



## Enhancing Engineering Education - Ain Shams University, Egypt

**Venue KTH Library building, room Lallerstedt, unless otherwise stated.  
Address: Osquars backe 31.**

Monday 15 January		
09.15 – 12.00	<p><b>Introductions:</b></p> <ul style="list-style-type: none"> <li>▪ How this week will work</li> <li>▪ Participants and facilitators</li> <li>▪ Introduction to Swedish Higher Education</li> <li>▪ Education Management and Development</li> <li>▪ Faculty Development in Sweden</li> </ul>	AKH, MB, EL
12.00	<p><b>Lunch</b> Will be served in conference area.</p>	
13.15 – 16.00	<p><b>CDIO – the Idea, Methodology and Community</b> CDIO is explained from three perspectives. First it is an idea regarding what engineering students should learn and why. It is also a methodology for curriculum and course development. Finally, the CDIO Initiative comprises over 130 universities (see <a href="http://www.cdio.org">www.cdio.org</a>) and is a dynamic community for engineering educators.</p>	KE

Tuesday 16 January		
09.15 – 12.30	<p><b>How to improve student learning in lectures – Peer instruction</b> Peer Instruction, a method that turns lectures into vivid interactive discussion sessions, is introduced, demonstrated and analyzed from a learning perspective. Different technical solutions to implement the method are demonstrated, including low-tech, no-cost alternatives.</p>	FL
12.00	<p><b>Lunch</b> Will be served in conference area.</p>	
13.15 – 16.00	<p><b>Mechanical Engineering Education</b></p>	MEG

**Wednesday 17 January**

09.15 – 12.00	<b>Integration of sustainable development</b> in the educational programs at KTH will be illustrated from several perspectives. We will describe the different processes conducted at KTH, including various pedagogical tools for course design, teaching and examination as well as student engagement. We will also discuss how different course contents can relate to the Sustainable Development Goals.	AR, ES
12.00	<b>Lunch</b> Will be served in conference area.	
13.15 – 16.00	<b>Workshop: level of integration</b> Characterization of the level of integration of sustainable development in engineering educational programs and/or correlated courses.	AR, ES

**Thursday 18 January**

09.15 – 12.30	<b>The Teaching Trick – How to improve student learning without spending more time teaching</b> The key principle here 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.	KE
12.00	<b>Lunch</b>	
13.15 – 16.00	<b>Inspiration Afternoon</b> Meet with a colleague in a similar role at KTH, or explore an area of your interest.	

**Friday 19 January**

09.15 – 12.00	<b>Workshop: Strategies for change</b> This workshop aims to develop support for implementing changes in teaching and learning on the course level, and for developing educational programs. We also discuss conditions for change on the organisation level.	AKH
13.15 – 16.00	<b>Roundup meeting</b> The week will be finalized with a reflective session where participants discuss and summarize the course given at KTH. Strategies for the future will be explored as well as future collaborations.	AKH, MB

AKH – Anna-Karin Högfeltd <https://www.kth.se/profile/akhog>  
MB – Margareta Bergman <https://www.kth.se/profile/margberg?l=en>  
EL – Elisabet Lökvist <http://ths.kth.se/about-ths/ths-central/karledning/>  
KE – Kristina Edström <https://www.kth.se/profile/kristina>  
FL – Fredrik Lundell <https://www.kth.se/profile/frlu>  
MEG – Martin Edin Grimheden <https://www.kth.se/profile/mjg>  
ES – Emma Strömberg <https://www.kth.se/profile/emmast>  
AR – Anders Rosén <https://www.kth.se/profile/aro>