



# EMPOWERING PRIMARY EDUCATORS: HEURISTIC PROBLEM SOLVING IN MATHEMATICS

22 - 26 April 2024  
SEAMEO RECSAM, Penang

Facilitator

Dr. Fong Ho Kheong

Target Participants

Primary School Teachers/Educators

Organised by:

Southeast Asian Ministers of Education Organization  
Regional Centre for Education in Science and Mathematics

## RATIONALE

This program aims to empower primary school teachers with effective heuristic problem-solving strategies in mathematics. By providing practical insights and hands-on learning experiences, the initiative seeks to equip educators with the tools to nurture the problem-solving abilities of young students. The overarching goal is to foster a love for mathematics and critical thinking skills among primary school children.

## OBJECTIVE

1. Train in-service teachers from Penang in Dr. Fong's Singapore Mathematics methods.
2. Enhance teachers' strength to solve challenging maths problems using model drawing and heuristics methods designed by Dr. Fong.
3. Equip teachers with problem-solving ability to help students improve their skills in mathematics.
4. Train teachers with essential skills to empower and sharpen students' critical thinking skills via solving challenging mathematical problems.

## WORKSHOP PROGRAMME (LOWER PRIMARY)

DAY 1 (22 April 2024, Monday)	
10.30 a.m. - 11.00 a.m.	Registration
11.00 a.m. - 01.00 p.m.	<b>Introduction Lower Primary</b>
01.00 p.m. - 02.30 p.m.	Lunch
02.30 p.m. - 04.30 p.m.	<b>Model Drawing Heuristics</b>
DAY 2 (23 April 2024, Tuesday)	
08.30 a.m. - 10.30 a.m.	<b>Solving Challenging Word Problems with Model Drawing</b>
10.30 a.m. - 11.00 a.m.	Morning Tea
11.00 a.m. - 01.00 p.m.	<b>Pedagogical Perspective for Teaching Problem Solving</b>
01.00 p.m. - 02.30 p.m.	Lunch
02.30 p.m. - 04.30 p.m.	<b>Contemporary Heuristics</b>
DAY 3 (24 April 2024, Wednesday)	
08.30 a.m. - 10.30 a.m.	<b>Conclusion</b>
10.30 a.m. - 11.00 a.m.	Morning Tea
11.00 a.m. - 12.30 p.m.	<b>Closing Ceremony &amp; Group Photo</b>

## WORKSHOP PROGRAMME (UPPER PRIMARY)

DAY 1 (24 April 2024, Wednesday)	
12.30 p.m. - 01.00 p.m.	Registration for Upper Primary Workshop
01.00 p.m. - 02.30 p.m.	Lunch
02.30 p.m. - 04.30 p.m.	Introduction Upper Primary Workshop
DAY 2 (25 April 2024, Thursday)	
08.30 a.m. - 10.30 a.m.	Model Drawing Heuristics
10.30 a.m. - 11.00 a.m.	Morning Tea
11.00 a.m. - 01.00 p.m.	Model Drawing Heuristics 1
01.00 p.m. - 02.30 p.m.	Lunch
02.30 p.m. - 04.30 p.m.	Model Drawing Heuristics 2
DAY 3 (26 April 2024, Friday)	
08.00 a.m. - 10.00 a.m.	Making a Systematics List Heuristics
10.00 a.m. - 10.30 a.m.	Morning Tea
10.30 a.m. - 12.30 p.m.	Pedagogical Perspective for Teaching Problem Solving
12.30 p.m. - 02.30 p.m.	Lunch
02.30 p.m. - 04.30 p.m.	Closing Ceremony & Group Photo

## WORKSHOP FACILITATOR



### Dr. Fong Ho Kheong

Former Associate Professor of National Institute of Education, Singapore; Founder of the Association of Maths Educators, AME Singapore; and member of the Board of Governors of the Paragon International and Private Schools, Malaysia. Current areas of Specialization comprise research and curriculum development work focusing on primary mathematics educations. Dr. Fong obtained his PhD from the King's College London, University of London.

His PhD thesis and other curriculum development works focus on information processing in solving mathematical problems. He writes research papers on the approaches of helping children who are struggling in Maths, use of various heuristics in solving challenging Maths problems and innovation to design tests and assessments for school examinations and Maths competitions. He has published more than 100 journal articles and schools text books. His series of Maths text books are currently used by majority of Singapore schools and have been used by more than 50 countries globally including ASEAN, USA, UK, France, Canada,

Spain, China and Netherlands. His Maths series are also translated into other languages such as Spanish, Chinese and Arabic. His latest 4<sup>th</sup> edition of MPH Maths Series has included activities that promote critical and creative thinking and teaching children to practice metacognition. These areas conform to Maths curriculum globally. He provides further training of teachers how to use his effective heuristics to help student's master primary mathematics.

## **PARTICIPATION FEES**

Items	Without Accommodation	With Accommodation
Lower Primary Course (22 - 24 April 2024)	RM 240	RM 500
Upper Primary Course (24 - 26 April 2024)	RM 220	RM 480
Both Courses Package (22 - 26 April 2024)	RM 400	RM 900

## **ACCOMMODATION AT RECSAM INTERNATIONAL HOUSE**

### **Lower Primary Workshop**

Check-in: 22 April 2024, 8.00 a.m. onwards

Check-out: 24 April 2024, after the workshop

### **Upper Primary Workshop**

Check-in: 24 April 2024, 8.00 a.m. onwards

Check-out: 26 April 2024, after the workshop

## **FOOD**

Morning tea, lunch and afternoon tea will be provided by SEAMEO RECSAM during the workshop. For stay-in participants (with accommodation), breakfast and dinner will be provided too.

## **REGISTRATION, PAYMENT & CLOSING DATE**

To enroll, please register online by **15 April 2024** via <https://forms.gle/Sxth55Li6g3QWWmNA> or scan the following QR code. Upload your payment slip for confirmation of registration.



## **PAYMENT (INTERNET BANKING)**

Pay to: SEAMEO RECSAM


Bank: MAYBANK GELUGOR BRANCH, PENANG

Account Number: 5571 5700 0647

## **FOR ENQUIRIES**

Dr. Kamalambal A/P Durairaj

 kamaladurairaj@gmail.com

 +6046522795

Ms. Shalaneeswary Muniandy

 shala@recsam.edu.my

 +6046522752

Ms. Noraini Bt. Daud

 noraini\_daud@recsam.edu.my

 +6046522741