

Application of IACEE Quality Program in Priority-Driven Strategic Planning of a Restructured Continuing Professional Education Department, Part I: Systematizing Business Processes



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ABSTRACT

University of Kansas Continuing Education was reorganized and restructured in 2011 to adjust to a change required by the University's central administration. While more revenue generation and cost recovery apparently seemed to be the imminent priorities, a long-term strategic planning was necessary for continuity in self-sustainment. Initially, standard strategic planning tools with Balanced Scorecard approach and Baldrige Performance Excellence Program for Higher Education were considered, however the simplicity and relevance of International Association of Continuing Engineering Education Quality Program (IQP, formerly known as Development of Accreditation in Engineering Training and Education or DAETE project) and applicability of the self-assessment tools in this specific situation made it a choice for long-term strategic planning and addressing immediate business priorities. As a first step of this planning, self-assessment of the present leadership, people, partnerships and business processes in the light of financial and societal outcomes were necessary. The entire leadership team and the staff in some units assessed the organization using the assessment tools of the IQP Enablers and Results. The IQP sub-criterion statements were slightly modified to suit the specific needs of this continuing education division. The self-assessment revealed several problems in the overall business process management; there was a lack of standardized processes. This paper reports the systemization of the business processes (financial, contractual, marketing, information research and analysis, and reporting) based on the findings of the self-assessments. The

executive leadership team worked with each business service unit and the program units, and developed standard processes, flow charts and project management systems for desired results. This is the first part of a series of three reports on the strategic planning process using IQP at this continuing education department. The second part will focus on the new program development efforts and third report will be on building strategic partnerships.

Keywords

Strategic planning, IACEE Quality Program, performance measurement, operational processes, organizational transparency, operational efficiency

1. INTRODUCTION

Based in Lawrence-Kansas, USA, University of Kansas Continuing Education (KUCE, www.ContinuingEd.ku.edu) provides post-graduate non-credit professional development and lifelong learning opportunities for the working professionals including engineers, educators, attorneys, law enforcement professionals, fire fighters, doctors, and health and public safety officials. Its customer base includes 105 Kansas counties, 50 U.S. states and 52 foreign countries. Until May 2011, KUCE also housed Independent Study and Distance Learning unit that provided credit-based academic courses and was one of the major sources of net revenue for the division. The other sources for financial sustainability have been aerospace and other engineering short courses, engineering conferences and some non-credit educational programs, and state funding for Kansas Fire and Rescue Training Institute and Kansas Law Enforcement Training Center. In May 2011, in response to the Kansas Board of Regents' recommendations on online learning, the University separated the Independent Study and Distance Learning unit from KUCE and rolled out into a stand-alone Center for Distance and Online Learning, thus eliminating one of the largest sources of revenue for the Continuing Education Division. This incident, obviously, forced the KUCE leadership team to concentrate on immediate business priorities geared toward creating resources for financial sustainability.

As the leadership team worked on the possibilities for revenue generation, it was clear that the division needed more than a short-term goal; it needed a long-term strategy for improving quality, striving for excellence and a sustained impact on society. Although the division had no formal strategic plan for years, individual units had adopted their own business plans and sustained themselves through the above funding sources. However the individual goals and objectives prevented the units from sharing a common vision; further, the lack of consistency in business processes across the units resulted in complexity in communicating and reporting to the University. Clearly, the entire division needed a change in strategic direction with a "sense of urgency" (Kotter, 2007 [1]) in communicating the change to the employees. The division needed a self-assessment process to find out where it was and where it would like to go in future, and finally it would need to know how it would go there. This strategy would need to be aligned with the strategic mission and vision of the University of Kansas. The division also needed to implement a performance measurement system, that would be aligned with the University systems and would consistently and continuously monitor the performance of the people and processes, and would modify the

direction, as needed. The standard strategic planning templates followed in business, non-profit organizations and academia did not answer specific questions that the leadership team or the employees had. Although several strategic planning examples for continuing education divisions or university extensions, such as Purdue University Continuing Education [2], across United States were available, it was found that there was no “one size fits all” and each case was different. Therefore, it was decided that several available tools for strategic planning that could be tailored to meet the needs of KU continuing Education would be evaluated. A major criterion was that it should be applicable to a continuing education provider, and it should also provide a method for self-assessment.

This paper describes the step-by-step approach taken to assess three of the many tools that are available and reports the first part of the planning process. The description also includes the roadblocks that were overcome, and when and why changes in the planning process were introduced.

