# LÄRANDE I LTH

### GENOMBROTTET - BLAD 34 - SEPTEMBER 2016

Genombrottet är LTH:s pedagogiska stöd- och utvecklingsenhet som bland annat ger högskolepedagogiska kurser och beforskar undervisning och lärande. Genombrottet bistår också lärare, programansvariga och LTH-ledningen med stöd för undervisningsplanering, undersökningar och ett ramverk för högskolepedagogisk meritering.

Lärande i LTH har glädjen att presentera professor Keith Trigwell, som 2016 utsågs till hedersdoktor vid Lunds universitet. Keith Trigwell har särskilt studerat sambanden mellan lärares uppfattningar om undervisning och kvaliteten på studenters lärande. Han har lagt fram empiriskt stöd för att lärare som utvecklar sin syn på studenters lärande också i högre grad lyckas få studenterna att använda ett djupinriktat studiesätt. I detta nummer av Lärande i LTH skriver han om sin syn på professionalism inom undervisningen vid universitet och högskolor. En empirisk studie av positiv inverkan på uppnådda lärandemål med rollspel i undervisningen vid LTH och Chalmers utgör den andra artikeln. En jämförelse av resultat för olika examinationsmoment visar på en positiv effekt av rollspel och studenterna ser rollspel som en nyttig erfarenhet.



Keith Trigwell utnämndes 2016 till hedersdoktor vid Lunds universitet, Lunds Tekniska Högskola. Utnämningen grundades på Keith Trigwells forskning och ledarskap inom området högskolepedagogisk utveckling och den betydelse detta har haft för LTHs pedagogiska utvecklingsarbete. Professor Trigwell har publicerat över 100 vetenskapliga artiklar, konferenspublikationer och böcker. En kort beskrivning samt fullständigt cv finns på följande hemsida från University of Sydney: http://www.itl.usyd.edu.au/aboutus/keithtrigwell.htm

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## Engaging with the scholarship of teaching and learning

### Professionalism in university teaching

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Teaching in higher education is rapidly achieving the status of an evidence-based profession. While formal certificated courses for those involved have been available for over 25 years, it is the growth of the scholarship of teaching and learning in the last decade that has accelerated this change. To be unaware of the literature on good teaching or the factors associated with student learning could be considered, even among those teachers rated by students as excellent, as being inexcusable. The reasons are two-fold: First knowledge, second leadership.

A professional must for teachers, in addition to being able to perform their profession at a high level, is to be able to explain to others in their profession how it is that they perform well. What it is that they do and think that leads to student learning. There are teachers who have the gifts of being a great teacher, but in some cases they have little idea why they are so good. The current literature provides an explanation in almost every case. The characteristics of good teaching are found consistently in research studies to include the following six sets of ideas [1].

- Good teachers display enthusiasm for their subject, and a desire to share it with their students.
- Good teachers recognise the importance of context, and adapt their teaching accordingly; they know how to modify their teaching strategies according to the particular students, subject matter, and learning environment
- Good teachers encourage deep learning approaches, rather than surface approaches, and are concerned with developing their students' critical thinking skills, problem solving skills, and problem approach behaviours.
- Good teachers demonstrate an ability to transform and extend knowledge, rather than merely transmitting it; they draw on their knowledge of their subject, their knowledge of their learners, and their general pedagogical knowledge to transform the concepts of the discipline into terms that are understandable to their students. In other words they display what Shulman has termed "pedagogic content knowledge".
- Good teachers set clear goals, use valid and appropriate assessment methods, and provide high quality feedback to their students.
- Good teachers are also good learners; for example they learn through their own reading, by participating in a variety of professional development activities, by listening to their students, by sharing ideas with colleagues, and by reflecting on classroom interactions and students' achievements. Good teaching is therefore dynamic, reflective and constantly evolving.

The final point on this list is the pathway to the scholarship of teaching and learning (SoTL). Teacher-learning from focused local enquiry is now considered to be one of the fastest routes to improved student learning. Important generic ideas such as student self-regulation, student approaches to learning (deep and surface) and constructive alignment are now widely used in Higher Education teaching and learning. However, as useful as they are, these ideas may not be equally effective in each individual local context.

