

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

Quality Education Fund Thematic Networks – Tertiary Institutes:

Self-directed Learning as a Strategy to Promote STEAM Education

(On-site Support) / (Network Support)

1. Objectives

The support service aims:

- to support participating schools in strategic planning and implementation of STEAM-related lessons and curriculum (includes Primary Science curriculum) using a whole-school approach
- to strengthen curriculum leadership, foster collaboration across STEAM related KLAS/subjects such as Mathematics Education, Science Education / General Studies , Visual Arts and Technology Education
- to enhance teachers' professional capacity in adopting self-directed learning (SDL) as a strategy to promote STEAM education
- to strengthen students' ability to integrate and apply knowledge and skills across different subject disciplines to unleash their innovation, and to help them develop positive values
- to provide professional views and technical solutions in field of STEAM including electronics and robotics

2. Foci of Support

- To support participating schools in designing learning and teaching strategies related to STEAM education
- To support the development of learning activities relating to STEAM education that integrate knowledge, skills and attitudes to help students develop positive values
- To support the development of school-based resources and promote activities for the successful implementation of STEAM education and SDL
- To help teachers understand the objectives and principles of STEAM education and SDL through teacher professional development programmes
- To provide consultancy service to participating schools to create the environment and space that is suitable for the implementation of STEAM education, such as setting up a STEAM Lab or cross-science subject laboratories for STEAM education and SDL
- To focus on, but not limited to, the following themes: robotics and sensors, 3D and VR technologies, coding and computational thinking, science project learning, artificial intelligence, smart city, e-learning

3. Modes of Support and Activities

- **“On-site support” mode**
 - Organise teacher's professional development workshop at the University of Hong Kong to equip participating school on STEAM education and SDL knowledge
 - Arrange project-based learning competition to nurture students' interest in 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**
 - Organise teacher’s professional development workshop at the University of Hong Kong to equip participating school on STEAM education and SDL knowledge
 - Participating schools attend two Executive Committee (EC) meetings and an annual dissemination seminar to foster cross-school professional exchanges

4. Points to note / Others

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