2. REORGANIZATION AND RESTRUCTURING

PRELIMINARY ORGANIZATIONAL ASSESSMENT OF THE DIVISION

It was the job of the KUCE Executive Director to reflect upon the change initiated by the elimination of a revenue-generating unit and lead to a planning process that would recreate and rebuild a sustainable continuing education unit with special emphasis to professional engineering education, which would directly contribute to the state of Kansas’ economy, and national and international collaboration. This could not have happened without reevaluating the successes and the failures that the division had in past, and the reasons behind each success and failure. DiPaolo and Marca (2008, [3]) had once mentioned, “The hallmark of an effective continuing engineering education (CEE) organization is to carefully review successes and failures to glean insights and to evolve and refine strategy.” KUCE and specifically the revenue funded engineering professional education units were no exception. Preliminary evaluation of the organizational structure revealed that there were several flaws existing in the division:

1. The revenue funded units were not organized by the category of professional education provided (Figure 1);
2. The people associated with each unit were not assigned to the jobs based on their knowledge, skills, ability and strengths;
3. The contractual, budgeting and reporting systems were not standardized and consistent across the division;
4. The units were working separately – each one had its own mission and goals – and there was no team approach even within the revenue-funded units.

However, some units worked better than other in reaching across the world and being financially sustainable. Also, operating processes in some units could not be changed due to state funding criteria.

The first step, therefore, was to:

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1. Categorize each type of professional education and statewide outreach and group similar activities, and reorganize the units; and
2. Reassign people to appropriate jobs based on the talents (knowledge, skills, activity, strengths and weaknesses)

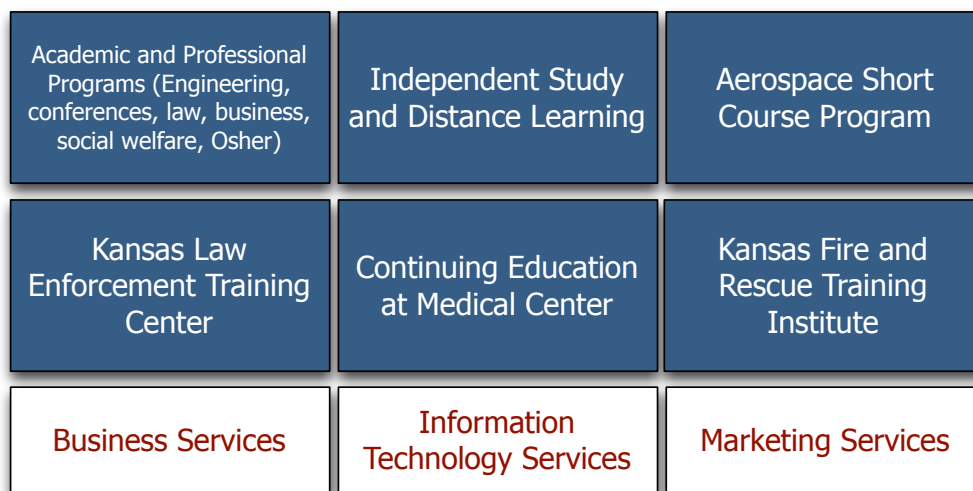


Figure 1. Previous unit structure of KU Continuing Education Division, before the revenue funded Independent Study and Distance Learning unit was separated and Academic and Professional Programs unit was a mixture of several unrelated activities

