

CDIO 2016 KEYNOTE

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Dr. Rissanen is Executive Director of The Rector's Conference of Finnish Universities of Applied Sciences, Arene. She has a banking and finance background from 90's after graduation as Master of Business Administration. After receiving her teacher qualification in 1995, she started as principal lecturer, later on as Head of Research and Vice-President in Savonia UAS.

Riitta did her PhD in education science (Working-life based Thesis in UAS Learning Context) for Tampere University in 2013. She has had several memberships in national educational groups, e.g. Finnish Higher Education Evaluation Council (FINHEEC). Riitta's research area is professional higher education, innovations and R&D, Mode2 as well as qualitative research, where from she has made presentations and publications.

Finnish Universities of Applied Sciences

- Innovations and Interaction with Industry and Business

The focus of this presentation is on UAS sector in Finland, especially on the scope of innovations, student centered learning and various types of interaction between professional higher education and industry, especially in engineering.

Universities of applied sciences (UAS) comprise the higher education system together in Finland with research universities, general universities, and universities of technology and arts. There are 26 universities of applied sciences in Finland, operating closely with industry, society and business. The mission of UAS is stated very clearly in the new UAS act 2014. They aim is e.g. carry out applied research with close co-operation with the world of work, society and regional development, and also carry out innovations and boost entrepreneurship in various levels in higher education and research.

UAS sector has a focus on professional higher education, which means that they all contribute to innovations and their education has a real meaning in the labour market. The link between higher education, applied research and innovations is strong. Many UAS has developed new pedagogical solutions to reach this goal in practice, e.g. using the framework of CDIO.

New pedagogy has been presented in UAS sector in different areas, etc. in technology, in social and health care, but largely also in multidisciplinary context. Many of those practical learning solutions are built and developed in close partnership between industries, students and professionals from higher education. The focus is on close cooperation with the relevant sector of labour market and knowledge networks. In that sense, the Mode 2 (Gibbons et. al, 1985) is put into action ß and developed further on the basis of phenomena based co-creation ß which is different, than traditional knowledge transfer.





In Finnish UAS the professional higher education orientation is also developed in the second cycle. These professional master programs, also in engineering, has been carried out in Finland during the last ten years. These programs has a strong link with applied research and innovations, as the students do they master studies besides working in industry. Furthermore the idea is not just to deliver highly skilled and competent engineers and professionals, but also act as an innovative player for the engineering profession it selves, innovating industry and labour market, and update new competences.

In my presentation I will discuss e.g. following questions: What is the scope and task of UAS sector in the sense of industry- university co-operation? What does applied research and student centered learning means in this context of co-operation? Theoretical concepts of this presentation is linked to the framework of a Mode 2, open innovation, co- creation and applied research. Furthermore, the content of the impact of professional higher education in society and industry is also discussed.

Keywords: Professional higher education, Mode2, student-centered learning, applied research, open innovation.