

# **Minutes of the Fourth Meeting of CDC Committee on Science Education (1999-2000)**

**Date:** 26 May 2000 (Friday)  
**Time:** 2:30 p.m. - 5:45 p.m.  
**Venue:** Conference Room, Room G06, 24 Tin Kwong Road, Kowloon.

## **Present:**

Mr. TSE Pak-hoi (Chairman)  
 Mr. CHAN Chi-tuen  
 Mr. CHAN Man-tak  
 Mr. CHENG Chi-leung  
 Mr. CHONG Shiu-kit  
 Dr. CHOW King-lau  
 Mr. CHUI Hing-wa  
 Dr. FUNG SHI Yuk-hang  
 Mr. HO Chung-nin  
 Mr. KO Cheung-chuen  
 Dr. LEE Hau-chi  
 Ms LEE Kwan-ping, Carole  
 Ms LEE Pui-har  
 Mr. LEUNG Shiu-keung (Vice-chairman)  
 Dr. MAK chi-keung  
 Dr. NG Kwok-hung  
 Mr. OR Choi-kuen  
 Mr. PANG Chi-chuen  
 Dr. PANG Wing-chung  
 Mrs. TANG TSUI Sau-mei  
 Mr. YIP Chee-kuen  
 Ms LUI Mong-yu, Grace (Secretary)

## **In Attendance:**

Mr. CHAN Pui-tin  
 Ms CHOW Kar-man, Sophia  
 Mr. FONG Wai-hung  
 Mr. LEUNG Kin-tak  
 Mr. MAK Tsz-pun  
 Mr. SO Chi-shing  
 Mr. TANG Chee-poon  
 Mr. WONG Kin-on  
 Mr. YEUNG Man-shing  
 Mr. YU Hon-yui

## **Documents sent and tabled:**

- SC4/1/99 Minutes of the Third Meeting of the CDC Committee on Science Education (1999-2000)
- SC4/1A/99 Summary of Suggestions/Comments/Issues raised during the Consultation (revised)
- SC4/1B/99 Proposed Format for Science Syllabuses (An example of a Section in the Revised S4-5 Chemistry Syllabus (2003))
- SC4/2/99 "Chapter 3: What is worth learning?" Extracted from " Holistic Review of School Curriculum - Building on Strengths" - Draft Consultative Document - Restricted
- SC4/3A/99 R&D Project on science Model making at the Primary Level - 小學科學模型試教計劃
- SC4/3B/99 Scientific Investigation Projects in Secondary Schools
- SC4/3C/99 教育署通函第 316/2000 號 -- 「中一至中三科學科的教材及教學法」研討會
- SC4/3D/99 Documents related to the development of the Science Curriculum Framework:
  - 香港科學教育現況分析與課程改革建議
  - Developing Generic Skills in Science Education
  - Exemplars of Linking Science Education with Other KLAs
- SC4/3E/99 CDC Committee on Science Education - Work Schedule in June - September 2000
- SC4/4/99 A Summary of the Benjamin Franklin Science Program
- SC/2/99 CDC Committee on Science Education Membership List (1999-2000) (Rev. 5/00)

