Roundtable Submission Template

Name of Roundtable	Exploring Synergy between CDIO Framework and Kosen Model Core Curriculum (MCC) for Program Continual Improvement	
Name of Facilitator(s)	Affiliation	Country
1. Sin Moh CHEAH	Singapore Polytechnic (SP)	Singapore
2. Dr Yasuyuki SHIMADA	NIT Kumamoto College	Japan
3. Dr Kuniaki YAJIMA	NIT Sendai College	Japan
Lead Facilitator Email:	CHEAH_Sin_Moh@sp.edu.sg	

Sub-Theme (please select the closest match) (You may want to check the Call for Papers for examples)	Select One Only
ST1: Engineering Contributed to Welfare, from Health and Safety to Well-being	☐
ST2: Pedagogical Innovation in Teaching & Learning	☒
ST3: Artificial Intelligence in Teaching & Learning	☐
ST4: Engineering Education for Global Citizenship	☐

Overview of the Roundtable
A roundtable is an informal discussions of a topic related to teaching and learning proposed by a roundtable facilitator.
Both the Kosen MCC (Model Core Curriculum) and CDIO Framework (Syllabus and Standards) are novel approaches to assist in program redesign. MCC is used by National Institute of Technology Colleges in Japan and various affiliated institutions; whereas CDIO is used by institutions from around the world most notably in Europe and Asia. There are much in common in terms of the intent and comprehensiveness of both approaches and can potential complement one another, leveraging on each other's unique features to drive design/redesign of innovative curriculum in today's fast-changing world.

Keywords (4 or 5, separated by commas)
CDIO Framework, Kosen MCC, Curriculum Innovation

Activities
Include a brief summary of the proposed activities participants will undertake in the discussion, including some questions for discussion.

1. Introduction and Context Setting by Lead Facilitators
   - Brief introduction to CDIO and MCC: emphasizing the uniqueness of each approach esp. for continual imrpovement (5 mins for CDIO, 5 min for MCC)

2. Participants to share challenges faced when introducing soft skills into their teaching using Padlet (a type of digital Post-It notes to be provided by SP), for example (not exclusive):
   - Progressive development of skills/attitudes (15 mins)
   - Design of real-world learning tasks that uses the skills/attitudes of interest (15 minutes)
   - Assessment of skills/attitudes (15 mins)

3. Participants to discuss complementary of CDIO and MCC (15 mins)

4. Participants interested in future collaborations can discuss possible areas where the team can work together after ISATE 2025, with possibility of continuing into ISATE 2026 (15 mins)

Possible questions (not exhaustive):
1. How to develop higher-order skills/attitudes, e.g. for sustainable development?
2. What are the appropriate context of learning for skill/attitude development?
3. How to optimize limited curriculum hours while covering learning of skills/ attitudes in addition to technical knowledge?
4. How to balance formative and summative assessment for skills/attitudes along with knowledge?

Target Audience
Explain who should attend this roundtable and outline any background knowledge required from participants.

Faculty with appointment such as program owner, chair, manager or other equivalent will be most suited for this roundtable. Other lecturers who are interested in improving one's teaching and course/module design practices are also welcome. Participants are required to bring own laptop for the activities.

Follow-Ups, if any

Are there any activities that is already envisioned for a follow-up from the roundtable, e.g. what participants are expected to do after ISATE 2025?

A follow-up can be expected after the conclusion of ISATE2025, to continue working on the activities via email exchanges and online meeting as deem necessary. It is also envisioned that the work done can be continued into ISATE2026 as another roundtable.

Resources Needed

The organizer will try as much as possible to provide the resources requested. Please be as detailed as possible. The organizer will contact the Lead Facilitator via the email address provided if clarification is needed.

Two (2) laptops connected to an overhead projector will be required. Wi-Fi is absolutely essential. No special software requirements.