Think about the context of your teaching. Do you know to what extent your students are developing their self-regulation skills? Students are known to shift from meaning-oriented learning to reproduction learning and vice versa within the same class at times, depending on how they experience their individual courses. What message does your course give to your students? Is there an alignment between what you want students to learn and how you assess them? How do you know? Do students' experience it?

These are the type of questions that can be answered by the use of basic SoTL enquiry, and the results, combined with the more generic educational frameworks, provide a pathway to learning improvement. The answers constitute evidence. They enable you to say how it is that what you are doing is likely to improve student learning.

The case provided here is an example that includes most of the key SoTL ideas.

Li, a lecturer in engineering, has been introduced to the idea of constructive alignment (see [2] and [3]). Constructive alignment is achieved when students perceive that what is being assessed is in alignment with the intended learning outcomes and the teaching/learning activities designed to achieve those outcomes

Li notices that the learning activities she provides are mostly passive, and not aligned with the actual engineering problems students address in the assessments. She decides to introduce inquiry-based learning and adopts an approach in which students work through five inquiry stages (asking, investigating, creating, discussing, reflecting) on a range of engineering issues (from Sincero [4]).

In her literature search, she notes that Friedman et al. [5] report a trial of inquiry-based learning in engineering in which student learning was shown to be enhanced. Her own scholarly inquiry question is holistic: What is the experience (locally) of my students, myself and my peers, and more broadly as described by other engineering teachers using inquiry-based learning? This approach is informed by Brookfield's four lenses [6] in which the outcomes of reflections from four perspectives (students, peers, self and literature) are integrated to give a more holistic analysis.

Li invites her colleagues to participate in the change process and seeks their feedback. She surveys the students for their response and does a critical self-review that includes thinking about her own satisfaction with the process. Together with three of her peers, she drafts a teaching grant application for money to extend the inquiry-based learning idea to the teaching contexts of her three peers. The grant application is supported.

While the enquiry element in this case is small, the effects on student learning are likely to be large. The evidence provided for peer review is in the teaching grant application. Using that evidence, she is also able to say how it is that she is hoping to improve student learning – her professional action is evidence-based.

In this brief overview I have attempted to show that engagement with SoTL is a practice derived from a way of thinking about teaching. Teachers who consider that continuing to learn about teaching is a vital part of being a professional are likely to use the power of SoTL to inform themselves about their local context. It is a process that combines being theoretically informed, reflective, enquiry-oriented, and taking ideas into the public arena for local verification. Teachers who self-report engaging with SoTL in this way are likely to also say that they adopt more of a student-focused, conceptual change approach to their teaching [7].

Somewhat surprisingly, SoTL is not universally thought of as having such a focus on teaching and learning. In many universities, SoTL is seen mainly as the process of carrying out research into learning and teaching with refereed publication as the aim. While few people would doubt the



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valuable contribution that research into learning and teaching makes to our understanding of these activities, I do not consider that this is the purpose of SoTL.

A practising professional engineer outside academia, as part of their practice, is expected to keep up to date with the latest ideas and approaches to engineering, to reflect on their practice, to be continuously learning about their profession, and to have an enquiry-oriented perspective. In other words, they are expected to be a scholar of the practice of engineering. Few would be expected to be conducting engineering research to produce refereed publications.

It is in academia where, for the practising professional engineering educator, both research and teaching are core professional activities, that some overlap between them occurs. This is not a problem if it does not involve a departure from the purposes of teaching (which is mainly to facilitate student learning) but in many cases, seeking publication does involve such a departure. It is my experience from studying teaching in many universities that it should be expected of professionals in teaching to be scholars of teaching and learning, but not necessarily researchers of teaching and learning.

Engaging in scholarship enables the acquisition of the necessary knowledge and the ability to lead through being able to explain how best to use it.

For more information, and further support for the development of SoTL, see: Trigwell [8].

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## Is Role Playing in Requirements Engineering Education increasing learning outcome?

