Assessment, Review, and Evaluation of the Project Management Education and Training Portfolio

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The paper presents a portfolio approach that facilitates strategic planning for education programs and trainings, and guides the operational activities. The portfolio approach assures a holistic view of all education programs, and trainings delivered by the organizer, assuring that all education programs are aligned with the strategy and the selection and assessment of the new and ongoing education investments are made properly. The roles and responsibilities, and other organizational issues related to the portfolio management are presented. An important part of the paper deals with the education programmes evaluation. The paper addresses this issue using a case study developed for the Academy of Economic Studies is finally discussed.

INTRODUCTION

The Academy of Economic Studies (AES) is a national university. The education and training programmes are delivered based on a public budget, coming from the Education and Research Ministry, and also on its own resources. It also has freedom and autonomy according the law. AES is considered a remarkable representative of superior economic studies in Romania. The university has 10 faculties, over 49,000 students and course attendants; 35500 – graduation cycle, 9400 – master programmes, 2500 – PhD enrolled, over 1600 in academic schools and post-graduation courses and 2000 didactic staff and technical and administrative personnel.

In 2009-2010, AES will deliver more than 192 education & training programmes, 12 of them having Project Management as specialization ([AES 2009]). More than 80% of the education & training programmes have PM topic included as disciplines or modules (see Table 1).

<table>
<thead>
<tr>
<th>AES Education &amp; Training Programmes</th>
<th>Total Number</th>
<th>PM Programmes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor’s degree in Economics</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>Continuing education (Trainings)</td>
<td>75</td>
<td>6</td>
</tr>
<tr>
<td>Scientific Master’s degree</td>
<td>29</td>
<td>1</td>
</tr>
<tr>
<td>Professional Master’s degree</td>
<td>46</td>
<td>4</td>
</tr>
<tr>
<td>International Master’s degree</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>Online Professional Master’s degree</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Doctor’s degree</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>192</td>
<td>12</td>
</tr>
</tbody>
</table>

Table 1 AES Education & Training portfolio for 2009-2010
AES mission

AES promotes the economic values, the administrative and judicial ones, together with the science and universal culture values. Its commitment is to achieve excellence in economic education, and so to ensure the next generation of economists and administrative specialist is fully prepared for success on the workforce market. Based on competencies high level and responsibilities that AES has for the Romanian nation, it has the following goals in his mission:

a) to educate and train qualified and high qualified personal for the economic, administrative and social domain;
b) to promote free mind and critical spirit and the spirit of economic, juridical, and administrative knowledge;
c) to continue develop the scientific research within economic, judicial and administrative domain, being connected with institutions of the same kind from the country and from all over the world;
d) to develop programs regarding entrepreneurial activity;
e) to promote the human culture and civilization;
f) to defend the democratic academic framework based on fundamental liberties and human rights within a democratic state;

AES wants take a leading role in increasing the interest in economic, juridical, and administrative sciences, as few other academies and organizations can through its unique mission, workforce, facilities, research and innovations. AES is also taking a leading role to make significant impacts in engaging underserved and underrepresented communities in economy.

AES Education & training portfolio management – the framework

Higher education traditionally has evaluated itself in terms of inputs and resources rather than outcomes and amount of value added. In (Freed, Klugman, 1996) the measurement of resources determined quality, but the public is increasingly concerned about institutional performance and stakeholders’ satisfaction.

The AES’s education portfolio depends upon strategic planning across the University. To succeed in his mission, the University tries to ensure that workforce requirements are identified and met and the education efforts are aligned and focused on building the future workforce in the specific domain. That’s why it reaches the following priorities:

- to train specialists in economy having the specializations: business administration, cybernetic economics, accounting and management information, agro food economics, commerce economics, general economics, enterprise economics, environment economics, finances and banks, applied mathematics, management, marketing, international business, economic statistics and previsions, public administration and other according to national economy needs;
- to train specialists using programs that are using for teaching foreign languages;
- continuing education through programs like: master programs, PhD programs and postgraduate programs;
- developing fundamental scientific research and applied through faculties, research centers, laboratories and departments;
- entrepreneurial activities that contain consulting programs, special assistance, business incubators;
- recalling scientific performances of the academic community members by having organized reunions at national and international level;
- offer education for foreign students.

