Title of School-based Support Service (2025/26):
Quality Education Fund Thematic Network (QTN) —
Promotion of STEAM Education by Infusing Mathematical Modelling into Secondary Mathematics

# 1. Objectives

The support service aims to:

- enhance curriculum leadership and professional level of the teachers of participating schools by adopting train-the-trainer approach with a focus on nurturing curriculum leaders
- assist participating schools in constructing a mathematics curriculum to promote school-based STEAM education and activities
- let students of participating schools learn how to apply mathematical modelling in solving real-life problems
- nurture the professional development of mathematics teachers to guide students to understand, learn and use mathematical modelling to solve problems

## 2. Foci of Support

- Assist participating schools in establishing school-based mathematics curricula and activities
- Optimise the vertical and horizontal development of STEAM learning and teaching through mathematical modelling
- Let teachers of participating schools understand the topics related to mathematical modeling, the key learning and teaching foci and our experience in organi tosing relevant classroom activities through talks and workshops
- Organise lesson planning and observation for broadening the horizon of the teachers of participating schools in mathematical modelling learning and teaching activities so as to optimise/construct their school-based curricula

### 3. Modes of Support

• QTN coordinator will support and collaborate with teachers of participating schools, details are as follows:

1	
On-site	At least 17 times of on-site support and networking
collaboration	activities
and	• Conduct in-depth analysis of school needs, lesson
Networking	study such as curriculum planning, collaborative
Activities	lesson planning, lesson observation and post-lesson
	discussion to enhance teacher professionalism through
	close exchange
	• The core teaching team participates in cross-school
	professional development activities to share and
	promote effective practices and resources with a view
	to facilitating professional exchange among schools
	Organise professional development activities such as
	workshops and lesson demonstration
	• Develop school-based mathematics curriculum,
	support participating schools to carry out at least one

- curriculum development task in mathematics
- Arrange networking meetings to share successful experiences and the challenges faced
- Promote interschool exchange through learning community activities and territory-wide dissemination seminar

#### 4. Points to note

- The duration of the support services normally lasts for one year
- Each participating school should nominate 1-2 teachers to participate actively in the support services
- At least one representative should attend each QTN activity
- To fully utilise the support services, participating schools should:
  - nominate panel head / deputy panel head to be responsible for coordinating the QTN activities.
  - arrange regular timeslots for teachers to collaborate and exchange,
     e.g. periods for collaborative lesson planning and lesson observation
  - assign teachers to attend at least 1 training workshop and 2 networking activities.
  - assign at least one form of students to participate in two activities related to mathematical modelling
  - arrange teachers to participate in two Executive Committee (EC) meetings and a territory-wide dissemination seminar to share their successful experience and the learning and teaching materials developed under collaboration
- Allow support officers to collect materials including video clips and photographs of learning activities, teachers' reflection and student work during the support period for professional discussion
- Encourage the core teaching team to disseminate successful experience, within and across schools, in school curriculum development and the learning and teaching resources co-developed (The copyright of these materials will be owned by Quality Education Fund. Quality Education Fund also reserves the right to compile and modify these materials for educational promotion purposes)
- Participating schools should comply with relevant laws, such as compliance with the Copyright Ordinance in developing school-based learning and teaching materials

### 5. Enquiries

Contact person: Mr WONG Wing-cheung
Support Service Coordinator: Kowloon True Light School

Telephone number: 3655 0000

E-mail: wcwong@ktls.edu.hk