

## Engineering professional context and CPD

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Engineers are the professionals that have intense and continuous lifelong learning (LLL) activities regulated by professional organizations, by employers and by official agencies. That is due to the obsolescence of competences and the need face new challenges. The dialogue between with LLL providers and users of the required continuing professional development (CPD) training is not structured in most of the cases. An analysis of the CPD policy of the federation of engineering professional organizations (FEANI) is made in terms of foreseeing methods and approaches to improve the communications between the LLL providers and engineering CPD consumers. In the first place, the FEANI policy affirms that there is an on-going need for CPD of engineers in Europe. CPD is considered the acquisition of knowledge, experience and skills and the development of personal qualities. It embraces both the acquisition of new capabilities to broaden competence and the enhancement of existing capabilities to keep abreast of evolving technology and its application. CPD is essential for the maintenance of high professional standards and enhances the employability and mobility of individual engineers. It assists career progression and strengthens professional satisfaction. CPD benefits society and is of crucial importance in sustaining the competitiveness of European industry in the global market. CPD is the individual's responsibility and requires the cooperation, encouragement and support of employers and professional and academic institutions as CPD providers. Some countries professional engineering organizations require mandatory periodic CPD to keep the status as engineers. Therefore, engineering CPD, to be most effective, has to be planned and related to specific objectives. A personal development plan in terms of competences needs to be periodically updated. The CPD plan can include a variety of forms, including mentoring and the sharing of knowledge and expertise. This is one of the areas where LLL providers can cooperate with professional engineering organizations to provide guidelines for engineers. These guidelines could address inclusion of promotion of CPD as an important element of the engineering mission and establishment of a CPD policy highlighting the key role of qualified professional engineers for the development of the economy and society. The cooperation between the LLL providers and professional engineering organizations could address encouraging all stakeholders to invest in CPD for engineers, define quality standards in CPD as well as innovative practices in learning. Other topics are the support of individual engineers in their personal CPD definition, publicizing good practices in CPD and include initiatives on competence recognition, mobility, employability and accreditation of education. A second aspect of possible cooperation between engineering professional bodies and LLL providers could address the identification of training needs resulting from innovation developments among academic institutions in cooperation with engineering companies. Relevant innovations result from industry requests and respective training to implement those developments could then be defined and planned jointly as LLL provisions. A third aspect could be the recording and accreditation by academic institutions of CPD achievements by engineers in terms of the professional personal development plan.

**Topic: Designing flexible learning for adults: Dialogue between University Lifelong Learning and professional contexts**