From theory to application and back again: the interplay between research in higher education and engineering education, 4 November 2021

00:43:52 Simon Marginson: if the global dimension is formed by acts of imagining, a global webinar is formed by acts of talking. Please put forward your questions and statements into the Chat - then we can select you into the discussion. Come forward now, our speakers have given us much to work with.

00:45:02 Simon Marginson: Questions please!

00:45:10 Bruce Kloot: Good day, I'd like to ask to Denver: How does the signing of China to the Washington Accord, which was originated by the US, impact the intertwined imaginaries identified in your work?

00:45:22 Kristina Edström: I'd like to consider professional education as an intermediate level

00:45:36 Bruce Kloot: I'm thinking in particular of the economic and technological competition between the US and China…

00:46:04 Tim Drysdale: What perspectives do the panel members have on the challenge of scale (student numbers increasing, staff and equipment resources perhaps not keeping pace, and changes in teaching approaches required as a result)?

00:48:23 Maartje Van den Bogaard: I would like to note that engineering education has many similarities to medical education and in many cases teacher training. I believe we have a lot to learn from these DBER fields too.

00:49:32 Maartje Van den Bogaard: I would also like to note that within the field of education there is a nice field that is concerned with comparative education. There is a set of methods and methodologies available in that field that is of interest to researchers who are interested in comparative work.

00:51:50 Alison Gwynne-Evans: In contrast to medical, engineering has perhaps much more of a political relationship. For me this raises the importance of ethics and how it is defined and implemented within the engineering curriculum and at an accreditation level

00:53:46 Per Fagrell: According to Denver Tang, three major forces that shapes EE are 1) Technical knowledge, 2) Employers' demand, 3) Aspirations of the engineering profession.

Are the three forces evenly distributed? Would it be doable to apply this take on what shapes education on other disciplines?

00:56:15 Aditya Johri: I would like the panel to talk a bit about the "global flows" of engineers and engineering knowledge and how that shapes or should shape engineering education research and practice. Engineering is one of the few professions were movement across national boundaries is so free; at least compared to medicine or law, and this aspect is often missing from higher education analysis.

00:57:43 Tim Drysdale: Nicky, David, thanks for your responses!

01:00:15 Renee Smit: I completely agree with Maartje -- there are elements of commonality between research into educating for the professions.

01:02:47 Jennifer Walsh Marr: I note this panel is in English and wonder if you can speak to its use within the field of int'l engineering, as well as developing engineering-specific communication skills within undergraduate curricula.

01:05:08 Mike Klassen: Another perspective on Bruce's question on the implications of China joining the Washington Accord: I'm excited to publish some forthcoming findings from interviews with long-term members of the Accord. there are many fascinating political and geopolitical dynamics unfolding within the Accord… many of which go beyond the familiar narrative of US/ABET dominance. There are lots of interesting questions to be asked of how the Accord is operating as a mechanism for legitimizing different systems… and how the 'rules' apply differently to the 'old guard' founding members compared to the new signatories… China included.

01:10:10 Bruce Kloot: Looking forward to it Mike!

01:11:39 CGHE Webinars: Thank you for joining us today. A recording of this session will be on the CGHE site tomorrow morning: https://www.researchcghe.org/events/cghe-seminar/from-theory-to-a-and-back-again-the-interplay-between-research-in-higher-education-and-engineering-education/

01:12:27 Aditya Johri: Excellent point!

01:13:02 CGHE Webinars: Our next webinar will be on Tuesday. 'The rise and rise of research in China: what does it mean for China and the world?' with Simon Marginson and Xin Xu. You can register here: https://www.researchcghe.org/events/cghe-seminar/the-rise-and-rise-of-research-in-china-what-does-it-mean-for-china-and-the-world/

01:14:08 CGHE Webinars: You can also subscribe to the CGHE events calendar on Outlook. More details here: https://www.researchcghe.org/news/2021-11-02-subscribingto-the-cghe-webinars-calendar/

01:14:52 Mike Klassen: Hardly! Just an apprentice.

01:15:00 Bruce Kloot: Really interesting strand. In some recent work here in SA, we're seeing how some students resist engaging or even thinking about the (quite fraught) local

context because they are focused on being international/global engineers and going to the UK or US.

01:17:57 Tim Drysdale: Many thanks to the panel and organisers - a thought provoking session!

01:18:38 Jonte Bernhard: @Jennifer In my opinion some of the best engineering textbooks are written In German, but I can not use them with my students.

01:18:46 Cristina Carvalho: This is really nice panel and speakers! Congratulations!

01:19:04 Jennifer Walsh Marr: @Jonte, interesting! thank you

01:19:25 Karin Wolff: Great panel!

01:20:06 Aditya Johri: @Jonte - many Indian engineering schools used to require German in addition to engineering course work. Not anymore. Another comparative empirical study needed on the use of textbooks across countries and institutions :-).

01:20:09 Mike Klassen: Thanks Jennifer. Not to beat the drum too hard but the use of English is also being used as a tool for retaining power/control of the direction of the Washington Accord itself… the English-speaking founders have a huge advantage over the nations who have joined later.

01:21:43 Esther Matemba: Thanks to Jenni and the panel. This was thought provoking seminar.

01:22:02 Aditya Johri: Thanks, everyone, excellent panel!

01:22:08 SHANNON CHANCE: Agreed—so much food for thought!

01:22:30 Kate Roach: Many thanks to all of you for this session. Really stimulating - I will be discussing it with my STS colleagues!

01:22:49 Jonte Bernhard: The challenge is to use theorists who originally been writing in German, French or Russian!

01:22:58 Aditya Johri: @David - Scale as well -- lots of engineers are produced; AMA limits number of doctors that can be produced.

01:23:03 Victorița Trif: Thank you!

01:24:09 Mike Klassen: @Aditya exactly! The social closure mechanism is way more effective in medicine compared to engineering.

01:24:25 Aditya Johri: @Mike -- more prestige and lot more money :-)