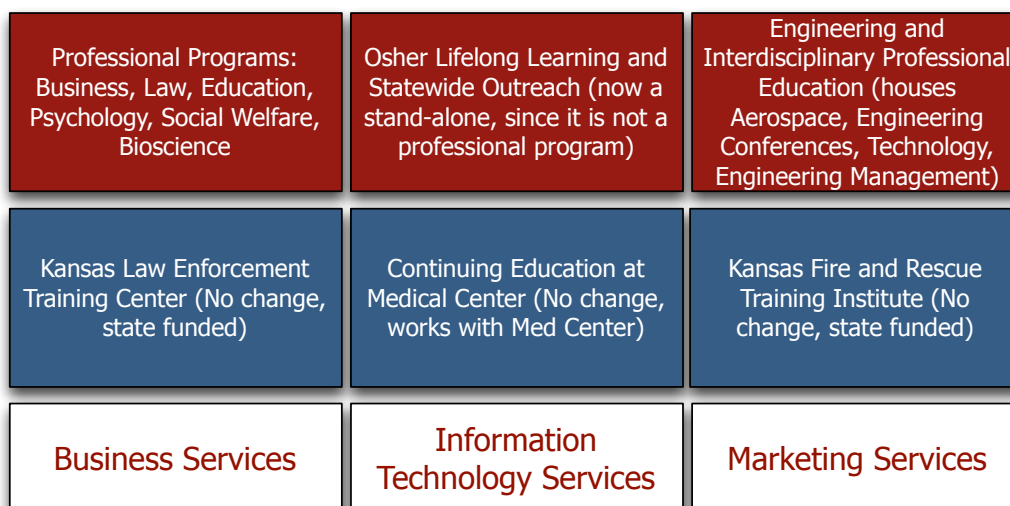


Figure 2. Present unit structure of KU Continuing Education Division, changes were made to categorize program and group similar activities

NEW CATEGORY-BASED ORGANIZATIONAL STRUCTURE OF KU CONTINUING EDUCATION

The new organizational structure (Figure 2) shows the grouping of all non-credit engineering, engineering management, engineering technology and engineering conferences with newly introduced interdisciplinary engineering short courses into a professional education unit. The other revenue funded subunits for business, law, education, psychology and social welfare were rolled into another professional education unit. The second unit also established collaboration with the KU Medical Center Continuing Education through bioscience short courses for the regional biotech companies. The employees were redistributed based on where they will best fit.

REDEFINING THE WORK

Organizational change is never easy for the employees who are directly affected. Many of the KUCE employees were initially unable to cope with the change in their position duties or the reorganization of their units. The first month after restructuring was spent on communicating the reasons and urgency behind the change, and what performance indicators might be used. It was also realized by the executive leadership that to implement a structured work process, a bottom-up approach where team members define the systems and processes within the legal and financial framework of the University (and thus own the processes) would be more effective. The leadership would insure that the University policies were strictly followed. However, the unit members needed to evaluate the existing systems and the processes, and they also needed to share their thoughts with the leadership. Further, the leadership needed to know whether it was communicating the vision and strategy of the division to each employee and what it should do improve the communication process. Lastly, a clear path for excellence had to be established.

3. AVAILABLE STRATEGIC PLANNING TOOLS AND THEIR APPLICABILITY

As indicated in the Introduction section, many strategic planning tools were considered, however, the following three were found to most relevant:

1. Balanced Scorecard Approach
2. Baldrige Performance Excellence Program
3. International Association for Continuing Engineering Education (IACEE) Quality Program Tools

Balanced Scorecard approach, introduced by Robert P. Kaplan and David P. Norton in 1992 [4], uses a set of measures that permit an integrated view of business performance and supplements financial performances with three other perspectives – customers, internal business processes and learning and growth of the people in the organization – and creates a continuing performance measurement indicator [5]. Kaplan and Norton's method (Figure 3) has been widely used in higher education [6,7] and has been able to carry the essence of large organizational performance measurement process to academic setting. Although overall this integrated approach was what KUCE was searching for, implementation of

Balanced Scorecard would require designing a completely new set of specific questionnaires for self-evaluation for this continuing education organization.

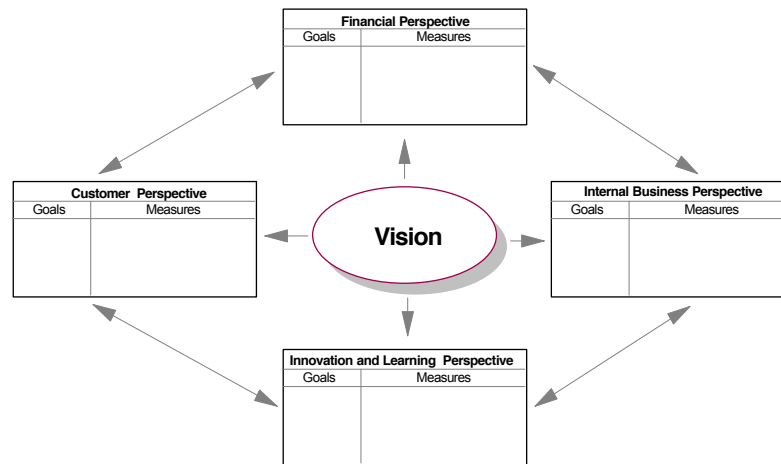


Figure 3. The Balanced Scorecard. Source: Robert S. Kaplan and David P. Norton, 1992 [4]

Baldrige Performance Excellence Program (www.nist.gov/baldrige), used in both private and public sector including higher education organizational performance measurement and the journey toward excellence uses specific questions for self assessment of organizations and is more suitable for university extensions or continuing education divisions. While web-based tools could be customized to some extent to fit our needs, it was not a turnkey system that could be directly used for KUCE.