### **Empirical study including statistical significance**

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Requirements Engineering (RE) is a process within Software Engineering that involves gathering, creating, and maintaining the requirements of a software product. Software Engineering education programs are expected to provide students with a solid foundation in the subject matter. In Requirements Engineering Education (REE), it is important to cover three fundamental topics: traditional analysis and modelling skills, interviewing skills for requirements elicitation, and writing skills for specifying requirements. REE papers report about using role playing as a pedagogical tool; however, there is a surprising lack of empirical evidence on its utility. We have investigated [1] whether a higher grade in a role playing project have an effect on students' score in an individual written exam in a Requirements Engineering course. Data has been collected from 412 students between the years of 2007 and 2014 at Lund University, LTH and University of Gothenburg, Chalmers. The results show that students who received a higher grade in the role playing project scored statistically significant higher in the written exam compared to the students with a lower role playing project grade.

Although the importance of RE in software development is well recognized, some students are not active in learning RE courses and find the courses to be boring if they do not get the opportunity to practice the RE methods and techniques that are taught in the classroom. Moreover, several studies [2]-[7] report on problems that students face in REE, for example a lack of requirements elicitation skills in REE, lack of practice on RE activities, being able to select and combine RE techniques that are suitable for a particular project, lack of interest in RE courses, and a too strong emphasis on theory rather than on practice. One of the main RE-related problems faced by teams is communication between developers and customers. Requirements engineers must be able to communicate with the customers about the problem being solved in a language they understand. Another issue faced in practice is to choose the most effective analysis and modeling techniques that are suited for a particular project.

However, to create such a realistic setting is difficult as it needs stakeholders who are either real or behave in a realistic way. In REE literature, two possibilities of creating a realistic setting are presented: (1) have access to real stakeholders with real needs, or (2) have stakeholders that are simulated by other persons [8]. Here we describe the investigated RE course, taught by the authors, with a focus on one specific technique, namely a group project using a role playing method [7]. The group project addresses the needs for practicing elicitation skills and the ability to choose the right RE techniques for a particular project.

Role playing as a pedagogical tool offers several advantages [9] for both teachers and students. First, student interest in the topic increases. Second, there is an increased involvement on the part of the students in a role playing. That is, students are not passive recipients of the teacher's knowledge. A third advantage of using role playing is that it teaches empathy and understanding of different perspectives. Greenblat [10] divided all of these claimed benefits in six categories; cognitive learning, affective learning, enhance student motivation and interest, longer-term learning benefits, gain increased self-awareness, and promote better student-teacher relations. In the literature, several reports of claims regarding the above list of benefits have been reported, often in an anecdotal fashion. However, few empirical studies are reported and even fewer where benefits have been empirically supported.

This study investigates if students with a higher grade in a role playing project perform better on an individual written exam compared to students with a lower role playing project grade. Based on potential performance differences we seek to draw conclusion on the potential impact of role playing projects on student learning.

Our main hypothesis is: Role playing projects promotes students' deep learning about requirements engineering.

Data was collected from a total of 412 students that participated in the Requirements Engineering course between 2007 and 2014 at Lund University, LTH and University of Gothenburg, Chalmers. All students received the same setup of the course. That is, the lectures were built up in the same way, the project setup has been the same, and the written exam has had the same format. Besides the difference of course responsible between the two universities, the only difference between the students has been their involvement, engagement, and their grade in the role playing project.

The teaching uses both a traditional approach of lectures and exercises as well as a group project using a role playing method [7], which runs over 8 weeks. The lectures provide an overview of the literature with a high-level structure of RE theory and thereby aid self-studies of the literature. The main objective of the exercises is to support the project by connecting theory to practice and to provide an opportunity to discuss RE techniques in detail. The project involves a number of deliverables and a final project conference where learning outcomes of each project is presented.

