

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 Secondary Level (Grades 7-9)

'Teaching Mathematics to Develop Mathematical Thinking as Higher Order Thinking: How do you teach? Why?' Part VI

Provided by

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

Lectured by

Masami Isoda, Prof/PhD, University of Tsukuba, Japan Gan Teck Hock (Malaysia) & Teh Kim Hong (ASMEP, 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 explaining why we teach them at the primary school level 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 VI**, focuses on various Problem Solving Approaches by using the guidebook for teachers' professional development of Lower Secondary Level (Grade 7 to Grade 9). Consecutively, it continues from Part IV for Lower Primary Level (Grades 1 to 3) and Part V for Upper Primary (Grades 4 to Grade 6).

The guidebook for this Part VI course for Lower Secondary 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 21st 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 lesson worked. Only participants that answer the questionnaire will receive the URL for the next lecture. This feedback from participants is used for evaluation of the program itself and as attendance confirmation, but not as an evaluation of the participants.

Торіс	Title of Lesson (tentative)	Schedule
		(Tentative)
Part VI	1. Open Approach & Inquiry-based	August 26th
Lower	Investigation to Learn New Ideas	
Secondary	2. Problem Solving Approach and	September 2nd
Level	Task Sequencing	
(Grades 7 to 9)	3. Dialectic Approach & Analysing Misconception of Ideas	September 9th
	4. How to Utilize Various Teaching Approaches	September 16th

Course Roadmap for Part VI in 2023

All the 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/jhAi6TinsMSV1yH26</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

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