Curriculum Reform for Business-Management Programs at “Lucian Blaga” University of Sibiu, Romania

Dan-Maniu DUSE and Charles FRANZ

Tel: 0040-69-211083, Fax: 0040-69-210298, prodid@univ.sibiu.ro
2 College of Business and Public Administration, University of Missouri, Columbia, USA
Tel: 001-573-882-2750 Fax: 001-573-882-0365 E-mail: FranzC@missouri.edu

Abstract: Starting from the Romanian-American cooperation program in the field of business management, the paper presents the main components of the program, the unfolded activities and obtained results.

The program marked as significant results the curricular reform for the study programs from the industrial business management school from the "Lucian Blaga" University of Sibiu. It is worth to mention the newly founded study programs: industrial business management, long-term courses (5 years), industrial management, master-type courses (1.5 years), manufacturing management, master-type courses (1.5 years).

During the six years of the cooperation there were many and rich results which accompanied the unfolding of the program, from which we can emphasize: the continuous increase of the candidates' competition factor for the study programs from the field of industrial engineering, curricular reform for the traditional study programs from the field of industrial engineering, creation of new study programs, creation of a powerful industrial business library at the "Lucian Blaga" University of Sibiu, creation of the Center for Education and Consulting for Industrial Business, development of the interest of faculty members from "Lucian Blaga" University of Sibiu for scientific activities in the domain of industrial business management.

Keywords: Education, Business-Management, Curriculum

1. The Romanian-American collaborative programs

Until 1989, the Romanian technical academic education, did not include combined economic and technical profiles. Rather, unequivocal priority was conferred to pure technical profiles and specializations. After 1990, new developments in curricula, fields of studies and study programs arose. The main stimulus for these changes was the radical decline of student interest in technical education and the inclination towards economic education. The modification of the state's economic structures contributed further to this new trend.

These factors, chronologically delineated, constituted the basis for the two collaborative programs in business-management between the University "Lucian Blaga" of Sibiu, Romania and the University of Missouri, Columbia, USA. The Romanian-American collaboration emerged through two programs, the first in the period January 1993 - August 1994 and second beginning in September 1994 through August 2000.

The new economic situation of Romania and the Sibiu region after 1989 expressed the necessity of economic decentralization and of sustaining small businesses. To reach this goal, it is necessary to surpass some limitations:
- the absence of an institution capable of assisting businessmen;
- the absence of business education;
- the lack of special facilities for business activities;
- the absence of credits with small interests;
- the need of university study programs with an industrial-business-oriented curriculum.

From the experience of countries with market economies it resulted that in order to develop the small and medium business sector it is necessary to build a specific organizational structure. Due to the professionalism and the experience of the American professors (in the first collaborative program), some very important points were identified in order to surpass the existing limits.

The bilateral Romanian-American programs meet the solutions to these problems. They were created especially to help the educational, research and consulting activities in industrial businesses.
To teach the new specialists, it was necessary to develop an Engineering-Business Management Department at the ULBS (Engineering School) and a lot of organizational activities of the new department: Student Career Services, establishing the curricula, training of the teachers.

The curricula must contain subjects orientated towards developing knowledge that is necessary in a market economy: Management, Finances, Human Resources, Small Business, Engineering Knowledge, Marketing, Micro-Economics, Consumer Behaviour, Informational Systems, Economic Legislation etc.

To develop activities which should stimulate business, consulting and research it was necessary to create a Education and Consulting Center for Industrial Business, as part of the University. This will help the new, but also the experienced companies.