Each project was instructed to act two roles simultaneously. The first role was that of acting as requirements engineers. The second role was to act as customer, which includes providing knowledge about the project and information about

the domain, for another requirements engineering project by delivering a Project Mission (PM). The two different roles and the setup of the project are illustrated in Figure 1. In Figure 1, 'Your Project' is a project group that consists of 4-5 students. In the second, fourth, and sixth week of the course, meetings between the project supervisor (a teacher in the course) and the student group are scheduled. The meetings include, but are not limited to, checking the progress and status according to plan, plans for coming weeks, and discussions about challenges, difficulties, and open issues across projects. The project has five phases (Figure 2):

- Definition: writing, establishment and documentation of the Project Mission (PM).
- Planning: developing a Project Plan (PP) for the group work.
- First Iteration: RE work conducted with focus on elicitation, prioritization, and specification. Hand in first version of the Requirements Document (RDv1).
- Second Iteration: RE work focused on elicitation, specification, and validation. Hand in second version of the Requirements Document (RDv2).
- Finalization: RE work focused on specification and validation. Includes a student conference presentation (CP). Hand in third version of the Requirements Document (RDv3) and the Experience Report (ER).

The results and lessons learnt are packaged for presentation and course assessment in the Experience Report (ER). The ER should contain what went according to plan and not, which elicitation, specification, prioritization, and validation techniques were used and why these techniques were chosen. In addition to the Requirements Document (RD), each project group should deliver a Review Report (RR). Each project group acts as a customer and therefore should review the RDv2 that the other project group has delivered using the provided checklist in RDv2. The goal of the RR is for the acting customers to validate the RDv2 for the PM that they created in the definition phase to suggest improvements to the RD.

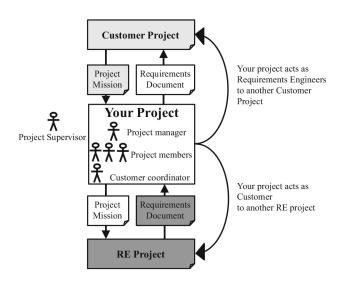


Figure 1

In the definition phase, each project group shall prepare a Project Mission (PM) for another project where they act as customers. The PM defines what type of system for which the other group (that act as requirements engineers) shall elicit, prioritize, specify and validate requirements. The project group creates a project of their choice where they take one of two roles as customers. The first role is as a potential customer. In this scenario, the other project owns the product and decides the products' contents. The second role is as product owner and then the students act to develop and sell a product to an open market. In the second alternative, the other project is subcontracted to only do requirements engineering. At the end of the first week, each project group submits their PM to the teachers who check the feasibility of the PM. In the planning phase, each project group should plan their work throughout the project by creating a Project Plan (PP). The PP should contain information such as description of the project, planned activities with start and stop dates, description of deliverables, cost estimations in terms of hours for each activity, and how the results should be packed.

The requirements engineering work starts in the first iteration and the students are encouraged to try out as many elicitation and specification techniques as possible. At the end of the first iteration, each project group should deliver a first version of their Requirements Document (RDv1) to the project supervisor. The RDv1 should contain, besides business goals and project type, results from elicitation and requirements specification including requirements and supporting information on goal level, domain level, and product level. In addition, RDv1 must contain at least 20 specified requirements, which will be used in the RP lab session. In the second iteration phase, the project groups should continue to elicit and specify more requirements and improve the requirements in RDv1 based on feedback from the project supervisor. At the end of the second iteration, each group project delivers a second version of their

The last phase, finalization, starts with a Conference Presentation (CP). Each project group prepare a short presentation of project results, including techniques used and important experiences and lessons learned. The remaining time in the finalization phase is devoted to RE work based on feedback from both the project supervisor and the acting customers, and to package results and lessons learnt into an Experience Report (ER). At the end of the last phase, the project groups should submit the ER and their final version of the RD (RDv3, extending and improving RDv2) to their project supervisors.

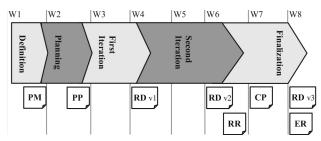


Figure 2

The general prerequisites are that all deliverables and versions must be in time, no free-riding on the rest of the group, and that RDv1 must contain at least 20 requirements. Note that the PM is not part of the grade, nor is RDv1. This is because we want the students to feel free to try out as many elicitation and specification techniques as possible without feeling the pressure that everything must be "perfect" already in the first version.

The results show that students with a higher grade in the role playing project scored, in total, higher in the written exam compared to students with a lower grade in the project, a difference that is statistically significant using regression analysis (p<0.05).

