SPECIAL COURSE ON LOGISTICS MANAGEMENT OF THE UNIVERSITY OF MISKOLC

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Abstract: In the institutional activity of Lifelong Learning studies the universities have special tasks and responsibility. The modern scientific discipline Logistics is not an exception. The Department of Materials Handling and Logistics, Faculty of Mechanical Engineering and Informatics, University of Miskolc has had a many years practice in this field, namely number of courses with title of "Logistics Management" have been organised and settled in the campus with good success and respect both from the side of the industrial companies and participants to be employed. The paper gives a rather comprehensive presentation on the many years work, the main points of the subject of matters, the course parameters, the important organisational characterises; data about the results have been gained etc.

Keywords: Study of logistics management, lifelong learning, and practice oriented modules, Act on Adult Education

1. Introduction

The University of Miskolc established its Regional Adult Education Centre in 1995, with the obvious purpose to widen the scope of the levels and disciplines of its undergraduate and postgraduate programmes, but, on the other hand, to develop a new and flexible system of retraining and further training programmes focusing on labour market needs. The Centre has developed several short term courses and special courses, and all its programmes are ICT-supported. The curricula of the programmes have been designed to orientate adult learners to education provision representing flexible learning through distance and e-learning modes in the case of growing number of courses. That aspect can be considered as very innovative in Hungarian higher education with a special focus on adult learners.

The Regional Adult Education Centre has shifted learning performance to a distinguished level of quality dimension. One aspect of this process was to develop education and training programmes with partners, as the Conservatoire National des Arts at Metiers in Paris (CNAM), in the field of logistics, quality assurance, ad in advising social integration of the disabled, which leads to a competence certificate.

The Centre has continuously widened its interactive, multi-media courses and learning materials to provide access for university faculties for connecting it to their academic programmes. The Centre's educational impact is rather strong to promote further adults participating in higher education. The functions of the Centre is rather clear and transferable, its regulatory framework is compatible to other universities' structures. On the

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other hand, the training portfolio of the Centre is clearly tied to the education and training portfolio of the host university. The Centre's sustainability depends on funding of programmes for adults and on individual fees paid by learners or their own employers.

Referring to the Logistics Management Training, the Regional Adult Education Centre of the University of Miskolc organises this particular programme, but the programme itself has been developed and its teaching activities are mainly provided by the Department of Materials Handling and Logistics of the Faculty of Mechanical Engineering and Informatics in co-operation with the Centre.

A special partnership with Conservatoire National des Arts et Métiers (CNAM) has been formed for the last twelve years in the field of logistics management. Accordingly, a CNAM-accredited programme has been launched twelve times for now. The adult education oriented CNAM supported the development and organisation of the programme in the field of logistics as part of the PHARE Partnership and its NETFORM programme. It was the University of Miskolc and its Department of Materials Handling and Logistics of the Faculty of Mechanical Engineering and Informatics to organise nationwide available courses in logistics, euro-logistics (Transportation of goods/products).

Education and training of the programme are provided by teaching staff of the Department and by several distinguished professionals and researchers in logistics. The Curriculum has been accredited by CNAM and exams are jointly supervised by CNAM representatives and the host university. Successful candidates are provided by a CNAM-certificate issued in Paris.

Themes of three trimesters:

- 1. Logistics and management of Acquisition and Distribution;
- 2. Logistics of Production and Services;
- 3. Global euro-logistics and management.

The programme implies 150 hours of contact hours and 150 hours of directed learning and practice which make a total of 300 hours. Each of the three trimesters imply 50 hours of lectures and 50 hours of directed learning.

Composition of course methodology: lectures, problem-solving practical tasks, simulation-oriented PC-bases tasks, visits to firms, individual work, writing of final thesis.

2. Characteristics of the programme

2.1. Target groups and participants. It must be recognised that approximately 90% of participants are employed at industrial firms including small and medium size enterprises and big international companies. 10% are single and independent people, rarely unemployed. Average age is between 25 and 55. One third of the students are female. In national sense, the social background of participating adult learners is generally stable.

