Quality Education Fund Thematic Networks – Tertiary Institutes (2023/24)
Project Title:
Integrated Self-directed Learning Approach to School-based STEAM Development (In-STEAM)

1. **Objectives**
   The project aims:
   - to provide support to teachers to enhance their capacity to integrate self-directed learning (SDL) into STEAM education
   - to develop and implement school STEAM curriculum, and assess effectively students' learning outcomes so that students are facilitated to integrate and apply the knowledge and skills across different STEAM disciplines
   - to develop students' SDL, entrepreneurial spirit and 21st century skills through scientific investigation and creative engineering design
   - at upper primary (P.4–6) and lower secondary (S.1–3) school students and develops multilevel school leadership networks so as to foster sustainable development of STEAM education in the participating schools

2. **Foci of Support**
   - To enhance teachers' understanding of STEAM education and SDL through classroom implementation so as to develop students' 21st century skills as well as STEAM-related disciplinary knowledge and skills
   - To enhance teachers' mastery of related learning design, assessment and curriculum development strategies to implement STEAM education through SDL
   - To promote values education through STEAM education
   - To support teachers to design and implement STEAM education using e-learning technologies, e.g. Learning Design Studio and iLap
   - To assess students' digital literacy achievement and provide feedback to teachers and school leaders on their achievement levels by using specifically designed and validated digital literacy assessment instruments
   - To facilitate collaboration among schools and scale up innovative practices through multilevel school leadership networks

3. **Modes of Support**
   - To provide onsite support and conduct lesson study including collaborative lesson planning, lesson observation and post-lesson discussion
   - To conduct networking activities and form school clusters among participating schools that facilitate network building and peer learning regarding integration of SDL in STEAM education
   - To invite resource schools (i.e. participating schools of In-STEAM before with expertise and rich implementation experience on STEAM education) to support participating schools' development on STEAM education through collaborative learning
   - To support the learning design and knowledge management of teachers through technologies and related training
   - To connect participating schools with local industries and other STEAM-related networks to broaden the horizon of teachers

- To conduct award schemes to recognise and celebrate the hard work and achievements of teachers and students

4. **Points to note**
   - The duration of the support services normally lasts for one year
   - Participating schools support the integration of SDL into school-based STEAM curriculum at upper primary (P.4–6) and lower secondary (S.1–3) levels
   - Participating schools nominate one teacher-in-charge to liaise with the support team and the related Curriculum Development Officer
   - Teachers in the core project team are willing to collaborate with each other for curriculum design and implementation, peer lesson observation and reflection on practice
   - Participating schools encourage the use of e-learning to support SDL in STEAM education
   - 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 attend two Executive Committee (EC) meetings and an annual dissemination seminar to share the good practices generated and effective ways to cope with challenges encountered
   - Participating teachers share with other teachers their experiences in school curriculum development and the materials and resources they develop, e.g. work plans, learning and teaching materials, research reports and student work. (The copyright of these materials will be owned by the Quality Education Fund.)
   - Participating schools should comply with relevant laws, such as compliance with the Copyright Ordinance in developing school-based learning and teaching materials
   - Please visit the QEF website (https://qcrc.qef.org.hk/en/fund/activity.php?cate=7) for details

5. **Support Service Coordinator**
   School-based Professional Support Section, Curriculum Support Division, Education Bureau