

# Mapping of Innovative Learning and Teaching Approaches in Engineering Education

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# Rationale of the Mapping Study

- There are increasingly loud calls for change of engineering education throughout the world  
- but -
- to facilitate change it may be useful to first have an overview of what changes have already taken place in engineering educational institutions

# The Proposed Pilot Mapping Study

- This pilot study is part of a planned larger study of engineering education in development in Africa, Latin America and Asia
- The pilot study is to be carried out in 4 – 6 of the following English speaking countries:  
Tanzania, Kenya, Uganda in East Africa,  
Nigeria and Ghana in West Africa and South Africa

# The Proposed Pilot Mapping study

- The study will be conducted by the UNESCO Chair in Problem Based Learning – hopefully with the able assistance of AEEA and similar organisations as informants
- The study will consist essentially of four phases:
  - ✓ Desk study and literature review
  - ✓ Questionnaires complemented by interviews
  - ✓ Case studies – one per country
  - ✓ Analysis and reporting

# Phase I: Desk study and literature review

Phase I will ...

- provide a background to the pilot study
- help identify individuals, organisations and institutions to be involved in Phase 2
- may start a 'snowball effect' of identification of individuals, organisations and institutions to be contacted

# Phase 2: Questionnaires and Interviews

Phase 2 will consist of ...

- one page electronic questionnaires sent to identified individuals, organisations and institutions
- supplemented by semi-structured Skype interviews with identified individuals in the countries selected for the study

## Phase 3: Case Studies

Phase 3 will include ...

- in-depth studies through observations and interviews with representatives of all stakeholders in the change process
- one selected case from each country involved

# Inspiration taken from:



The Royal Academy  
of Engineering



Massachusetts  
Institute of  
Technology

Achieving excellence in engineering  
education: the ingredients of  
successful change

March 2012

Author

Dr Ruth Graham

A copy of this report is available online at [www.raeng.org.uk/change](http://www.raeng.org.uk/change)



# If you want to get involved...

- If you want to get involved as an informant please contact me in person here in ARCEE5 or
- contact Tony and/or me by e-mail:
  - Mona Lisa Dahms – [mona@plan.aau.dk](mailto:mona@plan.aau.dk)
  - Tony Majoram – [t\\_majoram@yahoo.com](mailto:t_majoram@yahoo.com)

*Thank you very much in  
advance for your  
participation!*

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