



INNOVATIONS IN HIGHER EDUCATION SYSTEM, BASED ON THE EXAMPLE OF THE FACULTY OF ECONOMICS, MARIA CURIE- SKŁODOWSKA UNIVERSITY, PROJECT SYNERGIA CASE

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ABSTRACT

Purpose: *The work will aim at analyzing the system of higher education in Poland, in the context of global economy and our membership in the EU. Both strong and weak sides of the Polish educational system will be identified against the background of other countries. The study will present good practice regarding the improvement of the practical aspect of competences acquired by the students of the Faculty of Economics at Maria Curie-Skłodowska University in Lublin due to the project called "SYNERGY - Shaping the competences of the students of the Faculty of Economics , UMCS, through acquiring practical knowledge".*

Design/methodology/approach: *This paper has been based on analysis of educational system in Poland. It includes a case study of project Synergia, which aim is shaping the competences of the students of the Faculty of Economics , UMCS, through acquiring practical knowledge.*

Findings: *Building bridge between science and business, acquisition of practical competencies and improvement of specialist competencies could lead to better preparing students to find job when they graduate. Information which competences are required on labour market is also valuable for them to participate in specific trainings. All this activities are implemented in Project Synergia and can improve the situation on labour market.*

Originality/value: *The authors present detailed information and results of project.*

Keywords: higher education, innovations, competences, students, educational system

Classification: Case study

INTRODUCTION

The development of higher education system and courses of studies which would meet requirements and challenges of modern world fulfils a significant role in the process of shaping knowledge-based economy. As a result of growing tendencies for globalisation and integration, the potential and quality of higher education system constitute vital factors of socio-economic and cultural growth and boosting competitiveness of countries and regions as well. As a result of these processes a growing number of publications in one language are published and growing mobility of students and academic staff is observed. At the same time unification of studying processes takes place visible in e.g. the English model of bachelor, master's and doctoral studies.



The fundamental conditioning of higher education systems is the economic context. Greater financial resources translate into a greater degree of independence in shaping educational offer, developed infrastructure and possibility of employing the best academic teachers. (Keller 2006; OECD 2009).

Globalisation is also visible as regards universities' educational function. In recent years the number of students studying outside their country of origin has increased. This ability to attract foreign students testifies to attractiveness and competitiveness of universities.

The above mentioned processes of globalisation constitute a considerable challenge for Polish universities who must compete on the global market of educational services.

The process of globalisation poses numerous challenges for universities. Graduates ought to be prepared for competing on the global labour market, ought to possess knowledge and skills allowing them to undertake employment in any country. The analysis of advantages and disadvantages of education system in Poland revealed that when compared with other countries, there is still room for improvement. Realisation of innovative projects at universities provides opportunities for the perfection of the process of education.

When joining the EU on 1st May 2004, Poland became the signatory of the Bologna Declaration as well. The Bologna Declaration is a document defining all activities and task leading to the unification of education system across European countries. The main objective of the declaration is the development of the European Higher Education Area until the end of 2010, in which students can choose from a wide and transparent range of high quality courses and benefit from smooth recognition procedures.

EDUCATION SYSTEM IN POLAND

In Poland, the main statute concerning higher education system is the bill on higher education system from 27th July 2005. Universities (apart from those headed directly by specified ministries) are supervised by the Ministry of Science and Higher Education.

OECD Report¹ highlights strong and weak sides of the Polish educational system. This research based on cross country analyses and the strong sides are:

- large number of PhD students in Polish tertiary institutions,
- there are a number of positive developments regarding the links between the tertiary education system and the labour market,
- good examples of partnership between institutions and industry,
- career placement and advisory services appear to be available for students in the most Polish tertiary institutions.

¹ Fulton O., Santiago P., Equist Ch., El-Khawas E., Hackl E. (2007), OECD Review of Tertiary Education, Poland, OECD 2007.

The weak sides of Polish educational system are:

- low level of public spending on R&D (higher education expenditure on R&D as a percentage of GDP in 2005 was 18 position in ranking of 19 OECD countries),
- annual expenditure per student by educational institutions in primary through tertiary education in Poland rank among the lowest and amount to 5135 USD, with average in OECD countries 8354 USD. In USA, on the other hand, these expenditures amount to 14923 USD²,
- limited patenting activity.

