

# Lifelong Learning at Engineering Institutions: Barriers and Enablers

## Problem/Question

Lifelong learning (LLL) has been on the political agenda for some time, but currently, it has gotten even more attention from the politicians in the Nordic countries – it has become a part of the core expectations of universities. However, LLL is often perceived as challenging to integrate as a part of a university's core activities. Several studies have shown that several different types of barriers may influence the behaviour of learners and educational institutions:

- *Institutional* (or structural) barriers - institutional, political or structural practices and procedures that may discourage or prevent either learners' participation or universities' provision of LLL offerings.
- *Situational* barriers – practical barriers which arise due to a person's life situation at given points in his or her family or working life cycle.
- *Dispositional* barriers – personality traits or personal qualities which influence a person's intrinsic motivation to engage in LLL.
- *Information* barriers - refer to (lack of) availability and awareness of information regarding LLL opportunities.

However, a recent literature survey performed by the working group leaders indicates that there so far has been little research published on how these different categories of barriers are perceived by the education institutions providing LLL offers – most papers analyse barriers (and enablers) from a learners' point of view.

This working group will gather information from CDIO member institutions about enablers and barriers for those institutions offering formal lifelong learning to students. This information will be analyzed to

1. describe the state of lifelong learning within the participating members' institutions,
2. validate the four different categories of barriers and enablers,
3. find detailed examples of barriers and enablers in the field of lifelong learning in engineering, and
4. propose actions that CDIO institutions can take to better fulfil the expectations and needs related to lifelong engineering education.

**Leaders** (the persons who will evaluate the applications):

Geir Egil Dahle Øien  
[geir.oien@ntnu.no](mailto:geir.oien@ntnu.no)  
NTNU

Jens Bennedsen  
[jbb@ece.au.dk](mailto:jbb@ece.au.dk)  
Aarhus University

## Things to be done before the physical conference

Each group member is expected to identify and interview a key player for LLL at their university, based on a common interview protocol (semi-structured interview). Before the interviews, the

group will meet virtually to discuss the interview protocol. After the interviews, the main points are noted and shared within the group before the physical meeting at the conference.

### **Things to do at the conference**

At the conference, analysis of the interview findings will take place during a physical meeting. The process for finalizing the related state-of-the-art paper will also be agreed upon at the meeting.