

ICL Special Session Proposal

Title

European Parameters of Engineering Pedagogy

Acronym

EPEP

Overview

Education and teacher training requires special attention since knowledge society is formed through the process of education and training. Teachers should have such competencies that enable them to act in the 21st century. The quality of teachers and their training is considered a key component for reforming education and innovation in school activities. It is engineering pedagogy that forms the theoretical basis for teacher education in the engineering environment for the Industry 4 era. It is no coincidence that since its establishment based on the theory and application of Professor Melezinek, engineering pedagogy has spread out across Europe and throughout the world from the Central European area. This is also the basis of its specific parameters in a global context. The section aims to name these parameters, compare them with the development of this specific branch of pedagogy in the world, and outline the perspectives for its further development and cooperation. Digitization and Industry 4 have brought significant changes in the labour market across Europe and the world. This requires new competencies the educational environment must also respond to. Revolutionary technological developments determine the need to update graduate education. Quality education is the most important attribute and the main criterion for the technological development of human society. The new reality of social life in the digital economy, faced by unexpected events such as the COVID pandemic, the global environmental problems, the energy crisis, and others, poses new challenges for the education system in training modern graduates to be prepared to solve these problems. To successfully work in conditions of change uncertainty and complexity, graduates need the ability to adapt quickly to new conditions. It is important for the smooth transition of graduates from school to the labour market and to increase the employability of graduates in the labour market.

Topics

- *Engineering pedagogy*
- *Quality of education*
- *Trends in teacher education*
- *Improving teacher training*
- *Digital competencies of teachers*
- *Pedagogical diagnostics and evaluation*
- *School safety and indoor quality*
- *Education and social distance*
- *Startups*
- *Improving the employability of graduates in the labor market*

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