

PBLMD_Study Tour to KTH, Sweden, September 25 - October 1, 2016

Schedule

Monday 26 September		
09.15 – 12.00	Introductions: <ul style="list-style-type: none"> ▪ How this week will work ▪ Participants and facilitators ▪ Higher education in Sweden and at KTH ▪ Educational development at KTH 	AKH, MB Room Sydöstra
13.15 – 16.00	CDIO – the Idea, Methodology and Community CDIO is explained from three perspectives. First of all, it is based on an idea regarding what engineering students should learn and why. Then, it is a methodology for curriculum and course development. Finally, the CDIO Initiative comprises over 120 universities (see www.cdio.org) and is a dynamic community for engineering educators.	KE Room Sydöstra
Tuesday 27 September		
09.15 – 12.30	How to improve learning in student engineering projects As project-based learning activities are often assumed to be expensive and require high teaching effort, we discuss principles for making them cost-effective, sustainable and fun to teach. Much of this applies also to other kinds of courses. In particular, we illustrate the power of assessment to influence student learning. How can the complex professional engineering skills of individual students be assessed in a group project setting?	JK, KE Room Sydöstra
13.30 – 16.00	Continuation from the morning session: Visit to student labs, Q& A session, and group exercise.	JK, KE
Wednesday 28 September		
09.15 – 12.00	The Teaching Trick – How to improve student learning without spending more time teaching The key principle is that teachers should spend more of their time doing things that lead to high quality learning, and less time on such things that do not lead to learning. Concrete examples will be used to illustrate the principle, challenge old ways of thinking and question some taken-for-granted practices in education (focus on subject courses).	KE Room Sydöstra
13.15 – 16.00	How to improve student learning in lectures – Peer instruction The Peer Instruction method is illustrated and analysed from a learning perspective. Different technical solutions to implement the method are demonstrated, including low-tech, no-cost alternatives.	FL

Thursday 29 September

09.15 – 12.30	Room for learning – visiting the KTH learning environment We will visit some formal and informal learning environments to see how they accommodate the learning activities. Adapting the physical environment to support modern learning methodologies does not always have to involve spectacular new buildings. There is also much that can be done to transform existing buildings and utilising the facilities differently.	MB Room Start up D 31
14.00 – 16.00	Visiting a program Strengthening the program perspective is a key feature of engineering education at KTH and in the CDIO approach. The principle is to develop each course to have a specific function in the program. The strategy is to make the contribution of each course explicit, in relation to program goals. Thus, much course development starts from the needs of the program. In this curriculum model, the program leadership is key. We visit a program and make an in-depth investigation to its program design and lessons learned from the leadership.	AKH, HH Room Start up Brinellv 66

Friday 30 September

09.15 – 12.00	Course evaluation for development This workshop gives you hands-on experience working with course analysis and development based on the KTH Learning Experience Questionnaire (LEQ). We will explain the theoretical framework of the questionnaire and discuss different ways to improve a specific learning environment. Among the key strategies are fostering collegial collaboration and working with student representatives.	DB Room Sydöstra
13.15 – 16.00	Results, reflections and next steps Summing up the week, participants are invited to present some preliminary conclusions. We will discuss the most important take-away lessons, identify potential challenges to their implementations, and make a to-do list for educational development at home.	AKH Room Sydöstra

AKH – Anna-Karin Högfeldt

MB – Margareta Bergman

KE – Kristina Edström

JK – Jakob Kутtenkeuler

FL – Fredrik Lundell

HH – Hans Havtun

DB – Dan Borglund