A SWOT analysis of education sector outlined in 2007-2013 Strategy for the Development of Education indicates strong and weak areas of education in Poland. Among the assets one can find: a large number of universities which vary as regards their educational offer, high gross enrolment ratio, low percentage of 18-24 years-old dropouts in relation to the number of students in the education system, system of financial assistance for students, more than tripled number of students gaining PhD degrees, autonomy of universities. The disadvantages of the system include: low percentage of students of mathematics, natural sciences and technology in the total number of university graduates, weak relationship of science and higher education with economy and labour market, insufficient utilization of R&D potential of universities, ineffective university management system, teaching curricula not fit for preparing students for entering labour market, low percentage of students of further education (underdeveloped system of further and distance education), relatively low expenditures per student in USD as regards the purchasing power. Advantages include: relatively young age structure of the population; increase in the number of the well-educated entering labour market; low regional discrepancies as regards primary, middle and secondary education, strong position of exact sciences and achievements in some of the applied sciences (e.g. medicine, programming); relatively low cost of work as compared with the EU³.

Poland as a member of EU prepare National Cohesion Strategy for 2007-2013, which a strategic objective was formulated as a result of an analysis, including the analysis of higher education system, which indicated discrepancies in the level of socio-economic development of the country and its regions as compared with other EU countries. The objective will be accomplished by the implantation of Operational Programmes co-financed by the EU. National Cohesion Strategy outlines such disadvantages as: insufficient ties between education system and labour market, high unemployment rate, especially among the youth, women and the unqualified, insufficient promotion of entrepreneurship among citizens in the course of education. In education area one of the weak side is poor level of practical competences of students which lead to high young unemployment. Unemployment rate of young under 25 in March 2013 in Poland was 28,1%, but the EU average was 23,6%⁴.

In 2007-2013, the Ministry of Science and Higher Education serves as the Intermediate Body for three operational programmes: Innovative Economy, Human Capital and Infrastructure and Environment. 4,1 billion EUR is available in the framework of these programmes. The amount will be allocated to development and modernisation of universities, research infrastructure, R&D projects, maintaining the high level of education and increasing the

² Education at a Glance 2011: OECD Indicators.

³ Strategy for the Development of Education, Ministry of National Education and Sport, 2005.

⁴ Data come from Eurostat Database.

http://epp.eurostat.ec.europa.eu/portal/page/portal/employment_unemployment_ifs/data/database



overall number of students of courses which ensure attractive employment opportunities. Polish entrepreneurs have the opportunity for acquiring funds to be used for the development of cooperation with research sector. On the basis of students' requirements analysis and opportunity for funding "Synergia" project was introduced.

The structure of unemployment by education shows that employing a large part of the unemployment is not possible, because in current institutional conditions and the characteristics of the current economy, they have inadequate employment to those qualifying equipment⁵.

PROJECT SYNERGIA

In order to meet graduates' and employers' requirements the realisation of the project titled "SYNERGY - Shaping the competences of the students of the Faculty of Economics, UMCS, through acquiring practical knowledge" was started. The project is co-financed by the European Union under the European Social Fund under the Operational Programme Human Capital (OP HC) and will be realised at the Faculty of Economics of the MCSU in Lublin in the period between October 2010 and September 2014.

The main objective of the project is bridging the competence gap among graduates of the faculty by improving the practical aspect of education for 1120 students.

The particular aims of the project include:

- strengthening practical elements of teaching through initiating and developing the Faculty's collaboration with enterprises and institutions,
- organizing on-the-job training courses and internships for university students,
- creating the Council of Entrepreneurs as an advisory organ for the Program Council of the Faculty of Economics, UMCS,
- university classes taught by practitioners,
- implementing by students practical projects in enterprises and institutions, under the supervision of research assistants,
- enhancing knowledge of mathematics in students of the first year of full-time university courses, 1st cycle, at the Faculty of Economics, UMCS, through their participation in remedial courses,
- preparing the graduates more efficiently for their entering the job market, through offering interpersonal training courses and courses in starting and running business activities,
- facilitating the contact of our students with potential employers, through organizing panel meetings with representatives of enterprises and institutions, as well as workshops.

All students undertaking education at the faculty in the period of running the project can apply for support in its framework and at the end of 2012 in project participated 1,820 university students.

⁵ Thieme J.K. (2009), Higher education. Challenges of XXI century. Poland, Europe, USA, Difin, Warsaw, pp.276.



The project has been running at the Faculty of Economics of Maria Curie Skłodowska University in Lublin since October 2009. In the framework of the project, a variety of activities are undertaken all aiming at improving the practical aspect of education. It seems relevant to enumerate the most important among these and their results achieved until the end of 2012.

In the framework of the project, activities have been undertaken in the following areas:

- business-science cooperation,
- acquisition of practical competencies,
- improvement of specialist competencies,
- popularisation of project's results.

Detailed actions undertaken in these areas will be presented below.

