Science subjects / primary General Studies panel heads are advised to exchange views with the principal, vice-principal(s) and the panel members of the KLA concerned before responding to the questions and send the completed questionnaire, by using the self-addressed envelope enclosed herewith, with the signature of the principal and the school chop by mail to the Council and Secondary Section of the Curriculum Development Institute, Education Bureau (13/F, Wu Chung House, 213 Queen's Road East, Wanchai, Hong Kong) by 4 January 2016. For the Science Education KLA, schools are expected to return ONE questionnaire only. For enquiries, please contact Mr S.P. LIU at 3698 3445. All information will be kept strictly confidential and only used for the purpose of updating the Science Education KLA Curriculum Guide. No information of individual schools will be revealed.

Please refer to the *Overview on Promotion of STEM Education – Unleashing Potential in Innovation and Consultation Brief on Updating the Science Education KLA Curriculum (Primary 1 – Secondary 6)* when responding to the following questions.

Please express your extent of agreement or views by blackening the appropriate circles in the following items, and offer additional suggestions in the spaces provided.

1. The promotion of STEM education is introduced as a key emphasis of the ongoing renewal of the school curriculum. Its focus is to unleash students' potential and develop their capacity to **innovate** by enhancing their creativity and problem solving skills, as well as their interest in learning through **integrating and applying knowledge and skills** across disciplines of Science, Technology and Mathematics Education KLAs.

Strongly agree Agree Disagree Strongly disagree No opinion

Other comments:

2.

Recommended approaches for organising STEM-related learning activities	Strongly agree	Agree	Disagree	Strongly disagree	No opinion
(i) Learning activities based on topics of a KLA for students to integrate relevant learning elements from other KLAs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(ii) Projects for students to integrate relevant learning elements from different KLAs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other comments:

3.

Proposed strategies for promoting STEM education	Strongly agree	Agree	Disagree	Strongly disagree	No opinion
(i) Renew the curricula of Science, Technology and Mathematics Education KLAs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(ii) Enrich learning activities for students	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(iii) Provide learning and teaching resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(iv) Enhance professional development of schools and teachers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(v) Strengthen partnerships with community key players	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(vi) Conduct review and disseminate good practices	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other comments:

4. (i) Your concerns about the promotion of STEM education in your school:

(ii) Your views on the promotion of STEM education in schools:

(iii) Good practices of your school, if any, on promoting STEM education to share with other schools:

5. Other suggestions on promoting STEM education in schools:

6. (i) The updated curriculum aims of science education:

- Develop curiosity and interest in science
- Develop the ability to make inquiries about science and solve problems
- Acquire scientific knowledge and skills, and develop the ability to integrate and apply the knowledge and skills with other related disciplines
- Become familiar with the language of science to communicate science-related ideas
- Recognise the social, ethical, economic, environmental and technological implications of science; and develop an attitude of responsible citizenship and a commitment to promote personal and community health
- Develop an understanding of the nature of science
- Become lifelong learner in science for personal development
- Be prepared for further studies or future careers in scientific, technological and engineering fields

Strongly agree Agree Disagree Strongly disagree No opinion

Other comments:

(ii) The updated curriculum emphases of science education:

- Strengthening students' ability to integrate and apply knowledge and skills (including hands-on skills)
- Nurturing students' interest in science and related disciplines
- Emphasising development of scientific thinking and problem solving among students
- Fostering students to make informed judgements based on scientific evidence
- Nurturing students to become self-directed learners in science
- Catering for students with different needs and aspirations

Strongly agree Agree Disagree Strongly disagree No opinion

Other comments:

7.

Updated curriculum framework of science education	Strongly agree	Agree	Disagree	Strongly disagree	No opinion
➤ Maintaining the six strands of science education (Scientific Investigation, Life and Living, The Material World, Energy and Change, The Earth and Beyond, and Science, Technology, Society and Environment (STSE))	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
➤ Highlighting the importance of scientific literacy (including science process skills and nature of science)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
➤ Promoting STEM education – ability to integrate and apply knowledge and skills	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
➤ Including other updated elements of the ongoing renewal of the school curriculum (refined generic skills, values and attitudes, Language across the Curriculum and information literacy)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Other comments:

8. The holistic curriculum development (to enhance the vertical continuity and lateral coherence) is important in the Science Education KLA.

- Strongly agree Agree Disagree Strongly disagree No opinion

Other comments:

9. (i) Area(s) that your school requires support most: *(You may blacken more than one circle.)*

- STEM education
- Enhancing students' scientific literacy (including science process skills and nature of science)
- Holistic curriculum development (e.g. vertical continuity/lateral coherence, collaboration among KLAs, flexible use of curriculum time)
- Pedagogies (including e-learning)
- Catering for learner diversity
- Values education
- Language across the Curriculum
- Assessment literacy
- Others (Please specify.)

(ii) Support measures that can best address the needs and concerns of your school in incorporating the major areas for updates in the school-based science education curriculum: *(You may blacken more than one circle.)*

- Professional development programmes
 - Curriculum Planning (including the planning of cross-KLA/STEM-related activities)
 - Learning, Teaching and Assessment (including that for STEM-related activities)
 - Enriching Knowledge (including cutting edge development in STEM-related fields)
- Resource packages
- School-based support
- Online resources provided by the EDB (e.g. One-stop Portal for Learning and Teaching Resources, Science Education Section website)
- Others (e.g. equipment, venues) Please specify.

10. Other suggestions on the updating of the Science Education KLA Curriculum:

– The End –

Thank you!