

Enhancing the Pedagogy of Mathematics Teachers (EPMT)

to emphasize understanding, reasoning and communication in their classrooms.

This intervention project, in the area of mathematics classroom pedagogy, stems from the need to address two main issues:

- **the nature of mathematical learning tasks that enhance students' reasoning and communication in mathematics classrooms, so as to help them develop habits of mind necessary for higher order thinking, and**
- **teaching for understanding rather than assessment**

It focuses on the professional development of teachers addressing two main areas:

- **crafting of mathematical learning tasks that draw on concepts and processes to engage students in reasoning and communication during mathematics lessons, and**
- **designing of lessons, the objective of which is to teach for understanding, i.e. making meaning of facts and transferring knowledge to other problems, tasks and domains.**

The above two areas are related as for teachers to teach for understanding they need to use appropriate mathematical learning tasks in their lessons that draw on concepts and processes. These tasks engage students in reasoning and communication to make sense of the mathematics they are taught thereby facilitating their understanding.

The main objectives of the project are:

- **to engage mathematics teachers in professional development (PD) with the aim to improve their classroom pedagogy;**
- **to support teachers to work in small communities at the school level and put into practice their learning**
- **to guide teachers self-evaluate and peer-evaluate the infusion of knowledge and skills acquired during PD in their classrooms; and ultimately**
- **improve student learning**

The project will work with communities of Mathematics teachers in 5 primary schools and 5 secondary schools to help them examine their existing pedagogies, acquire the know-how of suggested pedagogies, use their learning in classroom practice, adapt what best works for them and look back at their learning journeys. Finally, this project will help teachers become leaders of change in their respective schools and clusters.

Principal Investigator: A/P Berinderjeet Kaur

Team members: Asst/P Yeap Ban Har & Carol Low Hooi Kiam