Title of Support Service:

Quality Education Fund Thematic Network (QTN) – Implementing 'Computational Thinking' and 'STEAM Education' by Two Approaches cum STEAM Education Resource Hub (2023/24)

1. Objectives

This support service aims to:

- Promote computational thinking and STEAM education through Mathematics learning activities and cross-curricular activities in KS1.
- Help teachers of participating schools apply the concept of computational thinking and improve their capacity of using information technology in teaching
- Establish a teacher-professional learning community and foster interschool professional exchange.
- Provide workshops for teachers, parents and students of participating schools and other schools and allow them to use the equipment and tools provided by the co-ordinating school under the STEAM Education Resource Hub.

2. Foci of Support

- To promote STEAM education and computational thinking in the learning of Mathematics according to the needs of the school and students
- To develop primary school-based curriculum of STEAM education to promote whole-person development of students
- To enhance ability of teachers to apply computational thinking and information technology in teaching
- To establish a professional learning community to promote inter-school exchange culture to contribute to the education sector as a whole
- To enhance students' positive values and attitudes by allowing them to enjoy the learning progress through trail-and-error and to figure out the most effective learning methods

3. Modes of Support

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

| On-site | At least 16 times of on-site support and networking |
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| collaboration and Networking Activities | activities Conduct in-depth analysis of school needs, lesson studies such as curriculum planning, collaborative lesson planning, lesson observation and post-lesson discussion to enhance teacher professionalism through close exchange Participate in and designing school-based curricula, including analysing the needs of students, organising teaching materials, designing teaching pedagogies and courses, conducting lesson observation etc.; Establish a learning community network with professional discussions and exchanges on the online platform; Synthesize and integrate past experience in implementing QTN, and share it with schools. Conduct teacher professional development activities based on topics, such as workshops and exchange courses; Organise courses by topics for teachers on the use of equipment and tools typically used in STEAM education; Organise territory-wide disseminatin seminar and share with Mathematics teachers he outcomes and accomplishments shared by teachers from participating |
| STEAM | schools. • Open the STEAM education resource hub at school |
| Education Resouce Hub | regularly for instructing teachers the use of the equipment and tools; |
| Resouce Hub | Regular teacher development events; |
| | • Organise varied educational activities for primary |
| | students regularly. |
| | • Organise STEAM parent-child classes, allow parents and students to experience the joy of programming and STEAM job creation. |

4. Points to note

- The duration of the support services normally lasts for one year.
- Active engagement of participating schools throughout the support services is expected.
- 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 the liaison of QTN activities.
 - arrange regular timeslots for teachers to collaborate and exchange,
 e.g. periods for collaborative lesson planning and observation.
 - arrange teachers to participate in two Executive Committee (EC) meetings and a territory-wide dissemination seminar to share their successful experiences in school curriculum development and the learning and teaching materials developed under collaboration.

• Participating schools should comply with relevant laws, such as compliance with the Copyright Ordinance in developing school-based learning and teaching materials.

5. Enquiries

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