The main theme and topics of the curriculum has a primary relevance in recent times referring to pure economic and logistics advancement. As it has been conceived several times: "Logistics move the world". Of course, on base of the knowledge the students have been gathered they would like to step forward in their carrier and on the other side, the companies are also needed for getting new methods, procedures, information in field of logistics.

Participation fee is 350.000 HUF (approx. 1250 euros) which includes the price of the final exam. In most cases (approx. 80%) the fee is covered by the sending company of the adult learner/employee. A regular source of co-financing has been the VET-fund related contribution that companies could directly turn into supporting their employees when needed further education and training. This source has been cut by the government and turned directly to central budget for several economic usage.

There is no centrally organised way to monitor and follow how the certified adult learners will benefit from the new knowledge, however, many formerly graduating people maintain professional connections with the university and its Department of Materials Handling and Logistics. Participants get hard/printed copies of learning materials regarding the subjects of the course.

There is no active and working accumulation of studies through credit points. However, the Bologna-process has promoted a BMD-system to allow planning that credit points of the Logistics Management Course will be recognised in case they continue studying at the Faculty of Mechanical Engineering and Informatics in Logistics engineer BSc.

The Department of Materials Handling and Logistics of the Faculty of Mechanical Engineering and Informatics has a wide relationship with distinguished companies (for example German car manufacturers and their subcontractors here in Hungary, like Audi, Mercedes or Bosch) and connections with universities abroad (in Germany: Magdeburg, Dortmund, Merseburg, München).

Not only the teaching staff of the department, but external professionals are taken place in the teaching and training activities of the course.

Generally underlining, the subject matters are practice-oriented. In several aspects students solve their own particular company-related logistics problems with the help of their teachers. It is very typical that they reflect to such problems of logistics in their final thesis. During the studies there are three-four professional visit to different factories which are to demonstrate high-quality logistics practice and innovations.

The course is a real part-time format for adult learners trying to respond to the need of flexible learning trajectories.

This Logistics Management Course is a classical formation of part-time education with frontal teaching combined with lots of situational learning based on problem-based orientation.

The QA system of the University of Miskolc is applied to this course too. Professionals are involved in several departmental actions and R+D+I actions before they are involved into teaching programmes.

There is no reference and administrative feed-back upon the contribution and direct benefit of the course, however, reflections and on-going engagement of professional logistics managers of local and regional firms in logistics innovations underline the quality impact and influence of the course through the employment and further development of former certified participants of the course in the last decade. Many of the former students come back and report upon the impact of the course on their personal career and the valuable scientific dimension of the curriculum with a hint of management orientation.

Adult learners play a significant role in the strategic goals and mission of the University of Miskolc. According to the founding document of the university, support, help and main activities in mission and culture of the Lifelong Learning world is a basic goal of this institution in accordance with the national Act on Higher Education. **2.2. Institutional conditions.** The institutional conditions for carrying and providing the course into effect is generally good. As mentioned above, there is a new and comfortable building with well-equipped lecture-rooms, professional university logistical lab in the campus, and several machine industrial factories in the university's surroundings to where professional visits can be organised. Support of the University Senate is also satisfying. For instance, it is not a problem to get the rector's permission to start a new course for adult learners through the Regional Centre.

According to a contract, which was signed in 1995 by the president of the Conservatoire National des Arts at Metier in Paris and rectors of three Hungarian universities, general coordination of the programme and academic issues were taken over by the professionals of the University of Miskolc. After an accurate scrutiny and revision, a necessary improvement and adaptation of curriculum to the national requirements was worked out for the participants. For the moment, fifteen such courses have been accomplished at an average of 14 students per course. The latest course was finished in 2009 and organisers hope to start the next one still during the Fall of 2012.

As has been written and described above, the transfer of individual results, namely, collected credit points to high educational BSc level studies is still a question referring to which a government-level decision is needed.

One problem is that there are some university colleagues who work more favourably at external agencies or adult education enterprises for financial reasons. Another issue is that the central university management can hardly harmonize the different faculty courses several times, for example, the use of the infrastructure (lecturer rooms, labs etc.).

