

Title of School-based Support Service (2024/25)

Quality Education Fund Thematic Networks – Tertiary Institutes:
Integrated Self-Directed Learning Approach to School-Based
STEAM Development (In-STEAM) (Onsite Support) / (Network
Support)

1. Objectives

The support service aims:

- to provide support to teachers and curriculum leaders to enhance their capacity to integrate self-directed learning (SDL) into STEAM education
- to provide support to teachers to enhance their capacity to integrate technologies, such as, artificial intelligence (AI) into STEAM education
- to develop and implement school-based STEAM curriculum, and assess effectively students' expected 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
- to facilitate school-based STEAM curriculum development at the upper primary (P.4–6) and lower secondary (S.1–3) levels
- to support schools to develop STEAM related multilevel leadership networks so as to foster sustainable development of STEAM education in participating schools

2. Foci of Support

- To enhance teachers' understanding of STEAM education, AI 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 and Activities

- **“Onsite support” mode**
 - Apart from receiving at least 7 on-site support, participating schools of the “on-site support” mode attend at least 5 professional development and network activities of the project, including theme-based workshops, technical training and award schemes, to facilitate learning design of STEAM education, school-based curriculum development and multilevel leadership capacity building
 - 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

- **“Network support” mode**
 - Participating schools of the “network support” mode attend five theme-based workshops on learning design to enhance their capacity to integrate SDL and AI into STEAM education. They are free to join other professional development and network activities of the project, including technical training and award schemes
 - Participating schools attend two Executive Committee (EC) meetings and an annual dissemination seminar to foster cross-school professional exchanges

4. Points to note

- 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
- 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
- Please visit the QEF website (<https://qcrc.qef.org.hk/en/fund/activity.php?cate=7>) for details