Business science cooperation

In order to link the process of education at the MCSU Faculty of Economics and R&D undertakings more closely with business practice, a Business Committee was established. The committee consist of distinguished managers of businesses and financial institutions and heads of professional and self-government associations.

The mission of the Business Committee is the establishment of a cooperation platform between domains of science and business practice which would lead to the effective utilisation of available resources as regards socio-economic development of the region⁶.

The Committee assumed the accomplishment of the following objectives as the aim of their operation:

1. Exchange of information and experiences in the area of science and business practice.
2. Initiating mutually beneficent activities and issuing opinions on proposed projects.
3. Organisation of joint undertakings as regards partners' standard operations or realising public interest⁷.

Entities interested in assistance as regards solving problems present in their business or institution may obtain such assistance in the framework of "Synergia" project. Such activities are realised in the framework of practical projects where students working in task forces under supervision of coordinators put forward resolutions to the problem. From the point of view of employers the exercise seems valuable because such solutions are innovative, cost free and frequently contribute to solving the problem. 133 students took part in practical projects in companies since the beginning of running the project until the end of 2012.

Another form of business-science cooperation is the provision of internships in businesses and institutions. Entities interested in offering practical trainings and internships can submit their offers along with their requirements. As a consequence, the entities are entered into the database of organisations cooperating with the MCSU in the framework of SYNERGIA project. Next, based on their own preferences and requirements, students apply for the internship. Upon completion of the recruitment process the candidate is qualified to

⁶ <http://www.umcs.lublin.pl/articles.php?aid=6550&mid=13&mref=39990>

⁷ <http://www.umcs.lublin.pl/articles.php?aid=6550&mid=13&mref=39990>

participate in the internship and the internship agreement is signed. 426 students participated in practical trainings held by businesses and institutions and 13 graduates participated in paid internships since the beginning of running the project up to the end of 2012.

In order to adjust teaching curricula to the requirements of labour market, research regarding the level of graduates' competencies compatibility with labour market's requirements is conducted regularly. In order to identify employers' opinions as regards the graduates of the Faculty of Economics such research methods as survey questionnaire, statistical analysis and focus group interviews are used.

A survey was carried out with the use of the Virtual Cooperation Platform of the MCSU Faculty of Economics (VCPFE) by means of a questionnaire. Research carried out in the framework of the project indicated, on employers' part, the necessity of improvement of graduates' practical preparation. In addition, among the students' competencies' components, domain knowledge and skills require improvement. According to employers' recommendations and opinions, graduates lack practical knowledge and skills. However, the tendency seems lower as compared to results of research conducted in 2009/2010 academic year⁸.

Acquisition of practical competencies

Research conducted in the framework of the project indicates that practical knowledge and skills are extremely desired by employers.

In order to acquire practical competencies students participate in practical projects contracted by businesses and institutions. This is aimed at providing students with the opportunity of becoming familiar with specific aspects of consulting work and provide setting for applying their knowledge into solving particular problems of the entities as regards their operations. Students work in task forces headed by coordinators where they work on their individual projects. Individual teams' results are presented during a public presentation and evaluated by managers, executives and heads of the company/ institution who select projects with the greatest potential for practical application. Owing to the participation in such practical projects, students gain the opportunity of presenting their own knowledge, skills and predispositions to employers, which constitutes a valuable source of information on prospective employees.

Students of the MCSU Faculty of Economics can acquire these by participating in free-of-charge training and paid internships. Almost 400 offers are available every year. Such offers are continually updated. If need be, when participating in trainings and internships, students can rely upon assistance of the project staff.

Realisation of practical projects where students solve existing problems of businesses and institutions provides them with the opportunity of becoming familiar with realities of the economy and its requirements. As a consequence, students realising practical projects apply their knowledge in practice and improve their skills.

⁸ Karasek A., Grela G. (2012), Report on the analysis of information on level of graduates' competencies of the Faculty of Economics compatibility with labour market's requirements, Lublin, pp.26.



Objectives of the project are accomplished by holding classes conducted by experts. For the duration of the project, such classes, under the name “Practical aspects of entrepreneurship” have been introduced into the curriculum of the following undergraduate courses: Economics, Management and Finances, Finances and Accounting. Classes are held by various experts and are tailor-made for the particular course. 931 students participated in such classes since the beginning of running the project until the end of 2012.

Improvement of specialist competencies

The project also offers assistance to freshmen whose knowledge of mathematics is insufficient. “Remedial Courses of Mathematics” are specially designed for them. The course lasts 25 hours. 255 student participated in such courses until the end of 2012.

