

Quality Education Fund Thematic Networks – Schools (2023/24)

Project Title:

Utilizing the Edge of e-learning, Cultivating Information Literacy, Innovating Teaching and Learning of Mathematics

1. Objectives

The project aims:

- to induce students' learning motivation and construct their mathematical concepts and logical thinking, through the use of e-learning platforms and tools that pair up with diversified modes of assessments, by creating scenarios that connect to important and difficult teaching points when applying diversified strategies for developing self-directed learning in students
- to lead teachers to design key questions and construct effective Mathematics lessons so as to provoke students' thinking, guide them to observe, explore and actively exchange ideas, as well as develop their mathematical thinking and learning ability
- to use e-learning platforms with peer sharing and comment functions to record the learning process, encourage peers to appreciate each other's learning achievements, and facilitate students to communicate, collaborate, co-construct and share knowledge with their peers. Through encouraging messages, teachers and students recognise the efforts of students in the learning process, improve students' information literacy through practice, and cultivate students' positive values and attitudes of respecting others and learning to appreciate
- to promote the development of school Mathematics curriculum and strengthen its vertical and lateral coherence through unit planning and effective course work design (pre-learning tasks, classwork and extended learning tasks)

2. Foci of Support

- To promote self-directed learning in Mathematics through collaborative lesson planning and lesson tryouts
- To assist teachers in developing a school curriculum with vertical and lateral coherence, focusing on the strand "Number", "Measures" or "Shape and Space" in Primary 2 to Primary 5
- To develop the spirit of lesson study among the Mathematics teachers teaching the same grade level and to establish the learning culture in school
- To form a professional learning community through interschool sharing and exchange so as to enhance teachers' professional development

3. Modes of Support

- To provide onsite support and conduct lesson study including collaborative lesson planning, lesson observation and post-lesson discussion
 - To assist participating schools in designing teaching plans of at least one learning unit through onsite support such as collaborative lesson planning
 - To review the effectiveness of learning and teaching as well as to refine the lesson design through lesson observations and post-lesson discussions

- To conduct networking activities such as open lesson and workshops
 - To conduct open lessons by the Network Coordinating School and assist participating schools in the arrangement of lesson observations and post-lesson discussions, with a view to promoting professional exchange among teachers and enhancing teacher development through effective reflection
 - To organise teacher workshops on Mathematics-related themes for participating teachers, for example, using educational apps as assessment tools and sharing of school-based experiences in self-directed learning
 - To form a teacher learning community with participating schools to facilitate the professional sharing amongst teachers of different schools
- To encourage participating schools to make good use of the shared resources and outcomes among the participating schools to enhance the sustainability of the support service in school

4. Points to note

- The duration of the support services normally lasts for one year.
- Participating schools assign 2-4 Mathematics teachers as core members of the project to participate in every activity, with one of them being the teacher-in-charge to liaise with the support team and the related Curriculum Development Officer
- Participating schools arrange regular timeslots (Thursday afternoons) for teachers concerned to attend meetings and participate in various professional development activities, e.g. collaborative lesson planning
- 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
- Participating teachers share with other teachers their experiences in school curriculum development and the materials and resources they develop, e.g. work plans, learning and teaching materials, research reports and student work. (The copyright of these materials will be owned by the Quality Education Fund.)
- Participating schools should comply with relevant laws, such as compliance with the Copyright Ordinance in developing school-based learning and teaching materials
- Please visit the QEF website (<https://qcrc.qef.org.hk/en/fund/activity.php?cate=8>) for details

5. Support Service Coordinator

School-based Professional Support Section, Curriculum Support Division, Education Bureau