The AES charter contents the coordination framework that aligns the University’s total education portfolio with a strategic plan, provides a coordination structure, and creates a wide strategic planning implementation and evaluation framework for the investment in types of education of the University. The document builds on the education goals. Three of most important goals are:

a) strengthen AES leading role in promoting economist profession in Romania – University will identify and develop the critical skills and capabilities needed to achieve the vision for its specific domains. To help this demand, the University will continue to contributing to the development of the nation’s economy workforce of the future through a diverse portfolio of education initiatives that target Romanian’s students at all levels.

b) attract and retain students in economy, judicial and administrative disciplines – to compete effectively for the minds, imaginations, and career ambitions of Romania’s young people, AES will focus on engaging and retaining students in its education programs to encourage their pursuit of educational disciplines critical to University’s future, economic, judicial and administrative missions;

c) engage Romanians interested people in University missions – AES has already and will build more strategic partnerships and linkages between economic, judicial and administrative formal and informal providers. Through hands-on interactive, educational activities, AES will engage student, educators,
In addition to the university values and strategic management priorities, the AES education portfolio is established upon some operating principles to ensure programs alignment and excellence. The principles are integral to the conduct of, and apply collectively to, all AES education programs. They form the foundation for evaluation of both new and existing education investments. The AES applies the following operating principles:

- **Relevance**: To effectively strengthen the nation’s economic, judicial and administrative workforce, AES must implement activities that are useful to the education community and that strengthen their ability to engage students in the University activities and programs and in the future in the economic life of the society.

- **Content**: Education investments use University content, people or facilities to involve educators, students, and/or the public in AES activities and plans, technology, business experts, lawyer and people with a vast experience in practice.

- **Diversity**: AES strives to ensure that underrepresented and underserved students participate in University education and research programs to encourage more of these students to embrace a career in economic domain.

- **Evaluation**: Education investments document their intended outcomes and use metrics to demonstrate progress toward and achievement of these outcomes and annual performance goals. Evaluation methodology is based on models and techniques appropriate to the content and scale of the targeted activity, product, or program.

- **Continuity**: Projects and activities draw from the obtained results that have already demonstrated the efficiency of the programs University. Many projects and activities encourage continued young people affiliation with AES throughout their academic career.

- **Partnerships/Sustainability**: Education investments achieve sustainability through their intrinsic design and the involvement of appropriate local, regional, and/or national partners in their design, development, or dissemination. Key aspects of projects and activities are replicable, scalable, and demonstrate potential for continuation beyond the period of direct AES funding.

The management of AES’s education efforts allows through the portfolio approach a holistic view of all University education programs, projects, products, and activities as:

- Ensures that all education programs, projects, products and activities are aligned with the university strategic plan.

- Coordinates programs, projects, products, and activities in a broader context so that they work together to achieve AES’s education goals.

- Guides selection and assessment of new and ongoing education investments.

- Facilitates performance evaluation, assessment, and accountability reporting, as well as communication of program status within AES and to external stakeholders.

- Identifies programmatic gaps and/or redundancies and guides investment strategies.

- Aids in development of annual performance goals.

The management also tries to offer to AES students a good feedback about their activities and information about the opportunities that they might to attempt.
Mechanisms for Education & Training Portfolio Management in a Distributed System

Strategic management of the AES education portfolio requires the participation of the Educational Programs Department (EPD), faculties and departments of the University. This extensive participation provides broad education engagement with the economic content, people, and facilities. Close and effective consultation, coordination, and cognizance among all entities are critical to the optimal fulfillment of AES’s objectives relative to its education investment. A coordinated and effective university education portfolio requires clear roles, responsibilities and a very well-defined management processes.

