

Workshop on 'Improving Science Learning through Inquiry-Based Science Education (IBSE)'

Date: 14 & 15 April 2021

Venue: Science Lab 2

Organiser: SEAMEO RECSAM, Penang

Introduction

Learning science is fundamental to understand the scientific aspects of the world around us. For this understanding, it is imperative to provide students with learning experiences that are interesting and engaging which they consider relevant to their daily lives. This workshop addresses the need for a creative approach to investigation with reference to situations in everyday contexts, making the process of investigation a meaningful experience for students. The various hands-on activities modeled in the workshop enables the participants to understand the fundamentals and process of inquiry-based learning and introduces a practical approach of providing inquiry experiences in the classroom.

Objectives

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

- Understand the fundamentals of inquiry-based science education.
- Recognise activities that demonstrates principles of inquiry-based learning.
- Apply the inquiry-based pedagogy in their science classrooms.

Workshop Facilitators



Dr. Koay Suan See is currently an academic teacher at the Sixth Form College Haji Zainul Abidin Penang. She was formally an academic staff of the Training Programme Division at SEAMEO RECSAM. She has been actively involved in IBSE after she attended the IBSE workshop held in SEAMEO RECSAM by the French trainers in 2012 and later in the 4th International Seminar of *La main à la pâte* in France in 2013. She has conducted numerous trainings both locally and internationally, including Indonesia and Sudan. She believes that IBSE is the way for children to learn science more effectively and that IBSE is an approach to Science, Technology, Engineering and Mathematics (STEM) education.



Dr Lay Ah Nam currently serves as the Head of the Assistant Directors in the National STEM Centre, Ministry of Education (MOE) Malaysia. He had served as a chemistry teacher in school for 5 years prior to joining the teacher education institute as a science lecturer since 2005 until 2018. As a science educator, he has been actively involved in science and STEM education and participated in the 9th and 10th Seminar of *La main à la pâte* in France in 2018 and 2019. Dr Lay has been a very active scholar participating in research and publishing papers. He also actively facilitates workshops in institutions, academic agencies and schools. His sharing of IBSE with teachers will provide a new opportunity for teachers to stay

up to date about STEM teaching and learning.