All students received the same treatment in terms of lectures, exercises and projects, so the role playing is likely to be responsible for the higher exam scores earned by the students with a higher project grade.

Looking into the different parts of the exam, that is the theory and essay parts, there was no statistically significant difference in the score of the theory part between students with a higher and lower project grade. However, students with higher project grades scored higher in the essay part compared to the students with a lower project grade, a difference which is statistically significant using the same regression analysis (p<0.05). This result is not surprising since the topics in the essay part are heavily correlated to tasks that have been performed during the project.

A threat to external validity in this study is that only one course has been studied. Thus, the context, the RE course and the role playing project setup have been described in detail, which can help in understanding if this situation is similar to other cases and situations (see full text version [1]). Hence, it may help to judge the transferability of the setup and the results to other situations. However, the results from the two universities are similar where higher project grades lead to higher score in the written exam, which supports generalization beyond the courses at Lund University and Gothenburg University.

Data collected from the official course evaluations shows that our students enjoy the course and think it is an important subject to learn for their future career in industry. An important aspect of why the students were satisfied with the course was the mix of theory and practice. Also, most of the students view the projects as realistic. Although it is not a requirement to pass the project, several projects have used

real stakeholders, customers, and user groups (i.e. stakeholders that are not teachers or students in the course). This indicates that the students are motivated and interested and that it is not just a good grade that motivates them.

The result presented in this study is, to the best of the authors' knowledge, one of few papers that statistically assess the impact that role playing has on students' performance in written exams. Although there was a statistically significant correlation between a higher project grade and higher score on the essay part of the written exam, the causal relationship is not absolute. Ideally, a control group should have been used to be able to clarify the causal relationship; however, we decided not to use a control group due to ethical reasons. That is, we did not want to withhold the students what we believe is a good teaching approach with the role playing project. However, the course evaluations, where the students have expressed the importance of the project, supports our assumptions of the importance of the role playing project in increasing learning outcome.

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## LTH:s Högskolepedagogiska kompetensutvecklingskurser hösten 2016

Nedan ges en kortfattad information om de olika högskolepedagogiska kompetensutvecklingskurser som ges av Genombrottet under hösten 2016. Förutom de allmänna högskolepedagogiska översiktskurserna erbjuds även mer praktiknära kurser samt individuella fördjupningskurser

med förhoppningen att kunna möta intressemångfalden bland lärarna. För utförligare information (kurstider, detaljerat kursinnehåll, med mera) hänvisas till Genombrottets hemsida http://www.lth.se/genombrottet/, där det också finns information om kurser av andra kursgivare.

### Högskolepedagogisk introduktionskurs (3v)

Kursen riktar sig främst till doktorander och nyanställda lärare och är en valbar kurs inom den behörighetsgivande högskolepedagogiska utbildningen, samt inom forskarutbildningen vid LTH. Kursen ger en introduktion till högskolepedagogik och aktuell forskning inom området. Många kursmoment bygger på deltagarnas egna erfarenheter, som knyts till pedagogisk teori. Studenters lärande och situation, examinationens betydelse och mekanismer, olika undervisningsmetoder, kommunikation och lärarens roll är exempel på områden som behandlas under veckan. Kursen syftar till att introducera deltagarna i ett tänkande kring universitetspedagogiska frågor och därmed öka deras förmåga att fatta beslut i undervisningen som gagnar alla studenters lärande. Kursen syftar också till att ge deltagarna en pedagogisk grund att bygga vidare på i deras arbete som lärare vid LTH. Sista ansökningsdag är 13 november 2016 och kursen startar 12 december 2016.

### Introduction to Teaching and Learning in Higher Education (3v)

As a PhD student or a new teacher at LTH you are invited to Introduction to Teaching and Learning in Higher Education (this course is equivalent to the course Högskolepedagogisk introduktionskurs but given in english). This course introduces you to current concepts of teaching and learning in higher education in order to develop your ability to improve student learning. The course provides an introduction for your further professional development as a university teacher. It is focused on students and their situation including students with special needs, the role of the teacher and his/her professional development, learning as a cognitive process, different teaching methods and their effect on students learning, assessment and its impact on students learning, evaluation at different levels, communication and pedagogical qualifications for teachers in higher education. Last day to register September 25 2016, course start October 24 2016.

