A DISCUSSION OF POSSIBILITIES FOR ESTABLISHING CURRICULUM AGILITY PRACTICES FOR INDUSTRY READY GRADUATES

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OVERVIEW OF THE ROUNDTABLE

There is on-going work in the CDIO community to create a set of principles characterizing Curriculum Agility. At the CDIO conference in Kanazawa 2018, a first workshop on curriculum agility was held and this resulted in the following synthesized definition:

> *An agile curriculum is responsive and adaptable to changes in society and industry, and to changing student characteristics and needs, by having the capacity to adjust structures, learning outcomes and learning activities where and when needed in a timely manner.*

The present version of Curriculum Agility is described by 10 principles, after discussions in a working group at the International CDIO Working Meeting 2022 in Turku, Finland. The work is still in progress and the final number of principles may change in the process of developing Curriculum Agility as a candidate for a future CDIO Standard. This round table agile curriculum design focus is on agile curriculum development through co-creation by students, staff, alumni and employers. Identifying examples of curriculum agility that are realistic and achievable to feature in future education curriculum development and support next generation of industry ready graduates.

KEYWORDS

Curriculum Agility, Curriculum Change, quality development. Standards: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12.

ACTIVITIES

We wish to address *how* academic teams can continuously and systematically develop an educational vision with agility in order to equip future engineering candidates for a changing society and industry.

We therefore invite you to join a discussion of practices that can support implementation of Curriculum Agility. A number of practices addressing aspects of agility is currently in use in different organisation and industry engagement, both academic, public, and commercial, and could potentially be adapted to establishing procedures for Curriculum Agility in educational institutions. Other practices are yet to be suggested and tried out.

How can we cultivate a change culture and reframe or re-interpret existing rule frameworks? How shall we establish much shorter response times in our quality development for incorporating new courses, or modifying old ones with respect to both contents and pedagogical design? How to have meaningful curriculum co-creation with students, alumni, industry and key-stakeholders within considerably shorter timescales? What can we learn from our experiences with the COVID-19 pandemic?

Let us share ideas and practices in order to collate a short list of suggestions on how to implement Curriculum Agility.

TARGET AUDIENCE

Participants interested in how to implement shorter response times with respect to societal changes, key stakeholder interests, needs for pedagogical and didactical reform in curricula are invited to join us.

FOLLOW-UPS

We will collate and share outcomes of the discussion with interested participants.

BIOGRAPHICAL INFORMATION

Reidar Lyng is Associate Professor at The Dept. of Physics NTNU, presently co-chairing the Centre for Science and Engineering Education Development at NTNU, with more than 30 years' experience of education development from NTNU and several Swedish universities. His R&D interests include the systemic interplay between teachers, students, and learning spaces. He is regional co-leader for the EU within CDIO.

Anne Nortcliffe is the founding Head of Engineering, Technology and Design at Canterbury Christ Church University. Anne Has PhD and MSc in Control Engineering and Degree in Chemistry. Anne Has industry and academic experience over 25 years experience of curriculum design, educating next generation of engineering graduates and working with industry to meet regional engineering skills gap Anne is an active engineering and computing education researcher.

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