The third choice was the IACEE Quality Program (IQP, formerly known as Development of Accreditation in Engineering Training and Education or DAETE project) toolset that established self-assessment matrix especially suited for continuing education activities [8, 9]. The matrix is based on the European Foundation for Quality Management™ (EFQM®) model (Figure 4) that allows the lifelong learning organizations to clearly focus on five Enablers criteria and four Results criteria of the continuing education activities. The self-assessment matrix also is extended to a benchmarking process that enables each CE organization to compare itself with similar organizations. While benchmarking capability was an added attraction, the primary reason behind choosing this tool was its simplicity and relevance to the needs of KUCE.

4. USE OF IQP TOOLS IN STRATEGIC PLANNING FOR KUCE

The five Enablers in the IACEE Quality Program Self-Assessment Matrix are Leadership, People, Policy and Strategy, Partners and Resources. The four Results criteria include

Customer Results, People (Staff) Results, Society Results and Key Performance Results. In order to build our vision (how we visualize our organization and how we would like to see us perform) and mission, we used each of the sub-criteria of Results and identified our goals. We self-assessed our leadership, partnership, policies, strategies, people and processes once before the restructuring and reorganizing, and based on our assessments, we assigned people in different positions with modified job duties. Except for the executive leadership team, we did not make any change in leadership and did not make any changes in partnerships. However, the processes needed a complete overhaul in order to facilitate communication and follow-up with existing partners, and to implement the strategies and policies. In other words, if the processes could not be systematized, we would not be able to retain our partnerships, or achieve the desired customer results or implement and adhere to the policies that the University has.

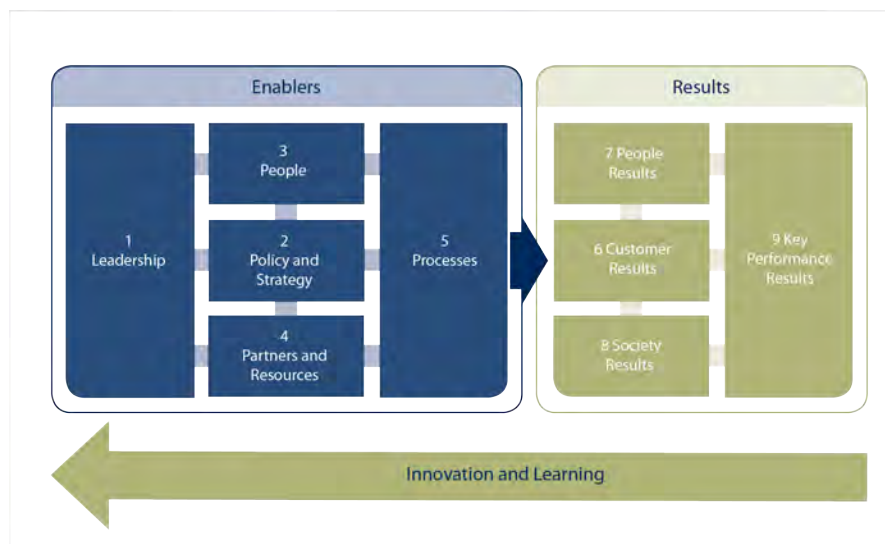


Figure 4. European Foundation for Quality Management™ (EFQM®) model 2003, the foundation of IACEE Quality Program self-assessment model for quality management [10,11]

5. SELF-ASSESSMENT AND SUBSEQUENT WORK

To fit to the needs of people engaged at KUCE, some of the sub-criteria statements were changed to specific questions which were directly asked to the professional education units (Engineering and Interdisciplinary group; Business, Law, Education, etc. group) staff in a two-day retreat. Representatives from the supporting units (IT, marketing and business office) also attended the retreat. Engaging and sometimes confrontational discussions took place when each of these questions were asked, however, the participants of the retreat were able to reach consensus on:

(1) What they would like to see in leaders, communication methods, processes, customer

results and staff results

(2) Where KUCE was (in a scale of 1 to 5)

(3) What we should do to reach 5 in the scale for the pertinent sub-criterion

(4) How we would do it.