2. Unfolded Activities

The activities of the program include:

a) building awareness of the Romanian-American collaborative program and of achievements of the “Lucian Blaga” University of Sibiu.

b) invitations to American specialists to Sibiu, for periods between 1 and 2 years, to monitor the program and perform activities like:
   • courses instruction in strategic management;
   • assisting small business center activities;
   • facilitating the development of the student business club;
   • assisting and managing the summer internship program;
   • organizing the consultancy training activities of the Center for Education and Consultancy for Industrial Business;

c) promotion of higher education reform in the field of business management in the University of Sibiu and in the National Education Ministry

d) consolidating the study program “Engineering-Business Management” and developing the master degree study program “Industrial Management”

e) strengthening of Engineering-Business Management department through following activities:
   • continuing training and specialization of the professors through courses and participating in post-university training in Sibiu and Columbia, USA.
   • strengthening and development of the personnel of the department through the employment of young staff, engineers and economists.

f) start up and development of the Education and Consulting Center for Industrial Business. Beginning with 1996 the stimulation and encouraging of the scientific research and consultancy activities was initiated, on technical-economic themes regarding technological transfer, feasibility studies, the development of organizations, market studies, product quality assurance standards and negotiating and resolving work conflicts.

g) developing a vast promotional program aimed at presenting the scientific results in the field of business management achieved by the participants at the Romanian-American collaboration program.

h) submitting an official proposal, as a grant request, to the National Education Ministry, the National Council for the Financing of the Higher Education, for developing the masters degree study program "MASTER - INDUSTRIAL BUSINESS".

i) creation and development of professional services for the students through:
   • the creation of the students’ business club, “University Business Association”, UBA,
   • the creation of the Students’ Career Office,
   • the organization of the "Summer Internships Program"
   • the "Executive-in-Residence” program.

j) implementing the university management program at department, school and university level in the ULBS, through the organization of business management courses at Sibiu and Columbia.

k) developing permanent collaboration and services relationships with the local community:
   • developing case studies and marketing research for companies and cultural institutions from Sibiu county and surroundings.
   • Sibiu and Columbia have become sister cities, according distinctions and honors to public representatives (mayors) and to the American administrator of the program, Dr. Charles Franz;
• the organization of courses for school administrators for the improvement of their training in education management.

3. Achieved Results

The results achieved during the program are remarkable, given the mentioned activities:

3.1 The consolidation of the study program “Industrial Business Management” at the “Lucian Blaga” University of Sibiu.
3.2 The curricula

In the economic development the engineering and business informations form a fundamental duality, the economy being incapable of living without both components, because each product has two dimensions: an economic one and a technical one. In consequence, the professional qualification of the engineer and of the economist are complementary.

The professional qualification given by this mixed specialization is building an interface between the two areas. The graduate of this study program can become an “orchestra-man” who can solve without special efforts technical and economic problems from the entire system.

Table 1 Presentation of the curriculum for “Industrial Business Management”

<table>
<thead>
<tr>
<th>Disciplines</th>
<th>Nr. of hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fundamental Disciplines 17.67 %</strong></td>
<td></td>
</tr>
<tr>
<td>• Mathematics</td>
<td>126</td>
</tr>
<tr>
<td>• Descriptive geometry and technical drawing</td>
<td>84</td>
</tr>
<tr>
<td>• General economics</td>
<td>56</td>
</tr>
<tr>
<td>• Computer programming, statistics</td>
<td>280</td>
</tr>
<tr>
<td>• Physics</td>
<td>42</td>
</tr>
<tr>
<td>• Civil and commercial law</td>
<td>56</td>
</tr>
<tr>
<td><strong>Complementary disciplines 7.63%</strong></td>
<td></td>
</tr>
<tr>
<td>• Foreign languages (English)</td>
<td>224</td>
</tr>
<tr>
<td>• Professional communication</td>
<td>42</td>
</tr>
<tr>
<td><strong>Speciality &amp; profile disciplines E 40.16 %</strong></td>
<td></td>
</tr>
<tr>
<td>• Materials science and technology</td>
<td>182</td>
</tr>
<tr>
<td>• Mechanics and materials strength</td>
<td>168</td>
</tr>
<tr>
<td>• Mechanisms and machine parts</td>
<td>84</td>
</tr>
<tr>
<td>• Tolerances and dimensional control</td>
<td>56</td>
</tr>
<tr>
<td>• Applied hydraulics, technical thermodynamics</td>
<td>126</td>
</tr>
<tr>
<td>• Electrotechnics, electronics, automation</td>
<td>98</td>
</tr>
<tr>
<td>• Computer aided design and manufacturing</td>
<td>70</td>
</tr>
<tr>
<td>• Machine manufacturing processes</td>
<td>336</td>
</tr>
<tr>
<td>• Machine-tools and flexible systems</td>
<td>280</td>
</tr>
<tr>
<td>• Company economy, economic analysis, international economic relations</td>
<td>154</td>
</tr>
<tr>
<td>• Finances and accounting</td>
<td>112</td>
</tr>
<tr>
<td>• Fundamentals of management and marketing</td>
<td>168</td>
</tr>
<tr>
<td>• Organisational theory</td>
<td>42</td>
</tr>
</tbody>
</table>
### Disciplines

