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

Quality Education Fund Thematic Networks – Tertiary Institutes:

Progressive Development of STEAM Literacy through STEAM

Education and Self-directed Learning

(On-site Support) / (Network Support)

1. Objectives

The support service aims to develop secondary and primary school teachers' professional capacity in:

- promoting STEAM education with a stronger linkage to the subject curricula
- enhancing the integration of STEAM-related disciplines using self-directed learning (SDL) as one of the major approaches
- exploring STEAM educational designs with a focus to develop students' problemsolving skill
- designing STEAM educational activities to integrate multiple disciplinary literacies and facilitate students' development of STEAM literacy

2. Foci of Support

- To assist teachers in integrating SDL with curriculum-oriented cross-disciplinary STEAM education in secondary and primary schools
- To enrich teachers' knowledge in designing and implementing problem-based STEAM learning activities to promote students' problem-solving skills
- To lead teachers to design cross-disciplinary STEAM learning activities that consolidate students' knowledge in STEAM-related disciplines
- To enhance the coordination of school curricula of various subjects relating to STEAM education across grade levels
- To help participating schools define an appropriate scope of STEAM literacy and identify holistic approaches for progressive development of students' STEAM literacy
- To provide exemplars of STEAM education activities, including the learning and teaching materials, developed by other participating schools for teachers' reference

3. Modes of Support and Activities

• Both "On-site support" and "Network support" modes

- To organise professional development seminars and workshops for school leaders and teachers
- To coordinate and facilitate lesson observations cum post-lesson discussions in the school-network

• "On-site support" mode

- To build a STEAM education leadership community, which composed of curriculum leaders and teachers from participating schools, for the development of quality STEAM education and facilitation of professional exchange and experience sharing among the teachers in the community
- To provide on-site support, such as collaborative lesson planning and technical support
- To conduct surveys and focus group interviews with the participating schools to evaluate students' learning outcomes and the effectiveness of STEAM education
- 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 attend two Executive Committee (EC) meetings and an annual dissemination seminar to foster cross-school professional exchanges

4. Points to note

• Both "On-site support" and "Network support" modes

- Participating schools nominate one teacher-in-charge to liaise with the support team and the related Curriculum Development Officer
- Participating schools arrange regular timeslots for teachers concerned to attend meetings and participate in various professional development activities such as workshops
- Each participating school forms a core team of at least 2 3 teachers to work closely with the support team in areas such as professional development, lesson observations and post-lesson discussions

"On-site support" mode

- Participating schools organise one open lesson for teachers of other participating schools to observe
- Each participating school contributes to a resource pack by sharing one school-based STEAM educational activities together with the learning and teaching materials as an exemplar
- Participating schools collaborate with the support team to design curriculumoriented, cross-disciplinary STEAM learning activities with a focus on applying EDP for problem-solving, and implement them in classrooms
- Please visit the QEF website for details (https://qcrc.qef.org.hk/en/fund/activity.php?cate=7)