Name of Quality Education Fund Thematic Network (QTN)

Implementing 'Computational Thinking' and 'STEM Education' in KS2 by Two Approaches

1. QTN Co-ordinator

Fung Kai Liu Yun Sum Memorial School

2. Address of QTN Co-ordinator

Wah Ming Estate, Fanling, New Territories

3. Beneficiaries

4 Primary schools

4. **Objective**(s)

This QTN aims at :

- Promoting STEM education in Key Stage 2;
- Promoting computational thinking in Key Stage 2;
- Enhancing teachers' ability to cope with computational thinking and information technology teaching techniques; and
- Building a learning community in order to promote a cross-school professional exchange culture.

5. Foci of Support

- Curriculum :
 - Mathematics Education Key Learning Area Mathematics Curriculum Guide (P1-P6) (2000);
 - Supplement to Mathematics Education Key Learning Area Curriculum Guide :
 - ♦ Learning Content of Primary Mathematics (2017);
- Classroom teaching :
 - Encourage adoption of different teaching methods to provide students with adequate opportunities to learn mathematical contents and apply knowledge.
- Learning tasks and materials :
 - Help teachers design school-based learning tasks and related materials catering students' learning diversity.

6. Mode of Support

- Theme-based activities for teaching professional development such as workshops and collaborative lesson planning will be conducted.
- Leading core schools to develop school-based curriculum. The following key experiences will also be shared :
 - Analysing students' learning needs;
 - Planning learning targets;

- Deciding teaching strategies;
- Designing learning tasks;
- Conducting lesson observations; and
- Conducting lesson study;
- Facilitate participating schools teachers to carry out cross-school exchange in order to foster professional development of teachers.

7. Points to be noted by core schools

To make the best use of the support services, each core school is required to:

- Design at least two learning units implementing computational thinking or/and STEM education in Mathematics in Key Stage 2, including teaching materials and relevant activities planning; and
- Design one school-based learning unit implementing computational thinking or/and STEM education in mathematics in Key Stage 1, which would be incorporated into the new Mathematics curriculum from September 2019 onwards.

8. Enquiry

Contact person: Ms TANG Pui Yuk Telephone number: 2677 2311