

$$X = \frac{\sqrt{b^2} + c - \frac{b}{2}}$$



Workshop on

PROJECT-BASED LEARNING IN MATHEMATICS ACTIVITIES

 **26 FEBRUARY 2025**

VENUE

Penang Room 1, SEAMEO RECSAM
Penang, Malaysia

TARGET PARTICIPANTS

Secondary School Teachers / Educators

TRAINING FACILITATORS

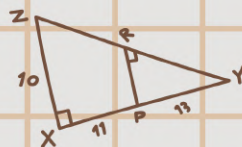
Associate Professor Dr. KOSAKA Masato
University of Fukui, Japan

&

Mr. Toshio Sekiya
SEAMEO RECSAM

ORGANISED BY

SEAMEO RECSAM
Penang, Malaysia



$$(X+Y)^2 - (X-Y)^2$$

INTRODUCTION

Project-Based Learning (PBL) in Mathematics Activities is a method of teaching where students work on lengthy projects that involve relevant and useful mathematical assignments. By incorporating real-world issues and applications, these exercises promote critical thinking, teamwork, and a deeper comprehension of concepts. The key elements of project-based learning in mathematics such as problem-based context, student-centered learning, interdisciplinary connections, authentic outcomes and teacher as facilitator.

OBJECTIVES

At the end of this workshop, participants should be able to:

Acquire the knowledge of Project-based learning, and gain more self-assurance to effectively design, implement, and facilitate PBL in their classrooms.

RATIONALE

By changing the learning process from passive absorption to active involvement, Project-Based Learning (PBL) improves the effectiveness, relevance, and alignment of education with the demands of the real world. In a world that is becoming more linked and complex, it gives students the abilities, information, and attitude they need to succeed. This workshop is designed to provide participants the professional development sessions on the goals, activities and advantages of PBL, as well as the abilities, know-how, and self-assurance they need to support student-centered, inquiry-driven learning.

SCHEDULE OF ACTIVITIES

PROGRAMME		
Time	Activity	PIC / Facilitator
08.00 a.m. - 08.30 a.m.	Registration	
08.30 a.m. - 10.30 a.m.	SESSION 1 <ul style="list-style-type: none">“Fostering Logical Minds: Insights from Japanese Mathematics Education”	Mr. Toshio Sekiya
10.30 a.m. - 11.00 a.m.	Morning Tea	
11.00 a.m. - 12.45 p.m.	SESSION 2 <ul style="list-style-type: none">Introduction to Project-Based (PBL) Learning in JapanPBL for Mathematics Activities	Assoc. Prof. Dr. KOSAKA Masato
12.45 p.m. - 13.00 p.m.	<ul style="list-style-type: none">Workshop EvaluationClosing SpeechGroup photo	SEAMEO RECSAM
END		

FACILITATORS



Associate Professor Dr. KOSAKA Masato from University of Fukui, Japan, specialising in Mathematics and Science Education / Teacher Education.

International Cooperation: Mathematics and Science Education Cooperation/Professional Learning communities for Teachers

Work History

- April 2021 - Present : Associate Professor, University of Fukui, Japan
- April 2017 - March 2021 : Senior Assistant Professor, University of Fukui, Japan
- April 2016 - March 2017 : Associate Expert, Japan International Cooperation Agency, Japan
- April 2015 - March 2016 : Research Fellow, Hiroshima University, Japan
- June 2009 - June 2011 : Japan Overseas Cooperation Volunteers, Njase Girls' Secondary School, Zambia
- June 2006 - June 2008 : Japan Overseas Cooperation Volunteers, Tabubil High School, Papua New Guinea

Proposed Theme

Lesson Study based on Students Learning and Professional Learning Communities for Teachers



Mr. Toshio Sekiya is a seasoned mathematics educator and specialist with extensive experience across secondary and tertiary levels. Originally from Japan, Mr. Sekiya taught mathematics in Japanese high schools within Saitama Prefecture for nearly four decades. Following his extensive career in Japan, Mr. Sekiya served as a JICA Volunteer at Solomon Islands National University, where he authored six comprehensive mathematics textbooks for pre-service teachers.

Currently, Mr. Sekiya works at SEAMEO RECSAM, supporting educators throughout Southeast Asia by developing innovative teaching methodologies and curricula. As part of his duties at RECSAM, Mr. Sekiya conducted a mathematics workshop on problem-solving at the Malcolm Moffat College of Education in Zambia, Africa, in response to a request from the institution.

His expertise in mathematics education, international capacity-building, and educational resource development makes Mr. Sekiya a valuable leader and mentor in the field.

REGISTRATION FEE

Items	Without Accommodation
Registration Fee	RM 50

FOOD

Morning tea will be provided by SEAMEO RECSAM during the workshop.

REGISTRATION, PAYMENT & CLOSING DATE

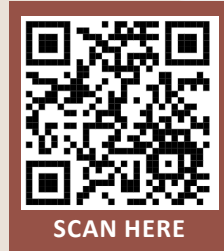
To enroll, please register online by **17 February 2025** via <https://forms.gle/ZZsccwk72an5WBhC7> or scan the following QR code. Upload your payment slip for confirmation of registration.

Payment (Internet Banking)

Pay to: SEAMEO RECSAM

Bank: MAYBANK GELUGOR BRANCH, PENANG

Account Number: 5571 5700 0647



FOR ENQUIRIES

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