

Project Title:

Promotion of STEM Education through the School-based Science and Bio-technology Curricula

1. Support Service Co-ordinator

School-based Professional Support Section, Quality Assurance and School-based Support Division, Education Bureau

2. Network Co-ordinating School

Ho Yu College and Primary School (Sponsored by Sik Sik Yuen)

3. Objectives

The project aims:

- to provide professional training and support to teachers and laboratory technicians of all Participating Schools on Bio-technology and STEM education
- to develop Bio-technology and STEM education learning activities for school-based Junior Secondary Science curriculum to enhance students' knowledge and experimental skills in Bio-technology as well as their creativity and problem solving skills
- to establish an interactive learning community to promote cross-school interaction and academic exchange on professional technological innovation
- to strengthen the promotion of Bio-technology and STEM education in the Participating Schools, as well as further promote Bio-technology and STEM education to other schools to enhance Bio-technology and STEM education in Hong Kong

4. Foci of Support

- To promote cross-school interaction, professional sharing and exchange by organising various teacher professional development activities such as visiting biotech laboratories, seminars, workshops and experience sharing of the Network Co-ordinating School
- To co-plan lessons with teachers of Participating Schools to help them develop a school-based curriculum related to Bio-technology and STEM education, develop and design appropriate learning activities for Bio-technology education and STEM education, and explore effective learning and teaching strategies
- To conduct cross-school peer lesson observation and lesson evaluation to strengthen professional exchange among the Participating Schools

5. Modes of Support

- To lead the Participating Schools to explore appropriate mode of implementation for school-based Bio-technology and STEM education, and provide training and support to the Participating Schools based on the experience of the Network Co-ordinating School
- To co-plan lessons with the teachers of the Participating Schools and conduct cross-school lesson observation to strengthen professional exchange

6. Expectations on Participating Schools

- Participating Schools assign one teacher-in-charge to liaise with the Coordinating School and the related School Development Officer
- Representatives of the Participating Schools attend at least two executive meetings held in the school year with the Network Co-ordinating School and other Participating Schools on formulating strategies and work plans, such as lesson study and observation
- Participating Schools arrange regular timeslots for teachers concerned to attend meetings and participate in various professional development activities, e.g. collaborative lesson planning
- Participating Schools share with other teachers their experiences in school-based curriculum development and the materials and resources they develop, e.g. work plans, teaching materials and research reports
- Participating Schools observe strictly their legal obligations and, in all cases, comply with the Copyright Ordinance in developing school-based learning and teaching materials