

Announcement of the online program for SEAMEO School Network (free of charge), 2024 Online Program by CRICED, University of Tsukuba, Japan

Title:

# Computational Thinking: How to develop it at Primary School

# Provided by

CRICED, University of Tsukuba, Japan: Affiliate Member of SEAMEO with collaboration of IRDTP, Khon Kaen University, Thailand

## Lectured by

Roberto Araya, Prof/PhD, University of Chile, Chile Masami Isoda, Prof/PhD, University of Tsukuba, Japan Kritsachai Somsaman, PhD, SEAMEO STEM-ED, Thailand

## With contribution of (tentative)

Maitree Inprasitha, Narumon Changsri, Nisakorn Boonsena, Uk Inprasitha: Khon Kaen University, Wahyudi: SEAMEO SEAMOLEC, Sri Wulandari Danoebroto: SEAMEO Qitep Mathematics, Wan Noor Adzmin Binti Mohd Sari, Warabhorn Preechaporn: SEAMEO RECSAM, Orawan Sriboonruang: SEAMEO STEM-ED, Nguyen Chi Thanh: Vietnam National University, Marcela Santillan: University Pedagogica Nationale, Raimundo Olfos, Soledad Estrella: Pontificia Catholic University of Valparaiso, Ivan Vysotsky: Moscow Institute of Open Education, Klinge Orlando Villalba-Condori: Universidad Catolica de Santa Maria de Arequipa, Guillermo Bautista Jr. : UP-NISMED, Colleen M. Eddy: University of North Texas

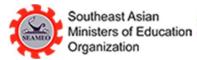
### **Course Summary**

On Era of Generative AI, how can we develop Computational Thinking? How can we develop computational thinking without using computers?" Especially on the Primary School Level, there are situations which we do not have computers and informatics teachers, and so on. Here, we have the following questions.

- "How can we develop computational thinking without using computers?"
- "What basic informatics content is suitable for primary school level?"
- > "How can we fit these lessons into our curriculum schedules?"

To Answer the questions, we developed the guidebook with SEAMEO Centers and related institutions based on the APEC curriculum reform recommendation. And them, the University of Tsukuba and Kohn Kaen University are engaging in the APEC Workshop with APEC Lesson Study Network to develop unplugged computational Thinking. First workshop was finished on April 18<sup>th</sup>, 2004 just only for the government officials in APEC economies.

For general audience in education, this course was developed based on the workshop. On this course, we share the idea and instruments to develop computational thinking at Primary School Level through the explanation of the content of guidebook.





#### Course Roadmap for Computational Thinking in 2024

Topic	Title of Lesson (tentative)	Schedule
		(Tentative)
Computational	1. Opening and Curriculum Reform	July 3rd
Thinking for K	Recommendations on APEC	
to 6	2. Computational Thinking &	July 10th
APEC Asia-Pacific Economic Cooperation	Examples	
	3. Mathematical Thinking &	July 17th
	Examples	
	4. STEM Thinking & Examples	July 24th

All the lessons will begin on Wednesday afternoon from **14:00 (Japan time GMT+9)** through a live streaming via YouTube. Each lesson will be approximately 75 minutes long which includes assessment.

Certificate will be provided for the participants who have completed all 4 assignments for the lesson by the set due date.

Registration for this course: Computational Thinking: How to develop it at Primary School (Deadline June 25th, 2024): https://forms.gle/tirNRUde96euS7YF8

#### Registration for the orientation on June 18th, 11:15-13:00 (GMT+9)

Please join the orientation to know more about the course and the platform. Register now! <u>Sign Up for the Orientation</u>

#### Contact

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### **Further Information**

Under Construction (To be developed in the CRICED website <u>CRICED | SEAMEO School Network from CRICED-University of</u> <u>Tsukuba</u>)

https://www.criced.tsukuba.ac.jp/math/apec/2024/

#### Reference

https://www.apec.org/publications/2021/03/developingcomputational-thinking-on-ai-and-big-data-era



