

FEANI EMC Working Group: Discussion document, April 2012

Compiled by:

Mr. De Wever
Mr. Harney
Mr. Scharl
Mr. Soeiro

International CPD themes

Reviewing literature, guidelines and policies on CPD internationally, a number of themes and sub-themes emerge which help in understanding all aspects of CPD. They are summarised briefly below.

CPD is universally encouraged. CPD is seen to be the *individual responsibility* of each professional, although CPD can be facilitated through professional bodies, employers and learned institutions. CPD might be defined as *relevant, planned learning interventions, at a professional level, ongoing in nature and throughout the working career*. CPD can cover matters which are technical and non-technical.

CPD Models

CPD models tend to be input-based, output-based and, in some cases, a combination of the two. The usual input is time in hours/days (sometimes called 'credits') and sometimes weighted to reflect the relevance or importance of the activity time was spent on. The output model is typically linked to competences the professionals must have in order to perform their role properly. The input model has an obvious practical advantage in terms of the ease of recording time spent learning. The disadvantage of the input model has is that it does not consider actual performance as a professional as a result of time invested. The output model has the primary advantage of focusing on competences as demanded by practice. An obvious disadvantage is that the assessment of individual competence is cumbersome, time-consuming and costly.

Relevance

It is important that FEANI be seen as a thought-leader with regard to CPD for a number of reasons. A stated objective of FEANI is "to affirm the professional identity" of engineers in Europe. Professional status requires competence. **The purpose of CPD is to gain or maintain or regain competence.** Competence is composed of knowledge, skills and attitudes (KSAs). The FEANI guidelines on CPD state: "To maintain and develop their professional competence, individual engineers are encouraged to recognise the importance of CPD for their career, employability and mobility, as well as, their professional satisfaction and well-being at all ages and stages throughout their career." The connection between CPD and progression in the European Qualification Framework is crucial for engineers to maintain or to improve the professional qualification.

The importance of CPD is further recognised at a national level in many of FEANI's member organisations. Also, generally, leading employers internationally place great importance on training, learning & development. A recent, major, global study (*What Great Companies Do Differently, Harvard Business Review, 2011*) highlights the distinct advantage which "robust learning systems" confer on consistently high-performing organisations.

At the level of FEANI, its member organisations, the national economies of Europe, engineering-led employers within Europe and also, for individual engineers themselves, we can see that CPD is a topic worthy of focus.

For considerations by FEANI EMC

It is desirable that FEANI is seen to be impactful in terms of bringing about positive outcomes as a result of its guidance, direction and actions on the CPD front. The CPD Working Group has been asked to propose projects which will allow for impactful outcomes.

1. Employer CPD standard

Internationally, after graduation, the preferred environment for CPD for engineers to be encouraged and facilitated is through the employer organisation (e.g. in industry). Engineers Ireland has led a national CPD employer programme since 1999. The programme has been extended to Portugal, Romania, Slovenia and Slovakia through a pilot Leonardo programme beginning 2010. This pilot has underscored the high degree of transferability of the CPD Employer standard and its value to engineering employers.

Recommendation: Investigate how FEANI could increase its relevance to leading engineering employers across European industry through promotion of a CPD Employer standard. Ultimately, FEANI could be a world-leader by creating and agreeing an EU CPD Employer standard, much like an ISO standard. This could be very usefully matched to the Engineering Card initiative and Eur Ing.

2. Promotion of understanding of CPD generally

To varying degrees, different national organisations currently promote and encourage CPD. FEANI has CPD guidelines. It appears that there is wide variance among FEANI partner organisations with regard to best-practice (based on best-evidence). FEANI should be a thought-leader in this space providing, in tandem with Item 1 above, a few key templates for member organisations to disseminate.

Recommendation: Explore how FEANI might best assist member organisations to improve their CPD guidance, education and support materials for individual engineers. One example is the support of FEANI members through a CPD personal plan model with training accounting rules, recording e-portfolio and template for 5 year plan.

3. Programmes/Courses

While FEANI provides guidance on CPD matters, it does not directly provide CPD courses or programmes. Clearly, there are a number of 'generic' CPD topics which would apply exactly the same across FEANI partner countries. However, 'technical' topics may be subject to individual national laws, annexes and regulation.

Recommendation: Ascertain how FEANI might 'approve' certain events that are running in order that a FEANI badge of worthiness might accompany the event where content is: (i) tailored/suitable for professional engineers, (ii) learning outcomes are clear and evaluated, (iii) delivered by suitably qualified professionals.

4. Innovations in CPD at EU level

A number of developments spearheaded by the EU Commission agencies are relevant to FEANI, its member organisations and their individual professional engineer members. These include **European Credit Transfer and Accumulation System (ECTS) and the European Qualifications Framework**. See <http://www.cedefop.europa.eu/EN/developing-lifelong-learning/index.aspx>

Recommendation: How can FEANI best act as a useful dissemination channel with regard to relevant changes and new initiatives which will impact engineering employers and individual engineers across Europe. FEANI could be a reference concerning CPD for engineers in Europe in terms of developments and examples.