

Workshop outline

ADAPTING CDIO TO CIVIL ENGINEERING: INVESTIGATE – PLAN – DESIGN – CONSTRUCT – OPERATE AND MAINTAIN

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BACKGROUND

In our paper, we propose an alternative expression for engineering practice in the context of the civil engineering and built environment sector. Our objectives are:

- to demonstrate that the CDIO approach can, with these modifications, be applied in developing civil engineering and built environment programs, and
- to showcase the adaptability of the CDIO approach, thereby encouraging other thoughtful modifications and transformations.

We outline the ideas underpinning the original expression, and identify the role it plays in the CDIO methodology for curriculum development. Taking these factors into account, a modified expression is proposed to describe the engineering process in civil engineering and built environment. We divide the process into '*investigation – planning – design – construction – operation and management*'. Further, to '*products, processes and systems*', we propose the addition of '*environments*'.

WORKSHOP AGENDA

Introductions of participants – Who are you, and what field or role do you come from that made you interested in this issue?

The proposal – We outline the ideas in our paper (10 minutes).

Discussion questions

- Is CDIO *really* applicable to all fields of engineering education?
- If so, how can we better show that CDIO *is* inclusive?
- What fields have the most trouble identifying with CDIO?
- What are the most common reactions from those who feel that CDIO is not applicable to their fields?
- What particular aspects of CDIO may most need adaptation to other fields?
- What should we think about when making adaptations?
- Is there a limit to how CDIO can be adapted - is there an essence that needs to be maintained?