### Den goda föreläsningen (2v eller 3v)

Kursen riktar sig främst till lärare med föreläsningserfarenhet och helst skall deltagarna också ha egna föreläsningar under den tid som kursen går. En stor del av undervisningen vid universitetet bedrivs i form av föreläsningar, en form med både för- och nackdelar. Kursen behandlar några av dessa. Vidare tar kursen upp ett antal konkreta metoder för hur föreläsningar kan genomföras och utvärderas. Syftet är att deltagarna efter kursen skall ha fördjupat sin förståelse kring föreläsningen som undervisningsform och dessutom praktiskt arbetat med att utveckla sina egna föreläsningar. Kursen har ett antal schemalagda träffar med en blandning av lärarledd undervisning, deltagarundervisning och diskussioner. Vidare tillkommer auskultationsarbete, förberedelse av deltagarundervisning och inspelningsuppgift i grupp mellan kursträffarna. Kursen motsvarar 2 veckors arbete. För dem som vill fullgöra en prestation om 3 veckor tillkommer en skriftlig uppgift, där man redovisar en pedagogisk reflektion grundad på egen undervisningserfarenhet. Innehåll och utformning avtalas i särskild ordning med kursledarna. Sista ansökningsdag är 23 september 2016 och kursen startar 5 oktober 2016.

### Workshop - Den pedagogiska portföljen (1v)

Att presentera och bedöma pedagogiska meriter med hjälp av en pedagogisk portfölj är en etablerad och genom forskning väl utvärderad metod. I den pedagogiska portföljen belyser och beskriver läraren sin kompetens framför allt genom en kritiskt reflekterande analys av exempel hämtade från den egna praktiken. Att skriva en pedagogisk portfölj bör vara en fortlöpande och integrerad del av arbetet som universitetslärare. På så sätt kommer portföljen att bli ett levande dokument som i hög grad bidrar till den professionella pedagogiska utvecklingen. Denna workshop ges som stöd för lärare som vill utveckla sin förmåga att reflektera över sin pedagogiska gärning i utvecklings- och/eller meriteringssyfte. Kursen stödjer erfarenhetsutbyte mellan deltagarna i form av diskussioner och reflektioner och baseras på material från relevant forskning. Förkunskapskravet är att man har genomgått någon högskolepedagogisk översiktskurs eller motsvarande. Sista ansökningsdag är 1 november 2016 och kursen startar 8 november 2016.

### Projektbaserad kollegiekurs (2v)

Projektbaserad kollegiekurs är en valbar kurs inom den behörighetsgivande högskolepedagogiska utbildningen vid LTH och vänder sig främst till grupper av lärare som delar samma pedagogiska sammanhang. Kursen syftar till att ge en grupp lärare, som delar ett socialt sammanhang (ämne, avdelning, etcetera), möjlighet att tillsammans fördjupa sig i för dem relevanta pedagogiska frågeställningar. Kursens huvuddel är ett projektarbete, som i normalfallet genomförs i grupp och som behandlar en för deltagarna relevant pedagogisk frågeställning. Projekten rapporteras skriftligt och muntligt inom kursen. Förutom projektet ges inom kursen ett antal schemalagda seminarier, vars huvudsyfte är att stödja arbetet med rapporten. Litteraturstudier relevanta för projektet tillkommer. Kursen ges på förfrågan i samarbete med den organisatoriska enhet där deltagarna delar det pedagogiska sammanhanget.