In Table 1 (see next page), we have shown examples of some of the sub-criteria of the Enablers or Results in consideration, specific questions that were asked, levels that the professional program staff assigned to each sub-criterion, what vision the staff had for each sub-criterion, what action was taken to reach a higher ranking in that sub-criterion, and at what stage we are now in this journey toward excellence.

As a result of the self-assessment, KUCE professional education units formed five specific Work Groups: Program Development, Conference and Program Management, Information Technology and Online Delivery, Marketing and Publications, and Business Processes (that includes financial processes). Each Work Group included members who worked on developing action plans and timelines for reaching the objectives and achieving specific, measurable goals. The Work Group members met once a month to review the action plans and worked with other Work Groups to communicate the information.

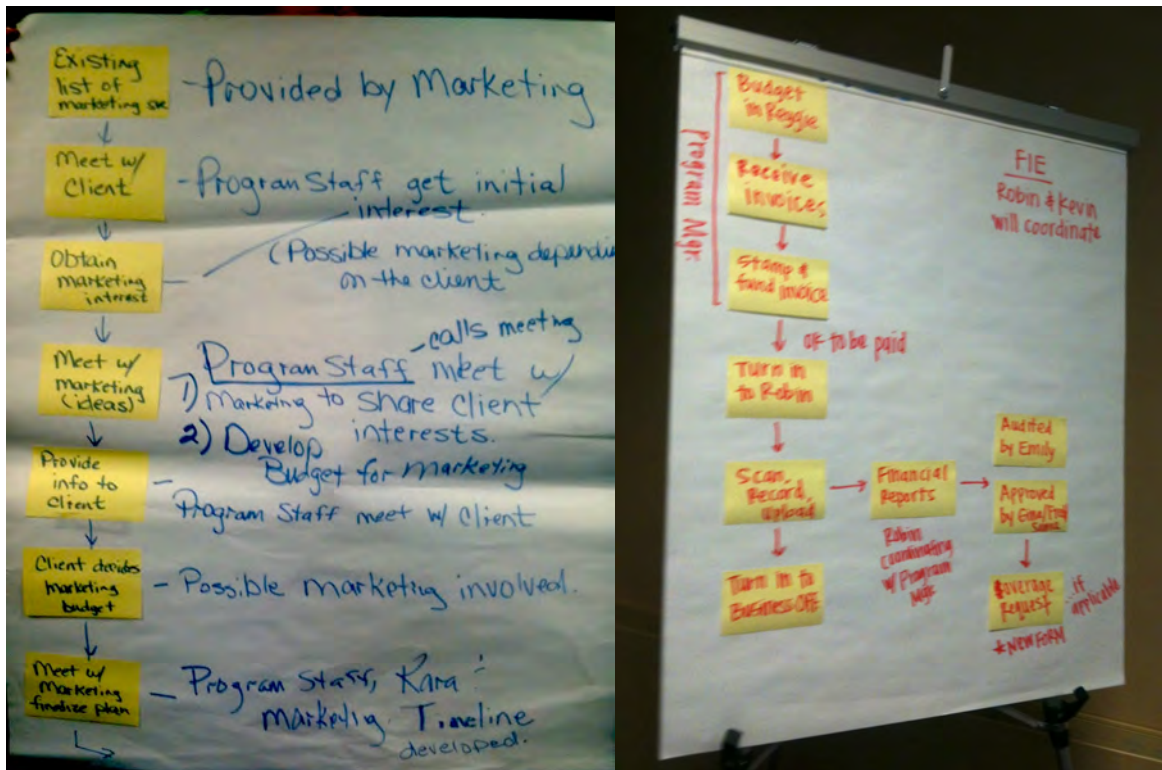


Figure 5. Business processes for marketing and financial reporting as developed during staff retreat. These were converted to appropriate business process flowcharts that were consistent with the University policies and guidelines.