2.3. Regulatory frameworks at national level. After acceptance of the new Act on high education by the national parliament I 2011, it would be expedient to establish a new adult educational law in which the state public institutions should be given preference. An important issue is how the private capital might be involved into the system. More emphasis must be put on recognising company needs, on quality assurance, on control of the processes, and so on. The roles of a governing body, public survey and usual media information are also at stake.

The one and only regulatory framework is the Act on Adult Education from 2001 which entitle each and all educational organisations to run programmes for adults in case they are accredited and/or put into a quality assurance process. Higher education organisations are entitled to offer and run such a service through their faculties or their identical units providing courses for adult learners.⁴

2.4. Financial provisions at national level. Financial provisions at national level provide direct support for students in BA and MA levels of education for some indicated number of students in the full-time settings in BA and MA levels of education. Part-time education and training programmes involve no direct state-funding of studies. Therefore, students and adult learners as participants in special trainings have to cover the expenses of their studies on their own and may apply for additional grants available for them combined with some

⁴ Act on Adult Education CL/2001. – According to the Act, *an adult is a person who has already completed her/his compulsory education* (strictly defined in the Act of Public Education - CXC./2011.)

financial support of their work-place in case they are permanently employed and their studies are mutually recognised as a professional development in their careers.

HEIs are urged to open up to and develop flexible learning, however, the lack of financial provisions and state-funded incentives are limited to a small number of trainings. The state urges special training which companies are delegating and sending their own employees and, therefore, finance or co-finance the costs of the adult learners through their own budget based grants. Another way of sustaining the development of the good practice is to involve the local Chamber of Commerce to support the programme and stay behind the maintenance of the initiative as a strong stakeholder in VET urging HE to respond to economic needs in quality production and services. Logistics management is such a field.

The contribution of companies into national VET-fund are collected centrally into the national budget per capita/employee from early 2012, and companies are not allowed to use this source of funds any more to directly finance or co-finance the necessary trainings and possible education of their employees. This change has got a negative impact on the sustainability of such courses.

In Hungary, there is a lack of available further financial resources. The inspiration for learning can only be carried out through several constraints. On the other hand, economic development cannot be realized without added value and highly qualified labour into which necessary contribution is needed both from the state, the private sphere and the individuals. Quality is the key question.

3. Assessment

There are two trivial problems:

- potential graduates are not necessarily allowed to participate due to their employers' limited conditions (for example, there is no possibility for the replacement of the employee at the place of work);
- there is not enough accessible financial support.

The general respect of the HEI, as a potential for improvement of performance of the individuals, are becoming better and better in the labour market. It is helping strengthening the roles of higher education as providing quality adult learning and promoting flexible learning trajectories.

The many logistics management courses which have been accomplished strengthened the general communication and relation of the department towards relevant stakeholders in national industry. It helped raising the recognition and academic reputation of the Department and its Faculty within the University of Miskolc and beyond in the field of logistics.

Such a rather practice-oriented training course generates particular challenges for lecturers, because the participants are demonstrating good previous knowledge and experiences, therefore, the curriculum and related methodologies are to face on-going upgrading. In addition, students communicate about their work experiences among each other which can be also a valuable source of new knowledge networking.

Strengths: practice oriented modules show relevance and reflect newest results of the scientific fields and discipline orientations, participants from different companies represent

and comprise a quality group of students with different ages. The special composition of group of students has so far stimulated interconnection between the lecturers and graduates and the motivation of the individual career development, etc.

Weaknesses: the current financial circumstances may result in barriers of learning, some teachers and lecturers are overloaded by having to teach longer hours, yet trying to maintain quality preparations and provide practice orientation throughout the course.

4. Summary

The creation and establishment of the course "Logistical Management" in practice of the University of Miskolc adult education activity was very successful in the Lifelong Learning work of the mechanical faculty. During the more then one and a half decay many professionals have managed to get the certificate for the practice oriented knowledge benefited by the qualified employees and the companies to be concerned. Hope, that the general state, social, financial and the local university circumstances will make possible the continuation and improvement of this special training system and also hope that the harmonisation of this type of adult educational activity and the classical high educational system can be achieved.

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