### Projektbaserad Högskolepedagogisk kurs för adjungerade lärare (1v)

Högskolepedagogisk kurs för adjungerade lärare är en kurs inom den behörighetsgivande högskolepedagogiska utbildningen vid LTH. Kursen är en variant av LTHs översiktskurser i högskolepedagogik och riktar sig till adjungerade lärare, som har sin huvudsakliga verksamhet i näringsliv och myndigheter utanför universitetsverksamheten. Kursen syftar till att introducera deltagarna i ett tänkande kring universitetspedagogiska frågor och därmed öka deras förmåga att fatta beslut i undervisningen som gagnar studenters lärande. Kursen syftar också till att ge en pedagogisk grund att bygga vidare på som akademisk lärare och handledare i samverkan med andra LTH-lärare. Särskild vikt läggs på att den adjungerade läraren relaterar sin specialkompetens till studenters och doktoranders lärande. För att kompensera de adjungerade lärarnas begränsade fysiska närvaro på LTH används en webbplattform för kurskommunikation. För tillträde till kursen krävs att man är anställd som adjungerad lärare vid LTH. Samtliga adjungerade lärare vid LTH har tillträde till kursen (ingen platsbegränsning) och kursen ges på begäran.

### Kom ihåg

#### 9:e Pedagogiska Inspirationskonferensen, 15 december 2016, LTH, Lund

LTHs Pedagogiska Inspirationskonferens är en regelbunden konferens för att öka möjligheterna till samverkan och till utbyte av pedagogiska erfarenheter. Konferensen har funnits sedan 2003 och arrangeras av Genombrottet, LTHs pedagogiska stöd- och utvecklingsenhet.



Bidrag lämnas senast 11 september. Antagna bidrag meddelas senast 3 oktober. Fulltext (cirka 1300 ord) skall föreligga senast 6 november. (Instruktioner skickas via mail till alla accepterade konferensbidrag). Sista dag för anmälan är 30 november 2016. För ytterligare information se konferenshemsidan: <a href="https://www.lth.se/genombrottet/lths-pedagogiska-inspirationskonferens/">www.lth.se/genombrottet/lths-pedagogiska-inspirationskonferens/</a>

### Tillämpad universitetspedagogik för övningsledare

Hur undervisar man egentligen? Studenter som fungerar, ska fungera eller har fungerat som lärare vid någon institution på LTH (laborationshandledare, övningsledare etcetera) inbjuds till att under fyra timmar ta del av en del av det man vet kring hur folk lär sig och hur folk undervisar

på en teknisk högskola. Kursen är avgiftsfri och ges av Genombrottet, LTH:s pedagogiska stöd- och utvecklingsenhet. Kursledare är Roy Andersson och Torgny Roxå. Kursen ges tisdag 27 september 2016, klockan 17:15-21:30 i sal SC:Pepparholm (Studiecentrum, andra våningen) och alla deltagare bjuds på något att äta samt dryck. Anmälan skickas via e-post till Lisbeth.Tempte@kansli.lth.se, senast 25 september 2016. Begränsat antal platser. Skriv på anmälan när och var du ska eller har undervisat vid LTH och ange även om du önskar vegetarisk mat. Intyg ges till alla deltagare som är med under kvällen. Vid frågor, kontakta: Roy.Andersson@cs.lth.se

### Seminarieserie, LTH, Lund, start 27 september 2016

Centre for Engineering Education, CEE, lanserar i höst en "brown bag" seminarieserie för såväl anställda som studenter på LTH. Seminarierna äger rum på lunchen, är informella och kräver varken föranmälan eller förberedelse. Deltagare får gärna ta med sin lunch och vid varje seminarie kommer en eller flera personer att presentera intressant pedagogiskt arbete eller leda en diskussion om aktuella pedagogiska frågor. Första seminariet för hösten är den 27 september 2016, 12.15–13.00 i Pepparholm, LTHs Studiecentrum. För information se: www.lth.selgenombrottet.

- 27 september 2106, Mitt flippade klassrum mer tid för det roliga, Kristofer Modig
- 4 november 2016, Effektivare grupper i undervisningen - att leda studenter som lär sig tillsammans, Joakim Malm, Ebba Rundquist och Matilda Lundin
- 2 december 2016, Stöd i akademiskt skrivande en MOOC för campuskurser, Susanne Pelger och Sara Santesson

Centre for Engineering Education, CEE, bildades i januari 2016 för att samla LTH-gemensamma pedagogiska verksamheter. CEE innehåller fyra delar: högskolepedagogiskt utvecklingsarbete inom Genombrottet, kurser och uppföljningar inom forskarutbildning och docentförberedande utbildning, SI-verksamhet vid LTH och Tekniskt basår.

### Kontakt

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