Different authors addressed the education & training portfolio management issue, most of them proposing multi-criteria decision-making processes. In (Mustafa and Goh, 1996) we can find a comprehensive analysis of literature recommendations. (Politis and Siskos, 2004) proposed an educational portfolio evaluation model for enhancing the educational quality and internal organization of an engineering department inside of a Greek university. In (Caballero et al, 2001), a goal programming approach is proposed in assigning financial resources within a university system.

Education & Training Portfolio Management – Roles and Responsibilities

Vice-Rector (VR) is responsible for the Education Portfolio, reporting to the Senate and to Rector. The VR for Education supervises the Educational Programs Department and ensures the overall planning, coordination, and integration of the University’s entire education portfolio. According to results received from EPD the VR submit to University Senate proposals for decision. Based on these proposals, the senate provides integration and evaluation support to external stakeholders. EPD maintains a centralized database of all University education activities and coordinates the evaluation and assessment of education portfolio.

The Educational Programs Department (EPD) and Business Environment Relationships Department (BERD). The Educational Programs Department is responsible for ensuring compliance with external requirements and laws, processes, procedures, standards, audits, and accounting related to education. It also provides the leadership for coordinating education strategic framework, implementation approach, and policies. BERD assures that the programs are according to market needs and advises the EDP what must be changed. BERD also has relationships with External Stakeholders. The EPD and BERD provide national partnerships networks and infrastructure to disseminate AES education content and activities developed by the faculties, commissions, PRS, programs directors, departments and other education partners and collaborators. The integration and evaluation results are aggregated to demonstrate the total impact of AES education efforts and assessed to provide data to the stakeholders to improve the effectiveness of the overall education investment strategic framework.

Other university departments and internal stakeholders are responsible for embedding education components into their research and development programs.

Educational Suppliers: Faculties and Continuing Education Department (F&CED). Faculties and Continuing Education Department (CED) are responsible for implementing the university education programs, projects and activities. They plan and implement education programs that are unique and funded by their Pro-Deans, Deans and Program Directors. They are also responsible for execution of programs and projects and for institutional assets, provide expertise in state standards and requirements in their area of geographic responsibility and provide valuable field-based input into education program planning.

Education & training Programme Directors and Deans. Programme Directors and Deans are responsible for making and executing decisions within their authority. Accordingly, they have authority over the budgets, schedules, and human and capital assets for their programs.

External Education Implementing Partners. External Education Partners include organizations that implement education activities for the University. The implementing partners include contractors, academic institutions, business organizations, business centers and other outside entities. Most external education implementing partners are competitively selected and offer specific areas of expertise of use to the University (for example SIVECO Company).

External Audit Bodies (EAB). These institutions are used to perform regular performance evaluation at each level. They try to identify the problem areas and to discover opportunities for better management. Their actions lead the university to greater organizational effectiveness and guiding investment strategies.

University Senate and Specialized Committees. The university senate is a collaborative structure that maximizes university’s ability to maintain
an integrated education portfolio and strategically manage the implementation of numerous programs, projects and activities in a distributed system. They receive from external Reviewers information about what they have to change in their program. They also send a feedback to Educational Suppliers according to information received from External Reviewers. The management of education programs/projects complies with current AES directives on program and project management, processes, and requirements. The evaluation plans will measure intended impact and be scaled appropriately to the size of the investment—“one size does not fit all.” The Programmes Directors regularly monitor and evaluate the programs, and report the results of those evaluations to their funding organizations. The main tool for the education programmes evaluation is the student opinion survey. 

The figure 3 presents some examples taken from Computerized Project Management, one of the PM master degree programme (MIP 2008).

Figure 2 presents the main processes of the education & training portfolio management. AES success in implementing its education portfolio is determined by the university management ability to accomplish the proposed goals. It uses performance metrics, regular review processes, and defined tools to assess its performance at all level—portfolio, goals, and the individual program. It will be a direct connection between “Review and Validate” position, represented by the Faculty leader (Dean, Pro-Dean) and Educational Suppliers that handle the “Executing programs”. “Review and Validate” sends information based on information received from External Reviewers. This fact optimized the results send to Educational Suppliers. Effectual consultation, coordination, and cognizance among all entities are critical to the optimal fulfillment of AES’s education investment.

