



Announcement of the online program for SEAMEO School Network (free of charge) Online Program by CRICED, University of Tsukuba, Japan

Title:

# Problem Solving Approach for Lower Primary Level (Grades 1-3) 'Teaching Mathematics to Develop Mathematical Thinking as Higher Order Thinking: How do you teach? Why?' Part IV Provided by

CRICED, University of Tsukuba, Japan: Affiliate Member of SEAMEO

## Lectured by

Masami Isoda, Prof/PhD, University of Tsukuba, Japan Teh Kim Hong (ASMEP, Malaysia) & Gan Teck Hock (Malaysia)

#### With the support and contribution of (tentative)

Sumardyono & Uki Rahmawati (SEAMEO-QITEP in Mathematics, Indonesia), Maitree Inprasitha, (Khon Kaen University, Thailand), Nguyen Chi Thanh (Vietnamin National University), Aida Yap (University of the Philippines-NISMED, Philippines), Raimundo Olfos & Soledad Estrella (Pontificia Universidad Católica de Valparaíso, Chile), Marcela Santillán (Universidad Pedagogica National, Mexico) and Yuriko Yamamoto Baldin (Universidade Federal de São Carlos, Brasil)

#### **Course Summary**

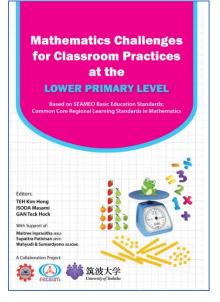
On OECD Education for 2030 (2019), Student Agency means students who 'learned how to learn'. For this issue, the objective of this online lecture is to establish Teacher Agency that develops students who learn mathematics by and for themselves by using task sequences to develop mathematical thinking. In the past three courses (Part I to Part III), we focused on terminologies for establishment of appropriate teaching sequence which explain why we teach them at the primary school level. The courses were illustrated by the curriculum and learning standards SEA-BES: CCRLS, which provides basic ideas of mathematics curriculum; and the task sequences for **Problem Solving Approaches** 

(Teaching Mathematics through Problem Solving).

The new course, **Part IV**, focuses on various Problem Solving Approaches by using the guidebook for teachers' professional development of Lower Primary Level (Grades 1 to 3). Consecutively, it continues as Part V for Upper Primary Level (Grades 4 to 6) and as Part VI for Junior Secondary Level (Grades 7 to 9).

The guidebook for this Part IV course for Lower Primary Level which consisted of materials to develop curriculum knowledge for teaching is shown on the right:









## **Course Content, Registration and Certifications**

It is a free program on SEAMEO priority areas #5 for 'Revitalizing Teacher Education' and #7 for 'Adopting 21<sup>st</sup> Century Curriculum'. CRICED, University of Tsukuba, Japan, provides the certifications to participants at the end of the course.

Each online lecture will be provided on a consecutive sequence based on the course roadmap. Participants cannot skip any lesson because each lesson uses ideas which were already discussed. At the end of each lesson, participants need to do a short questionnaire for knowing how the lessons worked. Only participants that answer the questionnaire will receive the URL for the next lecture. The feedback from participants is used for evaluation of the program and attendance confirmation, but not as an evaluation of the participants.

Торіс	Title of Lesson (tentative)	Schedule
Part IV	1. Open Approach & Inquiry-based	July 1st -
Lower	Investigation to Learn New Ideas	
Primary	2. Problem Solving Approach and Task	July 8th
Level	Sequencing	
(Grades 1 to 3)	3. Dialectic Approach & Analysing Misconception of Ideas	July 15th
	4. How to Utilize Various Teaching	July 22nd
	Approaches	

#### Course Roadmap for Parts IV in 2023

All lessons will begin on Saturday evening from **19:00 (Japan time GMT+9)** through a live streaming via YouTube. Each lesson will be approximately 75 minutes long which include assessment.

## Registration form (Deadline June 29th, 2023): <u>https://forms.gle/9B51RDHXEjM39Rh56</u>

#### Contact

Masami Isoda, Prof/PhD. Director of CRICED, University of Tsukuba, 305-8572, Japan. Inquiry form for the course: <u>https://forms.gle/4RNRfexJgYwpRJEdA</u>

## **Further Information**

https://www.criced.tsukuba.ac.jp/en/seameo.html

## **Past Courses**

https://www.criced.tsukuba.ac.jp/en/online-contents.html https://www.jv-campus.org/en/user/category/education/

#### Reference

Teh, K. H., Isoda, M., & Gan, T. H. (2021). *Mathematics challenges for classroom practices at the lower primary level*. Penang, Malaysia: SEAMEO-RECSAM