## 1. Confirmation of minutes of the Second Meeting

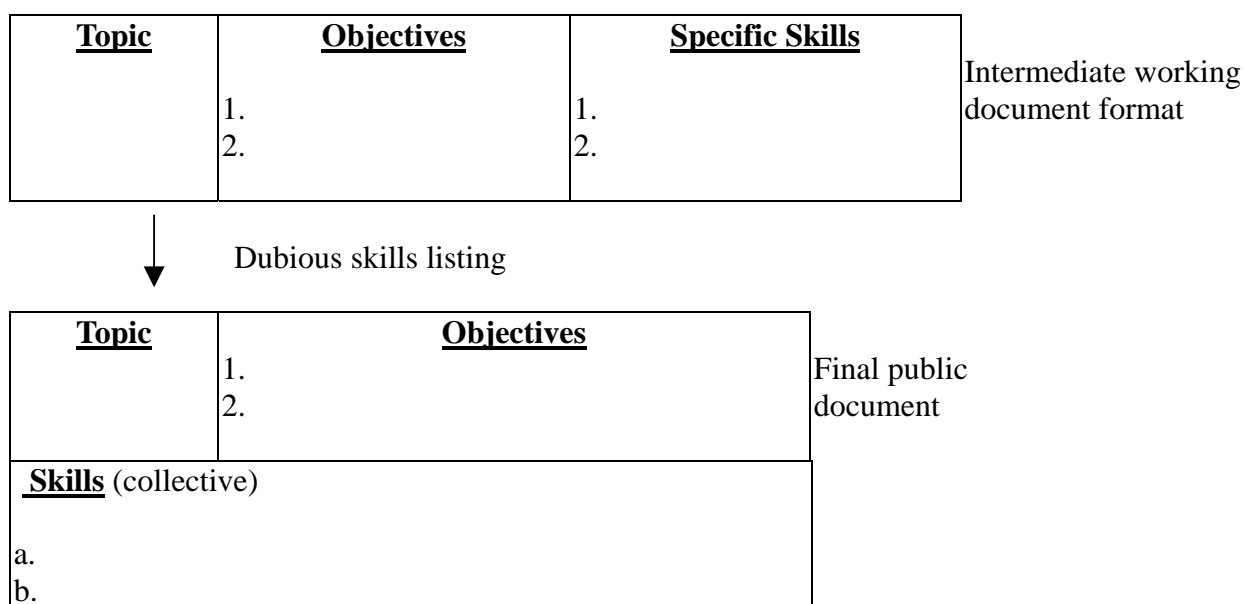
1.1 The minutes were confirmed with no amendments.

## 2. Discussion on matters arising from the last meeting

2.1 Members agreed that matters related to the CDC study tour on Science and Technology Education (Para. 3.1-3.2) would be discussed under Agenda Item 4.

2.2 The Secretary highlighted the amendments made to the document "The Summary of Suggestions/Comments/Issues raised during the Consultation (revised) - (SC4/1A/99)". Members held a brief discussion on the issues and the document was endorsed.

2.3 The proposed format for science syllabuses (SC4/1B/99) was tabled. Members agreed that it is worth listing the knowledge and skills that are expected for various topics, as depicted on page 2 of the document. Concerns that the skills listed in the Overview would be very similar for different Sections were raised. The Chairman suggested the Ad Hoc Committees to go through the working procedure as summarized in the following flow-chart to develop the generalized skills for each of the topics.



The above issue would be re-visited before finalizing the curriculum documents. Mrs. Tang remarked that she would have to discuss with her colleagues in HKEA and to provide further comments later.

2.4 In relation to the setting up of Ad Hoc Committees (Para.5), the Vice-chairman reported that all Ad Hoc Committees are working in good progress and the "Ad Hoc Committee on the revision of S.4-5 Biology Syllabus" was formed. In relation to the work of the Ad Hoc Committee on the Review of Science Curriculum at Primary Level (Para. 5.7), the Vice-chairman reported that an ad hoc committee would be formed under the CDC Standing Committee on Curriculum Development for K-S3 to develop a revised General Studies curriculum at the Primary Level. Members suggested that the Ad Hoc Committee on the Review of Science Curriculum at Primary Level to focus their

attention on the development of science and technology activities to promote science education at the primary level.

**3. To receive reports on:**

- (a) science learning activities for primary schools**
- (b) Science investigation projects in secondary schools**
- (c) implementation of the CDC Science curriculum for S1-3**
- (d) development of the science curriculum framework**