<table>
<thead>
<tr>
<th>Disciplines</th>
<th>Nr. of hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information systems for management</td>
<td>56</td>
</tr>
<tr>
<td>Money, banks, investments</td>
<td>182</td>
</tr>
<tr>
<td>Human resources management</td>
<td>56</td>
</tr>
<tr>
<td>Production systems management</td>
<td>126</td>
</tr>
<tr>
<td>Strategic management</td>
<td>112</td>
</tr>
<tr>
<td>Marketing management</td>
<td>112</td>
</tr>
<tr>
<td>Small and middle-sized business</td>
<td>98</td>
</tr>
</tbody>
</table>

E = engineering disciplines; B = business disciplines

#### 3.3 The Opportunity of Creating the Education and Consulting Center for Industrial Business

**Mission**

The mission of the Center is to create a core of competence for the training, research and consulting in the business activity area, able to satisfy the needs for the central part of Romania. The mission is also to establish a cooperative relationship with industry in Romania, leading to a partnership which will provide the school with an opportunity to stay informed of actual business practices; support businesses by providing expert assistance as needed; and enhance the opportunities available to our graduates by teaching skills by our business partners.

**Objectives**

The Center proposes to meet the following needs of the Romanian economy and society:
- the training at university level and post-university level (masters) in the field of business management according to the needs of the production, commercial and service activities;
- gathering documentation in the business and management field of activity, specific to the market economy;
- the development of a data base referring the production commercial and local service activities,
- development of appreciative research;
- consulting and assistance service in technical, business and organizational areas for companies, especially for small and middle ones.
- providing professors an opportunity to acquire business experience and stay informed in business practices while sharing their experience with business.
- adapting a curriculum which will evolve, meeting the stated requests of industry, thereby graduating students who are ready to meet the needs of business. The University will be a constant resource for industry for training, new technology and personnel needs.

- Another source of income for our professors/consultants will be created, allowing them to devote more time to their professional growth and free them from working two or more teaching positions.
- The reputation of LBUS and its programs will be enhanced, especially the Business Management programs of the Engineering School.
- A positive relationship with our graduates will be built, lasting even after they are in position in industry.

#### 4. Conclusions

The impact of the two programs can be synthetised in three major ideas:
- Exhibiting a real atmosphere of change in the Romanian educational system (LBUS);
- Creating real education reform, resulting in the development of new departments;
- Demonstrating high success in the transfer and applying of American know-how in international education.

The value of the American business training has directly impacted the participants at the business management program in more than a positive way. The majority were faculty members of the LBUS (over 85%). Those between the ages of 40 and 55 became the supporters of university reform, taking over and implementing the valuable characteristics of American university education. Those between 25 and 40 became Dr. Franz’ disciples, working, living and dreaming of being direct participants in the economic restructuring of Romania. Many of them are now
in the USA, working on “masters degree” or Ph.D. programs or other intensive business management courses. They will be the future leaders of the departments, schools and consulting centers at the LBUS.

References