

Daete2: Development of Accreditation in Engineering Training and Education

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INTRODUCTION

The objectives of the extended abstract are: To share tools for Continuing Engineering Education (CEE) Management, specifically to share those tools based on the EFQM model in the context of CEE management, tools for self-evaluation, tools for strategic planning and tools for CEE benchmark. The questions that are addressed are: Definition of indicators that define the criteria for self-assessment of CEE; Proposal of procedures for benchmarking results; Strategic analysis of performance of CEE centers.

BACKGROUND

This extended abstract presents as main aim to share different self assessment of tools and methodologies adapted from the industry to the management of CEE centers. The model chosen is based on the adaptation EFQM (European Foundation for Quality Management – website: www.efqm.org) tools. The research was carried out in the project DAETE (Development of Accreditation in Education and Training in Engineering – website: daete.up.pt). The first edition of the project was an example of cooperation between European and North American universities of the program Atlantis subsidized by the European Commission and by FIPSE. It was implemented between 2006 and 2008. The second edition of the project started in 2010 and will last for two years.

OBJECTIVES

The objectives of the DAETE project were to present among the partners the experience and practices of the participating institutions in quality management for CEE, to analyze and debate models that could be used taking account the different experiences on both sides of the Atlantic, to produce guidelines advisable for quality assurance and accreditation, to test the recommendations and to adapt the guidelines to the feedback results. The activities consisted in presentation of experiences and case studies in the area of accreditation and

quality assessment of engineering education and training, joint meetings of partners to discuss the models and strategies, evaluation by partners from US and EU in three conferences (one European, one American and one worldwide) and test the model within the organizations active in CEE. There was a project external evaluation allowing a formative judgment of the project.

BENEFITS

The principal benefit of this project was a reliable method to improve the strategy of quality management of CEE centers. There are other impacts that also deserve consideration like the development and acceptance of common methods of quality evaluation that will facilitate the recognition between EU and US CEE. The promotion and dissemination of the project outputs are being done by the partners of the project trying to involve other organizations and associations in the application of the proposed methods.

WORKING TOGETHER

Another added value of this transatlantic cooperation can be measured under two perspectives. The first perspective is related to the sharing the experiences of the partners on EU and US concerning the quality assessment of CEE. In effect the environments that framed the progress of this area have been different in these two regions. In Europe the research and development about quality evaluation of CEE has been based on joint projects supported by the EU funding. In the US the quality assessment has been developed using market analysis and the activities of organizations like UCEA (University Continuing Education Association). These two lines of action have created different management styles and benchmarks that were analyzed together by the partners and by other participants in the three CEE conferences. The CEE centers of this project have worked closely to extract the benefits of the differences existing in theories and in the implemented practices.

FUTURE

The ongoing project DAETE2 will provide a single framework that will cover the following aspects: training, self evaluation, benchmarking and external evaluation. The project is related with the activities of IACEE (International Association for Continuing Engineering Education- website: www.iacee.org). It is adopted by IACEE as the IACEE framework for quality management. This framework will combine the integration of existing tools (like the DAETE matrix) with the creation of new ones. By this it will be covered all the different necessities of CEE centers regard to quality management promoting, at the end, a continuous improvement philosophy. The project envisages the extension to centers of Lifelong Learning (LLL) in general since most tools and methods are not dependent on the discipline of Engineering. It is also considered the creation of a network to centers and universities that are interested in improving the quality of LLL. Therefore visit the project website and experience the tools and methods available: daete.up.pt. If interested in joining the network then contact the project coordinators.

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