

Project Title:

Implementing STEM Education through Refining School-based Curriculum and Establishing Structured Professional Learning Community

1. Support Service Co-ordinator

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

2. Network Co-ordinating School

Lok Sin Tong Yu Kan Hing Secondary School

3. Objectives

The project aims:

- to support Participating Schools in establishing STEM learning platforms, such as Aquaponics, propagation of corals, Makers and Artificial Intelligence Lab, so as to facilitate the sustainable development of STEM education in Participating Schools
- to broaden the academic and technological vision of the STEM education teams through exchanges among the Participating Schools and their collaboration with universities and related industries
- to share the refined designs of learning activities, strategies and action plans of the existing curriculum with more STEM education elements so as to let all students have exposure to STEM education
- to establish the STEM education professional learning community by sharing the rich experience and resources of the Networking Co-ordinating School in the promotion of STEM education, and to promote innovative technology education in the Participating Schools through on-site support

4. Foci of Support

- To assist the Participating Schools in launching STEM education, and develop a long-term and sustainable development plan
- To promote professional exchange among the teachers of Participating Schools and to strengthen the collaboration among teachers across subjects through on-site support, so as to promote STEM education more effectively
- To organise professional development activities such as sharing sessions by different experts from universities and related industries so as to enhance the professional capacity of the teacher cadre and facilitate the promotion of STEM education in schools

5. Modes of Support

- To conduct on-site support including thematic talks, lesson study, development of learning materials and activities, and cross-subject school-based curricula planning, etc.
- To exchange and to share STEM education resources on Cloud platforms
- To establish a STEM education learning community with the Network Co-ordinating School as the node, and promote the connection and collaboration of the industry, universities, experts in the areas and schools

6. Expectations on Participating Schools

- Participating Schools assign one teacher-in-charge to liaise with the Network Co-ordinating School and the related School Development Officer
- Representatives of the Participating Schools attend the related meetings held in the school year with the Network Co-ordinating School and other Participating Schools on formulating strategies and work plans, etc.
- The leaders and the team of the Participating Schools are committed to STEM education so as to enhance students' innovation
- Teachers of different KLAs of the Participating Schools are willing to promote STEM education collaboration, and to establish an active STEM education development team
- 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