Trainings constitute yet another form of support offered in the framework of the project. Initially, two trainings were planned: “Establishment and running a business” and “Interpersonal Training”. Every year, the offer is supplemented with additional two trainings as requested by students. Up to now, besides the above-mentioned, the following trainings were organised: “Computer Accounting” (3 editions), “Decision-Making Simulation” (1 edition), “Stock Exchange Investments” (1 edition). 289 students participated in these trainings since the beginning of running the project until the end of 2012.

Popularisation of project's results

The realisation of the project is supported by a Virtual Cooperation Platform of the MCSU Faculty of Economics (VCPFE) which serves as a virtual meeting place for students, faculty members, businesses, business environment institutions and self-government bodies as regards exchange of information on: practical projects' realisation. participation in internships and employment services.⁹ Until the end of 2012 there were 2901 active users of the platform¹⁰.

Users of the VCPFE can be divided into the following groups:

- students of the MCSU Faculty of Economics- including present and prospective graduates of the faculty,
- faculty members- employees of universities expressing willingness to participate in the project,
- businesses- employers, owners, business environment institutions,
- monitoring bodies- including project teams' members, project's administration staff¹¹.

Project's stipulations were presented during the opening conference. Representatives of businesses and institutions, university faculty members and students were among the participants. As a result of the discussion it was agreed that the development of mechanisms for systematic exchange of experiences and knowledge transfer between businesses and universities will constitute the key aspect of cooperation. The initiated joint activities

⁹ Wiechetek Ł., Supporting the cooperation between science and business with the use of e-learning tools on the project Synergia ex ample [in:] Information technology in practice, M. Miłosz (editor), Polish Informatic Society, Lublin 2010, pp.28.

¹⁰ Own data.

¹¹Wiechetek Ł., Supporting..., *op.cit.*, pp.30-31



contributed to the improvement of cooperation of businesses and institutions with universities. The cooperation will prove beneficial for elevating the level of student's practical competencies and students' preparation for entering labour market.

3rd Gala of Science and Business organised jointly by the MCSU Faculty of Economics and Lublin Confederation of Private Employers- Lewiatan constituted an extension to the conference. At the Gala, "Gold Course Record Books of Business" were awarded in three categories:

- 1) The Best Internship Provider;
- 2) Perfect Employer;
- 3) The Most Pro-Student Company

The "Gold Course Record Books of Business" is an award given by the MCSU Faculty of Economics students to distinguishing businesses and institutions as regards their openness towards students' needs in terms of improvement of competencies. The idea of the award arose in the framework of "Synergia" project.

In order to develop a multi-disciplinary platform for the exchange of knowledge in the areas of services, engineering, business, management, education and social sciences in the area of synergy the "International Journal of Synergy and Research" was established. Synergy seems to be the main expected factor of different business and/or social activities in contemporary, networked, electronic, interconnected, real-time, knowledge-based economy.

Professor Binshan Lin from Louisiana State University (Shreveport, USA) was appointed as the content-related consultant of the project. Professor Lin's participation in the project provides high-quality content-related assistance for its realisation. Professor Lin assistance guidance is available as regards publication of papers in international journals, including those listed in ISI and JCR. Moreover, Mr. Lin presented American experiences in the domain of business-science cooperation and commercialisation of research results. Examples of good practices concerning business-science cooperation originating from higher education system in USA proved invaluable.

"Synergia" project has been awarded four times by the Ministry of Science and Higher Education and the National Centre for Research and Development. The ministry considers the project as novel, innovative and distinguishing from among other educational projects realised in the framework of Human Capital Operational Programme. The ministry appointed the project as the model to be presented to reporters in the framework of STUDY TOUR (16.11.2010) and then featured in a national newspaper (Gazeta Wyborcza; June 2011). As one out of eight national projects, "Synergia" project was presented in the catalogue titled "The Innovative 2011" which promotes projects co-financed by the EU.

SUMMARY

In order to meet requirements of globalisation and knowledge-based economy and also growing competitiveness among universities, a variety of activities are undertaken, but innovation of education deserves more attention among these.

Building bridge between science and business, acquisition of practical competencies and improvement of specialist competencies could lead to better preparing students to find job when they graduate. Information which competences are required on labour market is also valuable for them to participate in specific trainings. All this activities are implemented in Project Synergia and can improve the situation on labour market. A summing-up conference is foreseen to conclude the project. Representatives of businesses and institutions, academic staff and students from Poland and other countries will be in attendance. The conference will be devoted to the exchange of points of view and experiences concerning business-science cooperation, financing this cooperation, the issue of clusters in economy, requirements of employers as to graduates of courses of economics, evaluation of their competencies and methods of meeting these requirements. There will be also possibility to discuss about the expectations of employers to graduates in economics and evaluation of their level of competence.

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