- 3.1 The Secretary gave a brief report on the running of the third Primary Science Project Competition (常識百搭) which took place on 18 March 2000. This competition was co-organized with the Hong Kong Institute of Education and the Science Museum. There were 53 entries this year. It was observed that students were able to develop their ability in hypothesizing, observation, communication, thinking creatively and making judgements in doing their science projects. It was also observed that throughout the past few years, significant improvement has been found among the students and also in teachers who have taken an active part in the competition. RTHK has interviewed one of the participating schools 鳳溪廖潤琛小學下午校 and the programme (課程先驅：活學活用) would be broadcast on 5.6.2000. Members were also presented with the book 「小學科學探究活動舉隅」 which include an account of the second Competition run in 1999.
- 3.2 Mr. K.T. Leung reported on the R&D project on Science Model Making (SC4/3A/99). Mr. Leung reported that 13 schools joined in the project and he had observed two lessons so far and the response of both the teachers and students were very good. He also tabled a tentative programme for the try-out. As most of the days on the programme had not been fixed yet, he pledged to send out the programme through e-mail once more schools had informed him of the intention to try-out. He would also invite members to observe the try-out sessions whenever possible.
- 3.3 Mr. K.O. Wong reported on the R&D project on Chemistry Olympiad (SC4/3B/99). Mr. Wong reported that 44 teams of students from 30 schools joined the competition this year. Questionnaires were distributed to the students during the finals of the competition on 13 May 2000. They are being analyzed at the moment. It is anticipated that the results of the questionnaire would shed light on how skills such as problem solving, communication, collaboration and creativity could be promoted among students through science project works, and how formal and informal curriculum would complement each other. The Chairman opined that the project titles in the competition and good practices identified through the competition should be disseminated. Mr. Wong related that a summary report on the event was published each year in the past few years and he is exploring on how to digitize the report and put them on the web as resources for teachers and students.
- 3.4 The secretary reported on the implementation of the revised CDC Science Curriculum for S.1-3 (SC4/3C/99). The Science Section had completed the review of 5 sets of textbooks written in English and 9 sets of textbooks written in Chinese. Two identical seminars aiming to enhance a better understanding of the revised syllabus and to introduce resources that would facilitate the teaching and learning of the revised Syllabus will be conducted on 7 and 8 July 2000. Members are invited to attend the seminars. A web-based training course aiming to enhance science teachers' foundation

knowledge in physics would be held this summer in collaboration with HKUST. Other activities in relation to the implementation of the revised syllabus including the School-based Curriculum Development Sharing Session (Science) to be held on 27 June 2000 and other resources being developed were also reported.

- 3.5 Members received the documents (SC4/3D/99) on recommendations of KLAs, development of generic skills and values & attitude in science education and linkage of science education with other KLAs. Members welcomed the idea and agreed that science education should contribute in these areas. Comments on the descriptors and progression statements of the generic skills were raised. The Vice-chairman invited Members to provide further comments on the documents. The Ad Hoc Committee on the Development of Curriculum Framework for the Science Education Key Learning Area will discuss and consolidate the opinions in its coming meetings. The Vice-chairman introduced the Committee's proposed work schedule in June - September 2000 (SC4/3E/99) and Members agreed to work towards a proposed science curriculum framework for the CDC consultation report by the 3<sup>rd</sup> week of September 2000.

**4. To receive a preliminary report on the CDC Study Tour on Science and Technology Education**

- 4.1 Mr. P.T. Chan gave a report on the tour on behalf of the tour group (SC4/4/99). He related that the section on implications for Hong Kong had not been compiled in the main report. The tour group will deliberate further on the points and the group would be very prudent in drafting this section as they see that experiences gained from US might not be totally applicable in Hong Kong. Members are invited to join in the forum specially set up by the group on the website ([www.hkace.org.hk](http://www.hkace.org.hk)). Members would also be invited to dissemination sessions when the full report is ready.

**5. Any Other Business**

- 5.1 A list of major science education events in the coming months was tabled. The Vice-chairman invited members to contribute further information to help keep the list up-date. Members opined that it would be helpful to teachers and science educators to have such a list available on the web for reference. The Vice-chairman agreed to look into this matter and similar lists would be prepared for Members' reference in the coming meetings.
- 5.2 The next meeting was scheduled to be held at 2:30 p.m. on 6<sup>th</sup> July 2000.
- 5.3 There being no other business, the meeting was adjourned at 5:45 p.m.

Confirmed on \_\_\_\_\_

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(Mr. TSE Pak-hoi)

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(Ms. LUI Mong-yu, Grace)

Chairman

Secretary