Education & Training Portfolio Management – Processes

Figure 2: The main processes of the Education & Training Portfolio Management

AES’s education portfolio is evaluated in some steps from the beginning of the process. First, an external reviewer evaluates the results of internal reviewer and valuator, then the activity of ADP, then the Senate and specialized commissions. After that, the last one sends a feedback to Educational Suppliers.

Education & Training Programmes Evaluation

The management of education programs/projects complies with current AES directives on program and project management, processes, and requirements. The evaluation plans will measure intended impact and be scaled appropriately to the size of the investment—“one size does not fit all.” The Programmes Directors regularly monitor and evaluate the programs, and report the results of those evaluations to their funding organizations. The main tool for the education programmes evaluation is the student opinion survey.

New modes of evaluation in contrast to traditional formats of evaluation indicate to students that their success depends not on how much (quantity) but rather on how well (quality) they have learned (Struyven K., Dochy, 2006 and Van der Schaaf, Stokking, 2008).

The figure 3 presents some examples taken from Computerized Project Management, one of the PM master degree programme (MIP 2008).
Review and Validate

The review and validation are made by the Educational Programmes Department. The tools used are:
A common database and format used with a very detailed information about the content of the education & training programmes (see figure 4) and required resources (academic staff and software). This database is used for the results interpretations and for further decisions.

Portfolio Assessment

In carrying out its role of assessing and guiding the total portfolio, the AES Senat and its committees have the ability to:

- Measure performance, including key performance indicators and metrics.
- Monitor ongoing status of operations, events, and resources.
- Set overall performance goals for the University.
- Establish measures and criteria for monitoring progress.

Ask input from external reviewers on the status of the overall portfolio and future trends/needs in economic education related to AES’s workforce needs.

Figure 3: Evaluation of the Computerized Project Management master degree programme.
CONCLUSIONS

The success of AES’s education portfolio depends upon strategic planning across the University. Strategic management of the AES education portfolio requires the participation of the Educational Programs Department (EPD), faculties and departments of the University.

In addition, a new direction indicated in (Rauner and Maclean, 2009) established for national and international education and research institutions are the vocational education and training research. The interest in these is a consequence of the direct connection of them not only with education policy, but also with economic and market policy. That is why AES wants in the future to introduce also these elements in his portfolio.

This extensive participation and this market adaptive management provide broad education engagement with the economic content, people, and facilities. Close and effective coordination among all entities are critical to the optimal achievement of the AES’s objectives relative to its education investment. A coordinated and effective university education portfolio requires clear roles, responsibilities and a very well-defined management processes.

REFERENCES


Rauner F., Maclean R., (2009), Handbook of technical and vocational education and training research, Publisher Springer.
Seldin P., Miller E., (2008), The academic portfolio: a practical guide to documenting teaching, research, and service, Publisher Jossey-Bass.
Dietz M., (2007), Designing the school leader’s portfolio, Publisher Corwin Press.
Freed J., Klugman M., (1996), A culture for academic excellence: implementing the quality principles in higher education, Publisher Jossey-Bass
Imhof M., Christin Picard C., (2009), Views on using portfolio in teacher education, in Teaching and Teacher Education. No. 25, pg 149–154, Publisher Elsevier.
Van der Schaaf M., Stokking K, Teacher beliefs and teacher behaviour in portfolio assessment, Teaching and Teacher Education 24 (2008) 1691–1704, Publisher Elsevier
Struyven K., Dochy F., Janssens S., Schelfhout W., Gielen S., The overall effects of end-of-course assessment on Student performance: a comparison between multiple choice testing, peer assessment, case-based assessment and portfolio assessment, in studies in educational evaluation, nr. 32 (2006), pg 202-222, Publisher Elsevier.