

Project Title:

Nurturing Students with the Quality of Self-directed Learning, Fully Utilising the Edge of e-Learning, and Constructing Highly Effective Mathematics Lessons (2021/22)

1. Support Service Co-ordinator

School-based Professional Support Section, Quality Assurance and School-based Support Division, Education Bureau

2. Network Co-ordinating School

Sau Ming Primary School

3. Objectives

The project aims:

- to flexibly adopt diversified learning and teaching strategies to construct teaching contexts with close connection to the learning key points and difficulties so as to arouse students' learning motivation, facilitate students to construct mathematical concepts and develop their logical thinking
- to design key questions in the lesson to stimulate students' thinking, to guide them to observe, to explore and to take initiatives to exchange their ideas so as to enhance their ability and thinking in learning Mathematics
- to strengthen the vertical continuity and lateral coherence of the Mathematics school-based curriculum through designing the learning units with effective assignments and tasks before, during and after lessons
- to utilise the e-learning platform and diversified assessment to review students' learning outcomes and provide students with instant feedback that can improve the learning and teaching effectiveness

4. Foci of Support

- To promote self-directed learning in Mathematics through collaborative lesson planning and lesson tryouts
- To assist teachers in analysing the learning and teaching materials from vertical and lateral perspectives. The review will be conducted in the strands "Number", "Measures" or "Shape and Space" at the levels of Primary 2 to Primary 5
- To establish the school culture of peer learning and to develop the spirit of lesson study among the Mathematics teachers teaching the same level
- To form a professional learning community through inter-school sharing and exchange so as to enhance teachers' professional development

5. Modes of Support

- To organise teacher workshops on Mathematics-related themes for the participating teachers, for example, using educational apps as assessment tools, sharing of school-based experiences on self-directed learning
- To form a teacher learning community with the Participating Schools to facilitate the professional sharing of ideas, Mathematics learning and teaching resources and experiences, etc.
- To open lessons conducted by the Network Co-ordinating School and assist the Participating Schools in coordination of lesson observations and post-lesson discussion, aiming to promote professional exchange and

- enhance teacher development through effective reflection
- To assist the Participating Schools in designing the teaching plan in at least one learning unit through collaborative lesson planning. Lesson observations and post-lesson discussion will be carried out in the Participating Schools to refine the lesson design and to examine the effectiveness of learning and teaching
- To assist the Participating Schools in organising the lesson preparation contents, teaching plans and relevant resources and utilising the shared resources among the schools to continuously refine the related knowledge management

6. Expectations on Participating Schools

- Representatives of the Participating Schools attend at least two meetings held in the school year with the Network Co-ordinating School and other Participating Schools on formulating strategies and work plans, etc.
- Participating Schools assign 2-4 Mathematics teachers (including a Mathematics teacher from the middle management as the co-ordinator) as core members of the project to participate in every activity to ensure the project sustainability and effectiveness
- Participating Schools fully support the project and provide administrative facilitation and ample capacity for the participating teachers to attend workshops, collaborative lesson planning, peer lesson observations and lesson study activities on Thursday afternoons
- Participating Schools share with other teachers their experiences in school-based curriculum development and the materials and resources they develop, e.g. work plans, learning and teaching materials, research reports, student work. (The copyright of these materials will be owned by the Quality Education Fund.)
- Participating Schools observe strictly their legal obligations and, in all cases, comply with the Copyright Ordinance in developing school-based learning and teaching materials