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TABLE 1: Self-Assessment Examples

| IQP Sub-criterion | Question for the Staff | Vision (where we want to be) | Where we were | Levels assigned by the staff | Action taken |
|--|---|---|--|------------------------------|---|
| 2c. Designing, communicating and validating the strategic plan | Does the leadership/management communicate the vision or strategic plan for future? | Need more definition and explanation of the shared vision. | Information dissemination was lacking. | 2 | The Leadership Team designed a communication method. |
| 5b. Program design and delivery | Is there a set Process to design and deliver a conference? What information should we gather? | As soon as we are requested for a conference, we know what to do, assess our workload and set a project management system. | Checklists, templates are missing, no defined process, workload assessment and therefore professional fees vary. | 2 | A Work Group was formed for Conference and Program Management which designed templates, checklists, procedural methods. |
| 5d. Communication and Promotion | What marketing tools are we using? What should be our process to develop a marketing strategy for a conference or course? | Aware of all the marketing tools that we have; Marketing Department works with us. | No set or defined communication procedure for contacting marketing staff, need streamlined workflow. | 3 | Marketing and Publication Work Group designed a communication process for marketing (see Figure 5). |
| 5f. Administrative and Financial Management | Do we know all our financial processes? Is the financial management software working for us? | We want to see all financial information available in a user-friendly dashboard. We would like to in real-time on how we are financially doing. The business managers will be in-charge of the business processes and financials, and not the program managers. | The present system does not allow all documents to be attached. Program managers are keeping all the records whereas business managers should do. This is resulting in confusion and inconsistency | 1 | The Business Process Work Group is designing a standard budgeting system for program managers, program managers are linked with business managers, business managers are responsible for all recordkeeping and a tested financial model for aerospace program is being implemented. |

The most important outcome of the self-assessment process was that the staff members redefined the processes followed at KUCE. The processes had to adhere to the University and the State of Kansas policies, and the to legal and financial framework of the University. Through engaging discussions by the participants, flow charts were drawn for each major process (two samples are shown in Figure 5), which the relevant Work Group later converted into an electronic business process work flowchart. At this time, the Work Groups are implementing required changes to the processes.

6. CONCLUSIONS & RECOMMENDATIONS

Among all the self-assessment, performance management and strategic planning tools available, IACEE Quality Program self-assessment matrix was best suited for the strategic planning and management of University of Kansas Continuing Education. The self-assessment questions clarified our vision, recreated a team environment, brought transparency in communication, structured the business processes and charted a clear path toward excellence. The IQP tools provided us the opportunity to become self-aware of our present status in each sub-criterion, and we charted our own future.

We now have standard reporting and budgeting systems, templates for contractual processes, flowcharts for export control and copyright compliance, flowcharts for marketing, publication, program development and conference management. We are developing a framework for online non-credit course delivery and web-based project management process. Our deadline for the completion of process overhauling is June 30, 2012. As we move to the new fiscal year, we will concentrate on program and partnership development, and will report in subsequent presentation. Further work will involve benchmarking our organization against other similar organizations.

REFERENCES

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- [1] Kotter, John P. (2007). *Leading Change: Why Transformation Efforts Fail*. Harvard Business Review, January, p. 96-103
- [2] Purdue University Extended Campus Strategic Plan (2009)
[tps://www.cec.purdue.edu/docs/2009-2014%20Plan%20Booklet.pdf](https://www.cec.purdue.edu/docs/2009-2014%20Plan%20Booklet.pdf)
- [3] Dipaolo, A. and Marca, P. (2008) *Going Global: How to develop your continuing education strategy for a world without borders*. World Conference on Continuing Engineering Education, Atlanta, USA.
- [4] Kaplan, R.S. and Norton, D. P. (1992). *The Balanced Scorecard - Measures That Drive Performance*. Harvard Business Review, January-February, p. 71-79.
- [5] Kaplan, R. S., & Norton, D. P. (1996). *Strategic learning and the balanced scorecard*. Strategy and Leadership, 24, 18–25.

[6] Ruben, B.D (1999). *Toward a Balanced Scorecard for Higher Education: Rethinking the College University Excellence Indicators Framework*. Higher Education Forum, Center for Organizational Development and Leadership, Rutgers University.

[7] Karathanos, D. and Karathanos, P. (2005). *Applying the Balanced Scorecard to Education*. Journal of Education for Business, March-April, p. 222-230.

[8] International Association for Continuing Engineering Education Quality Program
<http://www.iacee.org/projects.php>

[9] Development of Accreditation in Engineering Training and Education [2] website,
<http://daete.up.pt/>

[10] DAETE[2] project (2011). *A self-Assessment Model for Quality Management and Organisational Development for Continuing Education*. ISBN: 978-0-615-55862-2

[11] European Foundation for Quality Management Website. <http://ww1.efqm.org/en/>