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CHALLENGES FOR THE THIRD MILLENNIUM

CALOHEE Project and Civil Engineering: Analysis of Results

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ABSTRACT

Paper describes the experience of leading the group dedicated to Civil Engineering of the project Comparing Achievement of Learning Outcomes in Higher Education in Europe (www.calohee.eu). There were four other subjects that were analyzed: History, Physics, Teacher Education and Nursing. The rationale for this project was built with the goal of searching for a more reliable model for evidence based learning and quality assurance and enhancement of the assessment of learning outcomes. When civil engineers enter the labour market with sets of competences based on their personal experiences and their studies are they really prepared for the jobs they go after? What are the demands of employers? Are they equipped to fully engage with their civic responsibilities? Are students trained to cope with the many uncertainties that life and work will bring to them? Do existing quality assurance instruments offer sufficient evidence to answer those questions?

Existing approaches to assess quality of learning tend to look at processes and not at achieved learning by civil engineering students. CALOHEE applied a forward looking approach, focusing on what a graduate should know and be able to do in order to function successfully in life and contribute to society (learning outcomes perspective). The chosen approach brought evidence-based accountability into the teaching and learning role of HE institutions by focusing on competences acquired by students, which meet the needs of society and the graduates. The assessment framework included four strands: 1) Knowledge (theory and methodology); 2) Applying knowledge and skills; 3) Preparing for employability and 4) Civic, social and cultural engagement. CALOHEE also developed a set of reference points at 1st and 2nd cycles levels. The sets of learning outcomes' descriptors were prepared by teams from the respective academic communities, in close consultation with stakeholders and open to public scrutiny.